As filed with the Securities and Exchange Commission on August 1, 2003

Registration No. 333-

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form S-4

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

Arch Western Finance, LLC

(Exact name of registrant as specified in its charter)

Delaware	**1211**	**43-1811130**
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification No.)

One CityPlace Drive, Suite 300

St. Louis, Missouri 63141
(314) 994-2700
(Address, including zip code, and telephone number, including area code, of registrants' principal executive offices)

Robert G. Jones

Vice President — Law, General Counsel and Secretary
Arch Coal, Inc.
One CityPlace Drive, Suite 300
St. Louis, Missouri 63141
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copy to:

Ronald D. West
Kirkpatrick & Lockhart LLP
Henry W. Oliver Building
535 Smithfield Street
Pittsburgh, Pennsylvania 15222-2312
Telephone: (412) 355-6500

Approximate date of commencement of proposed sale of the securities to the public: As soon as practicable after the effective date of this Registration Statement.

If the securities being registered on this form are being offered in connection with the formation of a holding company and there is compliance with General Instruction G, check the following box. o

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

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

CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered	Amount to be registered	Proposed maximum offering price per unit	Proposed maximum aggregate offering price(1)	Amount of registration fee(1)
6 3/4% Senior Notes due 2013	$700,000,000	100%	$700,000,000	$56,630
Guarantees of 6 3/4% Senior Notes due 2013	N/A(2)	N/A(2)	N/A(2)	N/A(2)

(1) Estimated solely for purposes of calculating the registration fee in accordance with Rule 457(f) promulgated under the Securities Act of 1933, as amended.

(2) No separate consideration will be received for the guarantees. Pursuant to Rule 457(n) of the Securities Act of 1933, as amended, there is no filing fee with respect to the guarantees.

The registrants hereby amend this registration statement on such date or dates as may be necessary to delay its effective date until the registrants shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

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TABLE OF ADDITIONAL REGISTRANTS

Exact Name of Registrant as Specified in its Charter	State or Other Jurisdiction of Incorporation or Organization	I.R.S. Employer Identification No.	Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices
Arch Western Resources, LLC	Delaware	43-1811130	One CityPlace Drive, Suite 300 St. Louis Missouri 63141 (314) 994-2700
Arch of Wyoming, LLC	Delaware	43-1811130	One CityPlace Drive, Suite 300 St. Louis Missouri 63141 (314) 994-2700
Mountain Coal Company, L.L.C.	Delaware	43-1811130	One CityPlace Drive, Suite 300 St. Louis Missouri 63141 (314) 994-2700
Thunder Basin Coal Company, L.L.C.	Delaware	43-1811130	One CityPlace Drive, Suite 300 St. Louis Missouri 63141 (314) 994-2700

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

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SUBJECT TO COMPLETION, DATED AUGUST 1, 2003

PRELIMINARY PROSPECTUS

Offer to Exchange

$700,000,000 6 3/4% Senior Notes due 2013
Registered Under the Securities Act of 1933
For
All of the Outstanding
$700,000,000 6 3/4% Senior Notes due 2013
of

Arch Western Finance, LLC

Unconditionally Guaranteed by
Arch Western Resources, LLC

The exchange offer will expire at 5:00 p.m., New York City time,

on , 2003, unless extended.

The Issuer is offering to exchange its outstanding notes described above for the new, registered notes described above. The terms of the new notes are identical in all material respects to the terms of the outstanding notes, except for certain transfer restrictions, registration rights and additional interest payment provisions relating to the outstanding notes. In this document, we refer to the outstanding notes as the "old notes" and to the new notes as the "registered notes." We sometimes refer to the old notes and the registered notes collectively as the "notes."

The notes will be senior obligations of the Issuer. The notes will be unconditionally guaranteed on a senior basis by Arch Western Resources, LLC and each of its domestic subsidiaries other than Canyon Fuel Company, LLC. Each guarantee will rank equally with each guarantor's other unsecured senior indebtedness. The notes will be secured by a first-priority security interest in promissory notes issued by Arch Coal, Inc. to Arch Western Resources, LLC.

The principal features of the exchange offer are as follows:

- The exchange offer is subject to certain conditions described in this prospectus, including that the exchange offer does not violate applicable law or applicable interpretations of the staff of the Securities and Exchange Commission and that no injunction, order or decree has been issued which would prohibit, prevent or materially impair our ability to proceed with the exchange offer.
- All old notes that are validly tendered and not validly withdrawn will be exchanged.
- Tenders of old notes may be withdrawn at any time prior to the expiration of the exchange offer.
- The Issuer will not receive any proceeds from the exchange offer.

For a discussion of certain factors that you should consider before participating in the exchange offer, see "Risk Factors" beginning on page 9 of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is , 2003.

You should rely only on the information contained or incorporated by reference in this prospectus. None of the Issuer, Arch Western, Arch Coal nor any subsidiary guarantor has authorized anyone to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. You should assume that the information appearing in this prospectus is accurate only as of the date on the front cover of this prospectus or, with respect to information incorporated by reference from reports or documents filed with the Securities and Exchange Commission, the date such report or document was filed. Neither the delivery of this prospectus nor any sale or exchange hereunder shall under any circumstances imply that the information herein is correct as of any date subsequent to the date on the cover of this prospectus.

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NOTICE TO ALL NEW HAMPSHIRE RESIDENTS

NEITHER THE FACT THAT A REGISTRATION STATEMENT OR AN APPLICATION FOR A LICENSE HAS BEEN FILED UNDER RSA 421-B WITH THE STATE OF NEW HAMPSHIRE NOR THE FACT THAT A SECURITY IS EFFECTIVELY REGISTERED OR A PERSON IS LICENSED IN THE STATE OF NEW HAMPSHIRE CONSTITUTES A FINDING BY THE SECRETARY OF STATE THAT ANY DOCUMENT FILED UNDER RSA 421-B IS TRUE, COMPLETE AND NOT MISLEADING. NEITHER ANY SUCH FACT NOR THE FACT THAT AN EXEMPTION OR EXCEPTION IS AVAILABLE FOR A SECURITY OR A TRANSACTION MEANS THAT THE SECRETARY OF STATE HAS PASSED IN ANY WAY UPON THE MERITS OR QUALIFICATIONS OF, OR RECOMMENDED OR GIVEN APPROVAL TO, ANY PERSON, SECURITY OR TRANSACTION. IT IS UNLAWFUL TO MAKE, OR CAUSE TO BE MADE, TO ANY PROSPECTIVE PURCHASER, CUSTOMER OR CLIENT ANY REPRESENTATION INCONSISTENT WITH THE PROVISIONS OF THIS PARAGRAPH.

SUMMARY

This summary highlights some of the information about Arch Western Resources, LLC, Arch Western Finance, LLC and Arch Coal, Inc. contained elsewhere in this prospectus. As a result, it does not contain all of the information that you should consider in deciding whether to participate in the exchange offer. You should carefully read this entire prospectus and the documents incorporated into it by reference, including the "Risk Factors" and "Forward-Looking Statements" sections and the consolidated financial statements and the notes to those statements. Unless the context otherwise indicates, as used in this prospectus the terms "Arch Western," "we," "our" and "us" and similar terms refer to Arch Western Resources, LLC, its wholly owned subsidiaries, including Arch Western Finance, LLC, and its 65% membership interest in Canyon Fuel Company, LLC; the term "Issuer" refers to Arch Western Finance, LLC; the term "Arch Coal" refers to Arch Coal, Inc. and its subsidiaries (including us); the term "Vulcan" refers to Vulcan Coal Holdings, L.L.C. and its subsidiaries (including Triton Coal Company, LLC); and the term "Triton" refers to Triton Coal Company, LLC. We are owned 99% by Arch Coal and 1% by an affiliate of BP p.l.c. We account for the financial results of Canyon Fuel utilizing the equity method. Coal reserves data in this prospectus includes all of the reserves of Canyon Fuel. Unless otherwise stated in this prospectus, production data for Arch Western and Arch Coal does not include Canyon Fuel production data. References to productivity in this prospectus are measured in tons of coal produced per employee shift.

Arch Western Resources, LLC

We are one of the largest and most productive operators of compliance and low sulfur coal mines in the United States. We sold 72.5 million tons of coal in 2002 and 15.8 million tons of coal during the three months ended March 31, 2003, all of which was compliance and low sulfur. We have a total of seven operating mines. Our largest mine, Black Thunder, is located in Wyoming in the Powder River Basin, the largest and fastest-growing U.S. coal-producing region. Black Thunder is the second largest coal mine in the United States. We are the largest producer of coal in the Western Bituminous Region, where we directly own three mines in Colorado and Wyoming and a 65% interest in Canyon Fuel Company, LLC, which owns and operates three mines in Utah, one of which is scheduled to be idled by June 30, 2004.

As of March 31, 2003, we controlled approximately 1.9 billion tons of proven and probable compliance and low sulfur coal reserves. Approximately 93.5% of our reserves is compliance coal, which does not require electric generators to use sulfur dioxide reduction technologies to comply with the requirements of the Clean Air Act.

We sell substantially all of our coal to producers of electric power, most of whom are large, investment grade utilities. Currently, we have sales contracts in place for approximately 96% of our planned 2003 production and approximately 64% of our planned 2004 production. This provides us with a relatively reliable and stable revenue base. Our goal with respect to the remainder of our planned production is to seek long-term supply agreements with our largest and best customers as coal markets strengthen.

Arch Western Finance, LLC

The Issuer is a Delaware limited liability company and an indirectly wholly-owned subsidiary of Arch Western Resources, LLC. It was formed on June 3, 2003 solely for the purpose of being the issuer of the old notes and the registered notes. The Issuer has no operations, and we do not expect that it will have operations in the future. The Issuer's only asset is an intercompany note issued by Thunder Basin Coal Company, L.L.C., a wholly owned subsidiary of Arch Western and the direct owner of the Issuer, evidencing the net proceeds from the sale of the old notes that were loaned by the Issuer to Thunder Basin and, in turn, to us to repay our existing bank debt and for general purposes.

Arch Coal, Inc.

Arch Coal is the second largest and one of the most productive operators of compliance and low sulfur coal mines in the United States. Including our operations, as of March 31, 2003, Arch Coal controlled approximately 2.9 billion tons of proven and probable coal reserves. As of March 31, 2003, Arch Coal had 25 operating mines. Arch Coal sold 106.7 million tons of coal in 2002 and 22.7 million tons of coal during the three months ended March 31, 2003.

In addition to our operations, Arch Coal produces coal in Central Appalachia in the eastern United States. Arch Coal produces compliance and low sulfur coal exclusively, and 90% of its reserves are compliance quality or low sulfur. Arch Coal supplied the fuel for approximately 6% of the electricity used in the United States in 2002. In the past five years, Arch Coal has increased its coal production from 36.7 million tons in 1997 to 99.6 million tons in 2002, primarily as a result of selective acquisitions as well as the strategic development of existing reserves.

Arch Coal's common stock is listed on the New York Stock Exchange and traded under the symbol "ACI."

The Exchange Offer

On June 25, 2003, the Issuer issued in a private offering $700.0 million in aggregate principal amount of its 6 3/4% Senior Notes due 2013, which are referred to in this prospectus as the old notes. The Issuer, Arch Coal, Arch Western and the subsidiary guarantors entered into a registration rights agreement with the initial purchasers of the old notes in which the Issuer, Arch Coal, Arch Western and the subsidiary guarantors agreed to deliver this prospectus to you. You are entitled to exchange your old notes in the exchange offer for registered notes that are identical in all material respects to the old notes, except that the registered notes have been registered under the Securities Act of 1933, as amended, and will not bear legends restricting their transfer. Unless you are a broker-dealer or are unable to participate in the exchange offer, we believe that the registered notes to be issued in the exchange offer may be resold by you without compliance with the registration and prospectus delivery requirements of the Securities Act. You should read the discussions under the headings "The Exchange Offer" and "Description of the Registered Notes" for further information regarding the registered notes.

Registration Rights Agreement	You are entitled under the registration rights agreement to exchange your old notes for registered notes with substantially identical terms. The exchange offer is intended to satisfy these exchange rights. After the exchange offer is complete, except as set forth in the next paragraph, you will no longer be entitled to any exchange or registration rights with respect to your old notes. The registration rights agreement requires us to file a registration statement for a continuous offering in accordance with Rule 415 under the Securities Act for your benefit if: • we determine that we are not permitted to effect the exchange offer due to any change in law or applicable interpretations of the SEC's staff; • the exchange offer is not consummated within 225 of the issuance date of the old notes; • any initial purchaser of old notes so requests with respect to old notes that are not eligible to be exchanged in the exchange offer and that are held by it following consummation of the exchange offer;

	• any holder of old notes (other than an initial purchaser) is not eligible to participate in the exchange offer; or • an initial purchaser of old notes does not receive freely tradeable registered notes in the exchange offer in exchange for old notes constituting any portion of an unsold allotment.
The Exchange Offer	The Issuer is offering to exchange $1,000 principal amount of its 6 3/4% Senior Notes due 2013, which have been registered under the Securities Act and which we refer to in this prospectus as the registered notes, for each $1,000 principal amount of its unregistered 6 3/4% Senior Notes due 2013, which we refer to in this prospectus as the old notes. In order to be exchanged, an old note must be properly tendered and accepted. All old notes that are validly tendered and not validly withdrawn will be exchanged. As of the date of this prospectus, there are $700.0 million aggregate principal amount of old notes outstanding. The Issuer will issue the registered notes promptly after the expiration of the exchange offer.
Resales of the Registered Notes	We believe that the registered notes to be issued in the exchange offer may be offered for resale, resold and otherwise transferred by you without compliance with the registration and prospectus delivery provisions of the Securities Act if you meet the following conditions: • the registered notes are acquired by you in the ordinary course of your business; • you are not engaging in and do not intend to engage in a distribution of the registered notes; • you do not have an arrangement or understanding with any person to participate in the distribution of the registered notes; and • you are not an affiliate of ours, as that term is defined in Rule 405 under the Securities Act. Our belief is based on interpretations by the staff of the Securities and Exchange Commission, as set forth in no-action letters issued to third parties unrelated to us. The staff has not considered this exchange offer in the context of a no-action letter, and we cannot assure you that the staff would make a similar determination with respect to this exchange offer. If you do not meet the above conditions, you may incur liability under the Securities Act if you transfer any registered note without delivering a prospectus meeting the requirements of the Securities Act. We do not assume or indemnify you against that liability. Each broker-dealer that is issued registered notes in the exchange offer for its own account in exchange for old notes which were acquired by that broker-dealer as a result of market-making activities or other trading activities must agree to deliver a prospectus meeting the requirements of the Securities Act in connection with any resales of the registered notes. A broker-

	dealer may use this prospectus for an offer to resell or to otherwise transfer these registered notes.
Expiration Date	The exchange offer will expire at 5:00 p.m., New York City time, on , 2003, or such later date and time to which we extend it. We currently do not intend to extend the expiration date, although we reserve the right to do so. See "The Exchange Offer — Expiration Date; Amendments."
Certain Conditions to the Exchange Offer	The exchange offer is subject to certain customary conditions, which we may waive. Please read carefully the section of this prospectus captioned "The Exchange Offer — Conditions" for more information regarding the conditions to the exchange offer.
Procedures for Tendering Old Notes in the Form of Book-Entry Interests	The old notes were issued as global securities in fully registered form without coupons. Beneficial interests in the old notes which are held by direct or indirect participants in The Depository Trust Company through certificateless depositary interests are shown on, and transfers of the old notes can be made only through, records maintained in book-entry form by DTC with respect to its participants. If you are a holder of an old note held in the form of a book-entry interest and you wish to tender your old note for exchange pursuant to the exchange offer, you must transmit to The Bank of New York, as exchange agent, on or prior to the expiration of the exchange offer either: • a written or facsimile copy of a properly completed and executed letter of transmittal and all other required documents to the address set forth on the cover page of the letter of transmittal; or • a computer-generated message transmitted by means of DTC's Automated Tender Offer Program system and forming a part of a confirmation of book-entry transfer in which you acknowledge and agree to be bound by the terms of the letter of transmittal. The exchange agent must also receive on or prior to the expiration of the exchange offer either: • a timely confirmation of book-entry transfer of your old notes into the exchange agent's account at DTC, in accordance with the procedure for book-entry transfers described in this prospectus under the heading "The Exchange Offer — Book-Entry Transfer;" or • the documents necessary for compliance with the guaranteed delivery procedures described below. A letter of transmittal accompanies this prospectus. By executing the letter of transmittal or delivering a computer-generated message through DTC's Automated Tender Offer Program system, you will represent to us that, among other things:

	• the registered notes to be acquired by you in the exchange offer are being acquired in the ordinary course of your business; • you are not engaging in and do not intend to engage in a distribution of the registered notes; • you do not have an arrangement or understanding with any person to participate in the distribution of the registered notes; and • you are not an affiliate of ours.
Procedures for Tendering Certificated Old Notes	If you are a holder of book-entry interests in the old notes, you are entitled to receive, in limited circumstances, in exchange for your book- entry interests, certificated notes which are in equal principal amounts to your book-entry interests. See "Description of the Registered Notes — Book-Entry System." No certificated notes are issued and outstanding as of the date of this prospectus. If you acquire certificated old notes prior to the expiration of the exchange offer, you must tender your certificated old notes in accordance with the procedures described in this prospectus under the heading "The Exchange Offer — Procedures for Tendering — Certificated Old Notes."
Special Procedures for Beneficial Owners	If you are a beneficial owner of old notes that are registered in the name of a broker, dealer, commercial bank, trust company or other nominee, and you wish to tender the old notes in the exchange offer, you should contact that registered holder promptly and instruct that registered holder to tender on your behalf. If you wish to tender on your own behalf, you must, prior to completing and executing the letter of transmittal and delivering your old notes, either make appropriate arrangements to register ownership of the old notes in your name or obtain a properly completed bond power from the registered holder. The transfer of registered ownership may take considerable time and may not be able to be completed prior to the expiration date. See "The Exchange Offer — Procedures Applicable to All Holders."
Guaranteed Delivery Procedures	If you wish to tender your old notes and your old notes are not immediately available or you cannot deliver your old notes, the letter of transmittal or any other documents required by the letter of transmittal or comply with the applicable procedures under DTC's Automated Tender Offer Program prior to the expiration date, you must tender your old notes according to the guaranteed delivery procedures set forth in this prospectus under "The Exchange Offer — Guaranteed Delivery Procedures."
Acceptance of Old Notes and Delivery of Registered Notes	Except under the circumstances described above under "Certain Conditions to the Exchange Offer," we will accept for exchange any and all old notes which are properly tendered in the exchange offer prior to 5:00 p.m., New York City time, on the

	expiration date. The registered notes will be delivered promptly following the expiration date. See "The Exchange Offer — Terms of the Exchange Offer."
Withdrawal	You may withdraw the tender of your old notes at any time prior to 5:00 p.m., New York City time, on the expiration date. The registered notes to be issued to you in the exchange offer will be delivered promptly following the expiration date. See "The Exchange Offer — Terms of the Exchange Offer."
Exchange Agent	The Bank of New York is serving as exchange agent in connection with the exchange offer. See "The Exchange Offer — Exchange Agent."
Consequences of Failure to Exchange	If you do not participate in the exchange offer, the liquidity of the market for your old notes could be adversely affected. See "The Exchange Offer — Consequences of Failure to Exchange."
Important Federal Income Tax Considerations	The exchange of the old notes for the registered notes should not be a taxable event for federal income tax purposes. See "Important Federal Income Tax Considerations."

Summary of the Terms of the Registered Notes

For a more complete description of the terms of the registered notes, see "Description of the Registered Notes." As used in this summary, "Arch Western" means Arch Western Resources, LLC and not any of its subsidiaries, and "Arch Coal" refers to Arch Coal, Inc. and not to any of its subsidiaries.

Issuer	Arch Western Finance, LLC, a Delaware limited liability company wholly-owned indirectly by Arch Western.
Notes Offered	$700,000,000 aggregate principal amount of 6 3/4% Senior Notes due 2013, which have been registered under the Securities Act.
Maturity	July 1, 2013.
Interest Payment Dates	January 1 and July 1 of each year, commencing January 1, 2004.
Guarantees	The registered notes will be unconditionally guaranteed on a senior basis by Arch Western and all of its subsidiaries other than Canyon Fuel.
Ranking	The registered notes will be: • senior obligations of the Issuer; and • secured by a first-priority security interest in the promissory notes issued by Arch Coal to Arch Western evidencing cash loaned by Arch Western to Arch Coal. The Arch Coal promissory notes are unsecured obligations of Arch Coal payable upon demand by us and accrue interest at the prime rate. The guarantees of Arch Western and its subsidiaries (excluding Canyon Fuel) will be: • equal in right of payment to any future senior debt of the guarantors;

	• effectively subordinated to any future secured debt of the guarantors to the extent of the assets securing such debt; • senior in right of payment to any future subordinated debt of the guarantors; and • effectively subordinated to any existing and future liabilities of any subsidiaries of Arch Western that are not guarantors. Any distributions to, or investments in, Arch Coal or its subsidiaries (other than us or our subsidiaries) will be in the form of loans evidenced by additional promissory notes issued by Arch Coal to Arch Western, which will be pledged to the trustee as security for the registered notes. Amounts due under the promissory notes pledged to the trustee may be repaid and cancelled in whole or in part prior to the maturity of the registered notes. See "Description of the Registered Notes — Security."
Optional Redemption	At any time on or after July 1, 2008, the Issuer may redeem some or all of the registered notes at the redemption prices specified in this prospectus. See "Description of the Registered Notes — Optional Redemption." At any time and from time to time on or prior to July 1, 2006, the Issuer may redeem a portion of the registered notes with the net cash proceeds of any public equity offering of Arch Western, so long as: • its pays 106.750% of the principal amount of the registered notes to be redeemed, plus accrued and unpaid interest, if any, to the date of redemption; • at least 65% of the aggregate principal amount of all registered notes issued under the indenture remain outstanding afterwards; and • the redemption occurs within 75 days of the date of the closing of such public equity offering.
Change of Control	Upon a change of control involving Arch Western, you will have the right, as a holder of the registered notes, to require the Issuer to repurchase all of your registered notes at a repurchase price equal to 101% of their principal amount, plus accrued and unpaid interest, if any, to the date of repurchase. The Issuer may not be able to pay you the required price for your registered notes at that time because it or Arch Western may not have available funds to pay the repurchase price or the terms of other debt may prevent the Issuer from paying you. See "Description of the Registered Notes — Repurchase at the Option of Holders Upon a Change of Control."
Restrictive Covenants	The registered notes will be issued under an indenture among the Issuer, Arch Western, each of Arch Western's subsidiaries, excluding Canyon Fuel, and The Bank of New York, as trustee.

	The Indenture limits the ability of Arch Western and its subsidiaries to: • incur more debt; • pay dividends and make distributions or repurchase stock; • make investments; • create liens; • issue and sell capital stock of subsidiaries; • sell assets; • enter into restrictions affecting the ability of restricted subsidiaries to make distributions, loans or advances to Arch Western; • engage in transactions with affiliates; • enter into sale and leasebacks; and • merge or consolidate or transfer and sell assets. These covenants are subject to a number of important exceptions and limitations, which are described under "Description of the Registered Notes."
Termination of Certain Covenants	Many of the restrictive covenants will terminate if the registered notes achieve an investment grade rating from both Moody's Investors Service, Inc. and Standard & Poor's Ratings Services and no default or event of default has occurred and is continuing under the indenture. Covenants that cease to apply as a result of achieving these ratings will not be restored, even if the credit ratings assigned to the registered notes later fall below investment grade. See "Description of the Registered Notes — Certain Covenants — Covenant Termination."
Use of Proceeds	The Issuer will not receive any cash proceeds upon the completion of the exchange offer.

RISK FACTORS

In addition to the other information contained in or incorporated by reference into this prospectus, you should carefully consider the following risk factors and the information under "Forward-Looking Statements," which appears elsewhere in this prospectus, before deciding whether to participate in the exchange offer. The risk factors set forth below generally are applicable to the old notes as well as the registered notes.

Risks Relating to the Exchange Offer

If you fail to exchange your old notes, they will continue to be restricted securities and may become less liquid.

Old notes which you do not tender or we do not accept will, following the exchange offer, continue to be restricted securities. You may not offer or sell untendered old notes except pursuant to an exemption from, or in a transaction not subject to, the Securities Act and applicable state securities laws. We will issue registered notes in exchange for the old notes pursuant to the exchange offer only following the satisfaction of procedures and conditions described elsewhere in this prospectus. These procedures and conditions include timely receipt by the exchange agent of the old notes and a properly completed and duly executed letter of transmittal.

Because we anticipate that most holders of old notes will elect to exchange their old notes, we expect that the liquidity of the market for any old notes remaining after the completion of the exchange offer may be substantially limited. Any old note tendered and exchanged in the exchange offer will reduce the aggregate principal amount of the old notes outstanding. Following the exchange offer, untendered old notes generally will not have any further associated registration rights, and untendered old notes will continue to be subject to transfer restrictions. Accordingly, the liquidity of the market for any old notes could be adversely affected.

There may be no active trading market for the registered notes to be issued in the exchange offer.

The registered notes are a new issue of securities for which there is no established market. We cannot assure you with respect to:

- the liquidity of any market for the registered notes that may develop;
- your ability to sell registered notes; or
- the price at which you will be able to sell registered notes.

If a public market were to exist, the registered notes could trade at prices that may be higher or lower than their principal amount or purchase price, depending on many factors, including prevailing interest rates, the market for similar notes and our financial performance. We do not intend to list the registered notes to be issued to you in the exchange offer on any securities exchange or to seek approval for quotations through any automated quotation system. No active market for the registered notes is currently anticipated.

Risks Relating to Our Business

The demand for and pricing of our coal is greatly influenced by consumption patterns of the domestic electric generation industry, and any reduction in the demand for our coal by this industry may cause our profitability to decline.

Demand for our coal and the prices that we may obtain for our coal are closely linked to coal consumption patterns of the domestic electric generation industry, which has accounted for approximately 92% of domestic coal consumption in recent years. These coal consumption patterns are influenced by factors beyond our control, including the demand for electricity, which is significantly dependent upon general economic conditions, summer and winter temperatures in the United States, government regulation, technological developments and the location, availability, quality and price of competing sources

of coal, alternative fuels such as natural gas, oil and nuclear and alternative energy sources such as hydroelectric power. Demand for our low sulfur coal and the prices that we will be able to obtain for it will also be affected by the price and availability of high sulfur coal, which can be marketed in tandem with emissions allowances in order to meet Clean Air Act requirements. Any reduction in the demand for our coal by the domestic electric generation industry would result in a decline in our revenues and profit, which could be material.

We have experienced a net loss for the three months ended March 31, 2003 and may incur losses in the future.

We incurred a net loss of $10.2 million for the three months ended March 31, 2003. We have experienced adverse pricing trends, oversupply in our coal markets and may face regulatory or judicial developments or other industry conditions that are beyond our control. These factors may affect our ability to mine and sell coal profitably.

Extensive environmental laws and regulations affect the end-users of coal and could reduce the demand for coal as a fuel source and cause the volume of our sales to decline.

The Clean Air Act and similar state and local laws extensively regulate the amount of sulfur dioxide, particulate matter, nitrogen oxides, and other compounds emitted into the air from electric power plants, which are the largest end-users of our coal. Such regulations, which can take a variety of forms, may reduce demand for coal as a fuel source because they may require significant emissions control expenditures for coal-fired power plants to attain applicable ambient air quality standards, which may lead these generators to switch to other fuels that generate less of these emissions and may also reduce future demand for the construction of coal-fired power plants.

The U.S. Department of Justice, on behalf of the EPA, has filed lawsuits against several investor-owned electric utilities and brought an administrative action against one government-owned utility for alleged violations of the Clean Air Act. We supply coal to some of the currently-affected utilities, and it is possible that other of our customers will be sued. These lawsuits could require the utilities to pay penalties, install pollution control equipment or undertake other emission reduction measures, any of which could adversely impact their demand for our coal.

A regional haze program initiated by the EPA to protect and to improve visibility at and around national parks, national wilderness areas and international parks restricts the construction of new coal-fired power plants whose operation may impair visibility at and around federally protected areas and may require some existing coal-fired power plants to install additional control measures designed to limit haze-causing emissions.

The Clean Air Act also imposes standards on sources of hazardous air pollutants. Although these standards have not yet been extended to coal mining operations, the EPA has announced that it would regulate hazardous air pollutants from coal-fired power plants. Under the Clean Air Act, coal-fired power plants will be required to control hazardous air pollution emissions by no later than 2009, which likely will require significant new investment in controls by power plant operators. These standards and future standards could have the effect of decreasing demand for coal.

Other proposed initiatives, such as the Bush administration’s announced Clear Skies Initiative, may also have an effect upon coal operations. As proposed, this initiative is designed to further reduce emissions of sulfur dioxide, nitrogen oxides and mercury from power plants. Other so-called multi-pollutant bills, which could regulate additional air pollutants, have been proposed by various members of Congress. If such initiatives are enacted into law, power plant operators could choose other fuel sources to meet their requirements, reducing the demand for coal.

Because our industry is highly regulated, our ability to conduct mining operations is restricted and our profitability may decline.

The coal mining industry is subject to regulation by federal, state and local authorities on matters such as:

- the discharge of materials into the environment;
- employee health and safety;
- mine permits and other licensing requirements;
- reclamation and restoration of mining properties after mining is completed;
- management of materials generated by mining operations;
- surface subsidence from underground mining;
- water pollution;
- legislatively mandated benefits for current and retired coal miners;
- air quality standards;
- protection of wetlands;
- endangered plant and wildlife protection;
- limitations on land use;
- storage of petroleum products and substances that are regarded as hazardous under applicable laws; and
- management of electrical equipment containing polychlorinated biphenyls, or PCBs.

Extensive regulation of these matters has had and will continue to have a significant effect on our costs of production and competitive position. Further regulations, legislation or orders may also cause our sales or profitability to decline by hindering our ability to continue our mining operations, by increasing our costs or by causing coal to become a less attractive fuel source.

Mining companies must obtain numerous permits that strictly regulate environmental and health and safety matters in connection with coal mining, some of which have significant bonding requirements. Regulatory authorities exercise considerable discretion in the timing of permit issuance. Also, 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. Accordingly, the permits we need for our mining operations may not be issued, or, if issued, may not be issued in a timely fashion, or may involve requirements that may be changed or interpreted in a manner which restricts our ability to conduct our mining operations or to do so profitably. Under the federal Clean Water Act, state regulatory authorities must conduct an antidegradation review before approving permits for the discharge of pollutants into waters that have been designated by the state as high quality. This review involves public and intergovernmental scrutiny of permits and requires permittees to demonstrate that the proposed activities are justified in order to accommodate significant economic or social development in the area where the waters are located. If the plaintiffs are successful, the exemption from the antidegradation review policy is revoked and we discharge into waters designated as high quality by the state, the cost, time and difficulty associated with obtaining and complying with Clean Water Act permits for our affected surface mining operations would increase and may hinder our ability to conduct such operations profitably.

Federal and state laws require us to obtain surety bonds to secure payment of certain long-term obligations, including mine closure or reclamation costs, federal and state workers' compensation costs, coal leases and other miscellaneous obligations. Many of these bonds are renewable on a yearly basis. It has become increasingly difficult for us to secure new surety bonds or renew such bonds without the

posting of collateral. In addition, surety bond costs have increased while the market terms of such bonds have generally become more unfavorable.

Our profitability may fluctuate due to unanticipated mine operating conditions and other factors that are not within our control.

Our mining operations are inherently subject to changing conditions that can affect levels of production and production costs at particular mines for varying lengths of time and can result in decreases in our profitability. Weather conditions, equipment replacement or repair, fuel prices, fires, variations in thickness of the layer, or seam, of coal, amounts of overburden, rock and other natural materials and other geological conditions have had, and can be expected in the future to have, a significant impact on our operating results. Prolonged disruption of production at any of our principal mines, particularly our Black Thunder mine, would result in a decrease in our revenues and profitability, which could be material. Other factors affecting the production and sale of our coal that could result in decreases in our profitability include:

- expiration or termination of, or sales price redeterminations or suspension of deliveries under, coal supply agreements;
- disruption or increases in the cost of transportation services;
- changes in laws or regulations, including permitting requirements;
- litigation;
- work stoppages or other labor difficulties;
- mine worker vacation schedules and related maintenance activities; and
- changes in coal market and general economic conditions.

Decreases in our profitability as a result of the factors described above could adversely impact our quarterly or annual results materially.

Intense competition and excess industry capacity in the coal producing regions in which we operate has adversely affected our revenues and profitability and may continue to do so in the future.

The coal industry is intensely competitive, primarily as a result of the existence of numerous producers in the coal producing regions in which we operate. A number of our competitors have greater financial resources than we do. We compete with four major coal producers, including Triton, in the Powder River Basin and effectively compete with a large number of coal producers in the markets that we serve. Additionally, we are subject to the continuing risk of reduced profitability as a result of excess industry capacity and weak power demand by the industrial sector of the economy, which led us to reduce the rate of coal production from planned levels and adversely impacted our profitability.

Deregulation of the electric utility industry may cause our customers to be more price-sensitive in purchasing coal, which could cause our profitability to decline.

Electric utility deregulation is expected to provide incentives to generators of electricity to minimize their fuel costs and is believed to have caused electric generators to be more aggressive in negotiating prices with coal suppliers. To the extent utility deregulation causes our customers to be more cost sensitive, deregulation may have a negative effect on our profitability.

Our profitability may be adversely affected by the status of our long-term coal supply contracts.

We sell a substantial portion of our coal under long-term coal supply agreements, which are contracts with a term greater than 12 months. The prices for coal shipped under these contracts may be below the current market price for similar-type coal at any given time. As a consequence of the substantial volume of our sales that are subject to these long-term agreements, we have less coal available with which to

capitalize on higher coal prices if and when they arise. In addition, because long-term contracts typically allow the customer to elect volume flexibility, our ability to realize the higher prices that may be available in the spot market may be restricted when customers elect to purchase higher volumes under such contracts. Our exposure to market-based pricing may also be increased should customers elect to purchase fewer tons. In addition, the increasingly short terms of sales contracts and the consequent absence of price adjustment provisions in such contracts make it more likely that we will not be able to recover inflation related increases in mining costs during the contract term.

The loss of, or significant reduction in, purchases by our largest customers could adversely affect our revenues.

For the year ended December 31, 2002, we derived 20.8% of our total coal revenues from sales to our two largest customers. At December 31, 2002, we had five coal supply agreements with those two customers that expire at various times from 2003 to 2004. We intend to discuss the extension of existing agreements or entering into new long-term agreements with those and other customers, but the negotiations may not be successful, and those customers may not continue to purchase coal from us under long-term coal supply agreements, or at all. If either of those customers were to significantly reduce their purchases of coal from us, or if we were unable to sell coal to them on terms as favorable to us as the terms under our current agreements, our revenues and profitability could suffer materially.

Because our profitability is substantially dependent on the availability of an adequate supply of coal reserves that can be mined at competitive costs, the unavailability of these types of reserves would cause our profitability to decline.

Our profitability depends substantially on our ability to mine coal reserves that have the geological characteristics that enable them to be mined at competitive costs. Replacement reserves may not be available when required or, if available, may not be capable of being mined at costs comparable to those characteristic of the depleting mines. We may not be able to accurately assess the geological characteristics of any reserves that we acquire, which may adversely affect our profitability and financial condition. Exhaustion of reserves at particular mines also may have an adverse effect on our operating results that is disproportionate to the percentage of overall production represented by such mines.

Disruption in, or increased costs of, transportation services could adversely affect our profitability.

The coal industry depends on rail and trucking transportation to deliver shipments of coal to customers, and transportation costs are a significant component of the total cost of supplying coal. Disruptions of these transportation services could temporarily impair our ability to supply coal to our customers and thus adversely affect our business and the results of our operations. In addition, increases in transportation costs associated with our coal, or increases in our transportation costs relative to transportation costs for coal produced by our competitors or of other fuels, could adversely affect our business and profitability.

We face numerous uncertainties in estimating our economically recoverable coal reserves, and inaccuracies in our estimates could result in lower than expected revenues, higher than expected costs or decreased profitability.

We base our reserve information on geological data assembled and analyzed by our staff, which includes various engineers and geologists, and periodically reviewed by outside firms. The reserve estimates are annually updated to reflect production of coal from the reserves and new drilling or other data received. 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 a number of variable factors and assumptions, such as geological and mining conditions which may not be fully identified by available exploration data or which may differ from experience in current operations, historical production from the area compared with production from other producing areas, the assumed effects of regulation by governmental agencies and assumptions concerning

coal prices, operating costs, severance and excise tax, development costs and reclamation costs, all of which may vary considerably from actual results.

For these reasons, estimates of the economically recoverable quantities attributable to any particular group of properties, classifications of reserves based on risk of recovery and estimates of net cash flows expected from particular reserves 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 materially from estimates. These estimates thus may not accurately reflect our actual reserves.

Defects in title or loss of any leasehold interests in our properties could limit our ability to mine these properties or result in significant unanticipated costs.

We conduct a significant part of our mining operations on properties that we lease. The loss of any lease could adversely affect our ability to mine the associated reserves. Because title to most of our leased properties and mineral rights is not usually verified until we make a commitment to develop a property, which may not occur until after we have obtained necessary permits and completed exploration of the property, our right to mine some of our reserves has in the past, and may again in the future, be adversely affected if defects in title or boundaries exist. In order to obtain leases or mining contracts to conduct our mining operations on property where these defects exist, we have had to, and may in the future have to, incur unanticipated costs. In addition, we may not be able to successfully negotiate new leases or mining contracts for properties containing additional reserves, or maintain our leasehold interests in properties where we have not commenced mining operations during the term of the lease.

Acquisitions that we may undertake would involve a number of inherent risks, any of which could cause us not to realize the benefits anticipated to result.

We continually seek to expand our operations and coal reserves through acquisitions of businesses and assets. Acquisition transactions involve various inherent risks, such as:

- uncertainties in assessing the value, strengths, weaknesses, contingent and other liabilities and potential profitability of acquisition or other transaction candidates;
- the potential loss of key personnel of an acquired business;
- the ability to achieve identified operating and financial synergies anticipated to result from an acquisition or other transaction;
- problems that could arise from the integration of the acquired business; and
- unanticipated changes in business, industry or general economic conditions that affect the assumptions underlying the acquisition or other transaction rationale.

Any one or more of these factors could cause us not to realize the benefits anticipated to result from the acquisition of businesses or assets.

Changes in our credit ratings could adversely affect our costs and expenses.

Any downgrade in our credit ratings could adversely affect our ability to borrow and result in more restrictive borrowing terms, including increased borrowing costs, more restrictive covenants and the extension of less open credit. This in turn could affect our internal cost of capital estimates and therefore operational decisions.

Agreements to which we are a party contain limitations on our ability to manage our operations exclusively.

The agreement under which we were formed provides that one of Arch Coal's affiliates, as our managing member, generally has exclusive power and authority to conduct, manage and control our

business. However, consent of our other member generally would be required in the event that we would propose to make a distribution, incur indebtedness, sell properties or merge or consolidate with any other entity if, at that time, we have a debt rating less favorable than Ba3 from Moody's Investors Service or BB-from Standard & Poor's or fail to meet specified indebtedness and interest coverage ratios.

In connection with our formation, Arch Coal entered into an agreement under which Arch Coal agreed to indemnify our other member against specified tax liabilities in the event that these liabilities arise as a result of certain actions taken prior to June 1, 2013, including the sale or other disposition of specified properties of ours, repurchases by us of our equity interests or the reduction under some circumstances of indebtedness incurred by us in connection with our acquisition.

The membership interests in Canyon Fuel, which operates three coal mines in Utah, are owned 65% by us and 35% by a subsidiary of ITOCHU Corporation of Japan. The agreement which governs the management and operations of Canyon Fuel provides for a management board to manage its business and affairs. Some major business decisions concerning Canyon Fuel require the vote of 70% of the membership interests and therefore limit our ability to make these decisions unilaterally. These decisions include:

- admission of additional members; approval of annual business plans;
- the making of significant capital expenditures;
- sales of coal below specified prices;
- agreements between Canyon Fuel and any member;
- institution or settlement of litigation;
- a material change in the nature of Canyon Fuel's business or a material acquisition;
- the sale or other disposition, including by merger, of assets other than in the ordinary course of business;
- incurrence of indebtedness;
- entering into leases; and
- the selection and removal of officers.

The Canyon Fuel agreement also contains restrictions on the transfer of our membership interest in Canyon Fuel and a buy/sell provision, which can be utilized by either member in the event of a deadlock in certain management decisions.

Our expenditures for postretirement medical and pension benefits are expected to be significantly higher in 2003 and could further increase in the future.

We estimate our future postretirement medical and pension benefit obligations based on various assumptions, including:

- actuarial estimates;
- assumed discount rates;
- estimates of mine lives;
- expected returns on pension plan assets; and
- changes in health care costs.

Based on changes in our assumptions, we expect that our annual postretirement health and pension benefit costs will increase by approximately $1.9 million in 2003. If our assumptions relating to these benefits change in the future, our costs could further increase, which would reduce our profitability. In addition, future regulatory and accounting changes relating to these benefits could result in increased obligations or additional costs, which could also have a material adverse affect on our financial results.

Additional Risks Relating to Arch Coal's Business

In addition to the risks described above, which relate to Arch Coal's operations as a whole, Arch Coal also is subject to the following additional risks relating to its eastern operations.

Mining in Central Appalachia is more complex and involves more regulatory constraints than mining in the regions in which we operate.

The geological characteristics of Central Appalachia coal reserves, such as depth of overburden and coal seam thickness, make them complex and costly to mine. As mines become depleted, replacement reserves may not be available when required or, if available, may not be capable of being mined at costs comparable to those characteristic of the depleting mines. In addition, as compared to mines in the Powder River Basin, permitting and licensing and other environmental and regulatory requirements are more costly and time-consuming to satisfy. These factors could materially adversely affect the mining operations and cost structures of, and customers' ability to use coal produced by, operators in Central Appalachia, including Arch Coal.

Arch Coal has experienced net losses in recent periods, which may continue or reoccur in the future.

Arch Coal reported a net loss of $2.6 million on a consolidated basis for the year ended December 31, 2002 and a net loss available to common shareholders of $18.0 million on a consolidated basis for the three months ended March 31, 2003 and has incurred losses in prior periods. These recent losses are primarily attributable to Arch Coal's decision to reduce coal production in response to a weak pricing environment stemming from oversupply in our coal markets as a result of the general economic downturn that reduced electricity demand in the United States. Due to the continuing possibility of adverse pricing trends, regulatory and judicial developments, or other industry conditions that are beyond Arch Coal's control and that affect Arch Coal's ability to mine and sell coal profitably, Arch Coal may incur losses in the future.

The loss of, or significant reduction in, purchases by Arch Coal's largest customers could adversely affect Arch Coal's revenues.

For the year ended December 31, 2002, Arch Coal derived 61% of its total coal revenues from sales to its ten largest customers. At December 31, 2002, Arch Coal had 16 coal supply agreements with these customers that expire at various times from 2003 to 2012. Arch Coal intends to discuss the extension of existing agreements or entering into new long-term agreements with some of these customers, but these negotiations may not be successful, and those customers may not continue to purchase coal from Arch Coal under long-term coal supply agreements, or at all. If a number of these customers were to significantly reduce their purchases of coal from Arch Coal, or if Arch Coal was unable to sell coal to them on terms as favorable to Arch Coal as the terms of its current agreements, Arch Coal's financial condition and results of operations could suffer materially.

Arch Coal and Vulcan may be unable to obtain the regulatory approvals required to complete the acquisition or, in order to do so, Arch Coal may be required to comply with material restrictions or conditions.

The acquisition is subject to review by the U.S. Federal Trade Commission under the Hart-Scott-Rodino Improvements Act of 1976. Under that statute, Arch Coal and Vulcan were required to make notification filings, and Arch Coal and Vulcan are awaiting the expiration or early termination of statutory waiting periods prior to completing the acquisition. Arch Coal and Vulcan have not yet obtained any of the governmental or regulatory approvals required to compete the acquisition.

The reviewing authorities may not permit the acquisition at all or may impose restrictions or conditions on the acquisition. These conditions could include a complete or partial divestiture or the holding separate of assets or businesses. Arch Coal may refuse to complete the acquisition if restrictions or

conditions are required by governmental authorities that would materially adversely impact the benefits anticipated to be derived as a result of the acquisition.

In addition, during or after the statutory waiting periods, and even after completion of the acquisition, governmental authorities could seek to block or challenge the acquisition as they deem necessary or desirable in the public interest. In some jurisdictions, a competitor, customer or other third party could initiate a private action under the antitrust laws challenging or seeking to enjoin the acquisition, before or after it is completed. Arch Coal or Vulcan may not prevail or may incur significant costs in defending or settling any action under antitrust laws.

Although Arch Coal expects that its planned acquisition of Vulcan will result in benefits to Arch Coal, it may not realize those benefits because of potential challenges to integration.

The failure of Arch Coal to meet the challenges involved in integrating its operations with those of Vulcan successfully or otherwise to realize any of the anticipated benefits of the acquisition could materially impact the results of operations of Arch Coal. Realizing the potential benefits of the acquisition will depend in part on the successful integration of operations and personnel. Arch Coal may not successfully integrate Vulcan's operations with its operations in a timely manner, or at all, and Arch Coal may not realize the anticipated benefits or synergies of the acquisition to the extent, or in the timeframe, anticipated. These anticipated benefits and synergies are based on projections and assumptions.

Changes in Arch Coal's credit ratings could adversely affect its costs and expenses.

Any downgrade in the credit ratings of Arch Coal could adversely affect the ability of Arch Coal to borrow and result in more restrictive borrowing terms, including increased borrowing costs, more restrictive covenants and the extension of less open credit. This in turn could affect Arch Coal's internal cost of capital estimates and therefore operational decisions.

Acquisitions that Arch Coal may undertake involve a number of inherent risks, any of which could cause Arch Coal not to realize the benefits anticipated to result.

Arch Coal continually seeks to expand its operations and coal reserves in the regions in which it operates through acquisitions of businesses and assets. Acquisition transactions involve various inherent risks, such as:

- difficulties in assessing the value, strengths, weaknesses, contingent and other liabilities and potential profitability of acquisition or other transaction candidates;
- the potential loss of key personnel of an acquired business;
- the ability to achieve identified operating and financial synergies anticipated to result from an acquisition or other transaction;
- problems that could arise from the integration of the acquired business; and
- unanticipated changes in business, industry or general economic conditions that affect the assumptions underlying the acquisition or other transaction rationale.

Any one or more of these factors could cause Arch Coal not to realize the benefits anticipated to result from the acquisition of businesses or assets.

Risks Related to the Registered Notes

Both we and Arch Coal have a significant amount of debt relative to our equity capitalization, which limits our flexibility and imposes restrictions on us, and a downturn in economic or industry conditions may materially affect our ability to meet our future financial commitments and liquidity needs.

As of March 31, 2003, after giving effect to the sale of the old notes and the application of the net proceeds therefrom, we would have had indebtedness of approximately $700.0 million, representing

approximately 60% of our capital employed, and Arch Coal would have had consolidated indebtedness (including ours) of approximately $729.8 million (excluding $298.2 million of secured debt expected to be incurred by Arch Coal under its revolving credit facility to finance its acquisition of Vulcan), representing approximately 53% of its capital employed. Our ability to satisfy our debt, lease and royalty obligations, and our ability to refinance our indebtedness, will depend upon our future operating performance, which will be affected by prevailing economic conditions in the markets that we serve and financial, business and other factors, many of which are beyond our control. We may be unable to generate sufficient cash flow from operations and future borrowings or other financing may be unavailable in an amount sufficient to enable us to fund our future financial obligations or our other liquidity needs.

The amount and terms of our debt could have material consequences to our business, including, but not limited to:

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

Despite these significant levels of indebtedness, we and Arch Coal may incur additional indebtedness in the future, which would heighten the risks described above.

The Arch Coal promissory notes securing the registered notes are unsecured obligations of Arch Coal and are subordinated to Arch Coal's secured indebtedness and to the indebtedness and other liabilities of Arch Coal's subsidiaries other than us and our subsidiaries. If an event of default occurs, Arch Coal may not have sufficient funds to repay all or any of the promissory notes.

The registered notes will be secured by a pledge of the promissory notes issued by Arch Coal to us evidencing cash loaned by us to Arch Coal. On March 31, 2003, there was $361.1 million outstanding under those promissory notes. Any distributions by us to, or investments by us in, Arch Coal or any of its subsidiaries, other than us or our subsidiaries, will be in the form of loans evidenced by additional promissory notes which will be pledged for the benefit of the holders of the registered notes as security for the payment of the registered notes. Under the indenture, we can distribute to Arch Coal all of our cash, other than amounts necessary to pay for our operating expenses, interest and principal obligations on indebtedness, capital expenditures, improvements and replacements, contingencies, reserves and other expenses. However, the aggregate principal amount of Arch Coal notes may not be equal to or greater than the aggregate principal amount of registered notes outstanding. In addition, because the Arch Coal notes are demand notes, Arch Coal may repay all or part of the Arch Coal notes prior to maturity of your registered notes, in which case, in the event of default, you may not have any claim, or you may have a more limited claim, against Arch Coal.

Arch Coal is a holding company and does not directly conduct any business operations. Arch Coal depends on its operating subsidiaries and has no assets other than its interests in its subsidiaries. The Arch Coal notes are unsecured obligations of Arch Coal ranking effectively junior in right of payment to all existing and future secured debt of Arch Coal to the extent of the collateral securing such debt. As of March 31, 2003, Arch Coal had $25.0 million of secured debt, which does not include $298.2 million of secured debt that Arch Coal expects to incur to finance its acquisition of Vulcan. In addition, the Arch

Coal notes are structurally subordinate to the indebtedness and other liabilities of all of Arch Coal's subsidiaries other than us and the guarantors. Therefore, all of the indebtedness and other liabilities, including trade payables, of those subsidiaries must be satisfied in full before any of the assets of such subsidiaries would be available for distribution, upon a liquidation or otherwise, to Arch Coal to meet its obligations with respect to the Arch Coal notes. As of March 31, 2003, the subsidiaries of Arch Coal (other than Arch Western and its subsidiaries) would have had $703.7 million of debt and other liabilities, excluding approximately $107.1 million of liabilities of Vulcan that would be assumed upon completion of the acquisition. As a result, Arch Coal may have insufficient assets or funds to repay the promissory notes in whole, in part or at all.

Although the holders of the registered notes will have a first-priority security interest in the Arch Coal notes, we will be permitted to incur liens on the Arch Coal notes in favor of the lenders under a credit facility in an amount not to exceed $100.0 million, which liens will be equal and ratable with the liens securing the registered notes. As a result, in the event that we foreclose on the Arch Coal notes, we may have to share proceeds from such foreclosure with the lenders under such credit facility.

The guarantees will be structurally subordinate to the indebtedness of our subsidiaries that are not guarantors of the registered notes.

You will not have any claim as a creditor against our subsidiaries that are not guarantors of the registered notes, which currently includes our 65% owned subsidiary, Canyon Fuel (which represented 2% and 12% of our revenue and assets, respectively, in 2002). As a result, all indebtedness and other liabilities, including trade payables, of the non-guarantor subsidiaries, whether secured or unsecured, must be satisfied before any of the assets of such subsidiaries would be available for distribution, upon a liquidation or otherwise, to us in order for us to meet our obligations with respect to the guarantees. As of March 31, 2003, Canyon Fuel had approximately $51.8 million of total indebtedness and other liabilities, including trade payables and accrued expenses. In addition to the structurally senior claims of creditors, the equity interests of our joint venture partner in any dividend or other distribution made by Canyon Fuel would need to be satisfied.

The guarantees will not be secured by any assets of the guarantors and therefore will be structurally subordinated to the guarantors' existing and future secured indebtedness.

The registered notes will be general unsecured obligations ranking effectively junior in right of payment to all existing and future secured debt of each guarantor to the extent of the collateral securing such debt. In addition, the indenture governing the registered notes will permit the incurrence of additional debt, some of which may be secured debt. In the event that a guarantor is declared bankrupt, becomes insolvent or is liquidated or reorganized, creditors whose debt is secured by assets of the guarantor will be entitled to the remedies available to secured holders under applicable laws, including the foreclosure of the collateral securing such debt, before any payment may be made with respect to the affected guarantees. Holders of the registered notes will participate ratably with all holders of the guarantors' unsecured indebtedness that are deemed to be of the same class as the guarantees, and potentially with all other general creditors, based upon the respective amounts owed to each holder or creditor, in the guarantors' remaining assets. In any of the foregoing events, there may be insufficient assets to pay amounts due on the registered notes. As a result, holders of the registered notes may receive less, ratably, than holders of secured indebtedness.

We may not generate cash flow sufficient to service all of our obligations, including our obligations related to the registered notes.

Our ability to make payments on and to refinance our indebtedness, including our guarantees of the registered notes, depends on our ability to generate cash in the future. We are subject to general economic, climatic, industry, financial, competitive, legislative, regulatory and other factors that are beyond our control. In particular, economic conditions could cause the price of coal to fall, our revenue to decline and hamper our ability to repay our indebtedness, including the registered notes. As a result, we may need to

refinance all or a portion of our indebtedness, including the registered notes, on or before maturity. Our ability to refinance debt or obtain additional financing will depend on, among other things:

- our financial condition at the time;
- restrictions in the indenture governing the registered notes and any other indebtedness; and
- other factors, including financial market or coal industry conditions.

As a result, we may not be able to refinance any of our indebtedness, including the registered notes, on commercially reasonable terms, or at all. If our operations do not generate sufficient cash flow from operations, and additional borrowings or refinancings are not available to us, we may not have sufficient cash to enable us to meet all of our obligations, including payments on the registered notes.

The terms of the agreements governing our indebtedness contain significant restrictions that limit our operating and financial flexibility.

The indenture governing the registered notes will contain covenants that, among other things, limit our ability and the ability of our subsidiaries to:

- incur more debt;
- make distributions;
- make investments;
- create liens;
- issue and sell capital stock of subsidiaries;
- sell assets;
- enter into restrictions affecting the ability of restricted subsidiaries to make distributions, loans or advances to us;
- engage in transactions with affiliates;
- enter into sale and leasebacks; and
- merge or consolidate or transfer and sell assets.

These restrictions on operations and financings, as well as those that may be contained in future debt agreements, may limit our ability and the ability of Arch Coal to execute preferred business strategies. Moreover, if operating results fall below current levels, we may be unable to comply with these covenants. If that occurs, our lenders, including you, could accelerate their debt. If their debt is accelerated, we may not be able to repay all of their debt, in which case your registered notes may not be fully repaid, if they are repaid at all.

If the registered notes become rated investment grade by both Standard & Poor's and Moody's, certain covenants contained in the indenture will be terminated, and you will lose the protection of these covenants.

The indenture contains certain covenants that will cease to be in effect from and after the first date when the registered notes are rated investment grade by both Standard & Poor's and Moody's. These covenants restrict, among other things, our ability and the ability of our subsidiaries to pay dividends, incur additional debt and enter into certain types of transactions. Because these restrictions will not apply when the registered notes are rated investment grade, we will be able to incur additional debt and consummate transactions that may impair our ability to satisfy our obligations with respect to our guarantee or the Issuer's ability to satisfy its obligations with respect to the registered notes. These covenants will not be restored, even if the credit ratings assigned to the registered notes later fall below investment grade.

The Issuer may be unable to repurchase registered notes in the event of a change of control.

Upon the occurrence of certain kinds of change of control events, you will have the right, as a holder of the registered notes, to require the Issuer to repurchase all of your registered notes at a repurchase price equal to 101% of their principal amount, plus accrued and unpaid interest, if any, to the date of repurchase. The Issuer may not be able to pay you the required price for your registered notes at that time because we or the Issuer may not have available funds to pay the repurchase price. In addition, the terms of other existing or future debt may prevent the Issuer from paying you.

Federal and state fraudulent conveyance laws may permit a court to void the registered notes and the guarantees, and, if that occurs, you may not receive any payments on the registered notes.

The issuance of the registered notes and the guarantees may be subject to review under federal and state fraudulent conveyance statutes. While the relevant laws may vary from state to state, under such laws the payment of consideration generally will be a fraudulent conveyance if:

- it was paid with the intent of hindering, delaying or defrauding creditors; or
- the Issuer or any of the guarantors received less than fair consideration in return for issuing either the registered notes or a guarantee, as applicable, and either:
  - the Issuer or the guarantor was insolvent or rendered insolvent by reason of the incurrence of the indebtedness;
  - payment of the consideration left the Issuer or the guarantor with an unreasonably small amount of capital to carry on the business; or
  - the Issuer or the guarantor intended to, or believed that it would, incur debts beyond its ability to pay the debt.

If a court were to find that the issuance of the registered notes or a guarantee was a fraudulent conveyance, the court could void the payment obligations under the registered notes or such guarantee or further subordinate the registered notes or such guarantee to presently existing and future indebtedness, or require the holders of the registered notes to repay any amounts received with respect to the registered notes or such guarantee. In the event of a finding that a fraudulent conveyance occurred, you may not receive any repayment on the registered notes. Further, the voidance of the registered notes or a guarantee could result in an event of default with respect to our other debt that could result in acceleration of that debt.

There is currently no active trading market for the registered notes. If an active trading market does not develop for these registered notes, you may not be able to resell them.

No active trading market currently exists for the registered notes, and none may develop. The registered notes will not be listed on any securities exchange. If an active trading market does not develop, you may not be able to resell your registered notes at their fair market value or at all. Historically, the market for non-investment grade debt has been subject to disruptions that have caused substantial volatility in the prices of securities similar to the notes. The market for the registered notes may be subject to similar disruptions. The trading price may depend upon prevailing interest rates, the market for similar securities and other factors, including general economic conditions and the financial condition, performance and prospects of Arch Western and Arch Coal. These factors could adversely affect you as a holder of registered notes.

FORWARD-LOOKING STATEMENTS

You should carefully review the information contained in or incorporated by reference into this prospectus. In this prospectus, statements that are not reported financial results or other historical information are "forward-looking statements." Forward-looking statements give current expectations or forecasts of future events and are not guarantees of future performance. They are based on our management's expectations that involve a number of business risks and uncertainties, any of which could cause actual results to differ materially from those expressed in or implied by the forward-looking statements.

You can identify these forward-looking statements by the fact that they do not relate strictly to historic or current facts. They use words such as "anticipate," "estimate," "project," "intend," "plan," "believe" and other words and terms of similar meaning in connection with any discussion of future operating or financial performance. In particular, these include statements relating to:

- our expectation of continued growth in the demand for electricity;
- our belief that legislation and regulations relating to the Clean Air Act and the relatively higher costs of competing fuels will increase demand for our compliance and low sulfur coal;
- our expectation that we will continue to have adequate liquidity from cash flow from operations;
- a variety of market, operational, geologic, permitting, labor and weather related factors;
- expectations of Arch Coal regarding the consummation of the Triton acquisition and any synergies to be derived from the acquisition; and
- the other risks and uncertainties which are described in this prospectus under "Risk Factors."

We cannot guarantee that any forward-looking statements will be realized, although we believe that we have been prudent in our plans and assumptions. Achievement of future results is subject to risks, uncertainties and assumptions that may prove to be inaccurate. Should known or unknown risks or uncertainties materialize, or should underlying assumptions prove to be inaccurate, actual results could vary materially from those anticipated, estimated or projected. You should bear this in mind as you consider any forward-looking statements.

We undertake no obligation to publicly update forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required by law. You are advised, however, to consider any additional disclosures that we or Arch Coal may make on related subjects in future filings with the SEC. You should understand that it is not possible to predict or identify all factors that could cause our actual results to differ. Consequently, you should not consider any such list to be a complete set of all potential risks or uncertainties.

USE OF PROCEEDS

The Issuer will not receive any cash proceeds from the completion of the exchange offer.

CAPITALIZATION

The following tables set forth cash and cash equivalents and capitalization as of March 31, 2003 for us and for Arch Coal on an actual basis and on an as adjusted basis. The as adjusted presentations give effect to the sale of the old notes and the use of the net proceeds therefrom to repay and retire the outstanding indebtedness under our $675.0 million credit facility, which consisted of a $150.0 million non-amortizing term loan maturing in April 2007 and a $525 million non-amortizing term loan maturing in April 2008 for general purposes. The tables should be read in conjunction with the respective consolidated financial statements and the related notes of Arch Western and Arch Coal and with the respective management's discussions and analyses of financial condition and results of operations of Arch Western and Arch Coal that are included elsewhere or incorporated by reference in this prospectus.

Arch Western

	As of March 31, 2003	
	Actual	As Adjusted
	(Dollars in millions)	
Cash and cash equivalents	$ 1.7	$ 11.9
Total debt:		
Term loan due April 2007	$ 150.0	$ —
Term loan due April 2008	525.0	—
6 3/4% Senior Notes due 2013	—	700.0
Total debt	675.0	700.0
Members' equity(1)	465.4	460.7
Total capitalization	$1,140.4	$1,160.7

Arch Coal

	As of March 31, 2003	
	Actual	As Adjusted
	(Dollars in millions)	
Cash and cash equivalents(2)	$ 65.8	$ 76.0
Total debt:		
Term loan due April 2007	$ 150.0	$ —
Term loan due April 2008	525.0	—
Revolving credit indebtedness(3)	25.0	25.0
Other debt	4.8	4.8
6 3/4% Senior Notes due 2013	—	700.0
Total debt	704.8	729.8
Stockholders' equity:		
Preferred Stock	—	—
Common stock	0.5	0.5
Paid-in capital	974.9	974.9
Retained deficit(1)(4)	(275.0)	(279.7)
Less treasury stock, at cost	(5.0)	(5.0)
Accumulated other comprehensive loss	(43.4)	(43.4)
Total stockholders' equity	652.0	647.3
Total capitalization	$1,356.8	$1,377.1

(1) Reflects the projected net decrease in Arch Western's members' equity and Arch Coal's stockholders' equity resulting from the write-off of $4.7 million of debt issuance costs related to the extinguishment of Arch Western's term loans.

(2) Does not include $52.0 million received subsequent to March 31, 2003, with respect to a coal sales contract buy-out, or $65.8 million that would be used to finance the acquisition of Vulcan.

(3) Does not include $298.2 million that would be incurred to finance the acquisition of Vulcan based on cash on hand of $65.8 million as of March 31, 2003, excluding $52.0 million of cash received subsequent to March 31, 2003, with respect to a coal sales contract buy-out. Arch Coal's revolving credit facility permits borrowing of up to $350.0 million, and is secured by the ownership interests in its subsidiaries, other than Arch Western and its subsidiaries. As of March 31, 2003, after giving effect to outstanding borrowings and letters of credit, Arch Coal had borrowing availability of $281.2 million under its revolving credit facility. The revolving credit facility expires in April 2007.

(4) Does not include losses recognized upon the termination of hedge accounting for interest rate swap agreements entered into in connection with indebtedness repaid with the net proceeds of the sale of the old notes. As of March 31, 2003, the amount of the deferred losses that would have been recognized upon termination of hedge accounting was $35.6 million. The losses have been deferred as a component of accumulated other comprehensive loss and will be amortized as an adjustment to interest expense over the remaining terms of the agreements.

ARCH WESTERN SELECTED CONSOLIDATED FINANCIAL AND OPERATING DATA

The following selected historical consolidated financial and operating data are qualified by reference to, and should be read in conjunction with, our audited consolidated financial statements and the related notes, our unaudited interim consolidated financial statements and the related notes and "Arch Western's Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this prospectus. The selected consolidated financial data set forth below for the period from June 1, 1998 (inception) through December 31, 1998 and for each of the four years in the period ended December 31, 2002 are derived from our audited consolidated financial statements. The selected consolidated financial data for the three months ended March 31, 2002 and 2003 are derived from our unaudited interim consolidated financial statements, and, in the opinion of our management, fairly present our results for such periods. Our results for the three months ended March 31, 2003 are not necessarily indicative of the results to be expected for the year ended December 31, 2003 or for any other future period.

	Years Ended December 31,					Three Months Ended March 31,	
	1998	1999	2000	2001	2002	2002	2003
	(In thousands, except ratios and per tonnage data)						
Consolidated Statement of Operations Data:							
Total revenues	$ 228,457	$ 446,400	$ 416,586	$ 515,713	$ 514,180	$ 113,837	$ 124,577
Cost of coal sold	216,953	396,951	383,608	440,363	450,144	105,841	106,004
Selling, general and administrative expenses	10,057	12,248	10,991	13,004	13,011	3,180	3,789
Amortization of coal supply agreements	6,479	10,049	9,536	1,976	1,201	164	95
Income (loss) from operations	(5,032)	27,152	12,451	60,370	49,824	4,652	14,689
Interest expense, net	(27,868)	(42,669)	(33,200)	(29,028)	(29,915)	(6,488)	(6,578)
Income (loss) before cumulative effect of accounting change	(32,900)	(15,517)	(20,749)	31,342	19,909	(1,836)	8,111
Cumulative effect of accounting change	—	615	—	—	—	—	(18,278)
Net income (loss)	$ (32,900)	$ (14,902)	$ (20,749)	$ 31,342	$ 19,909	$ (1,836)	$ (10,167)
Consolidated Balance Sheet Data (at period end):							
Cash and cash equivalents	$ 14,230	$ 204	$ 94	$ 461	$ 249	$ 707	$ 1,706
Receivable from Arch Coal	32,964	133,568	189,182	259,822	333,825	283,459	361,102
Total assets	1,305,436	1,308,428	1,308,729	1,329,688	1,373,061	1,334,487	1,405,571
Total debt	675,000	675,000	675,000	675,000	675,000	675,000	675,000
Members' equity	462,533	457,520	445,716	460,409	473,974	467,913	465,423
Other Financial Data:							
Capital expenditures	(21,679)	(68,417)	(28,535)	(32,142)	(51,360)	(21,907)	(6,391)
Ratio of earnings to fixed charges(1)	—	1.52x	1.25x	2.29x	2.13x	1.48x	2.40x
Operating Data:							
Tons sold	33,773	68,357	68,554	73,719	72,519	16,254	15,770
Tons produced	33,508	70,580	68,343	74,032	73,203	17,240	15,782
Average sales price (per ton)	$ 6.41	$ 6.16	$ 5.74	$ 6.35	$ 6.79	$ 6.77	$ 7.18
Average operating cost (per ton)	$ 6.42	$ 5.81	$ 5.60	$ 5.97	$ 6.21	$ 6.51	$ 6.72

(1) Ratio of earnings to fixed charges is computed on a total enterprise basis including our consolidated subsidiaries, plus our share of significant affiliates accounted for on the equity method that are 50% or greater owned or whose indebtedness has been directly or indirectly guaranteed by us. Earnings consist of income (loss) from continuing operations before income taxes and are adjusted to include fixed charges (excluding capitalized interest). Fixed charges consist of interest incurred on indebtedness, the portion of operating lease rentals deemed representative of the interest factor and the amortization of debt expense. In 1998, fixed charges exceeded earnings by $5.0 million.

ARCH WESTERN MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion should be read in conjunction with our consolidated financial statements and notes thereto included elsewhere in this prospectus.

Overview

We were formed as a joint venture on June 1, 1998 when Arch Coal acquired the U.S. coal operations of Atlantic Richfield Company and combined these operations with Arch Coal's western operations. Our membership interests are owned 99% by Arch Coal and 1% by an affiliate of BP p.l.c., the successor to Atlantic Richfield Company.

Excluding our Canyon Fuel joint venture, the results of which are accounted for under the equity method of accounting, we sold approximately 72.5 million tons of coal in 2002. We sold approximately 86% of this tonnage under long-term contracts, which are contracts of greater than one year, and the balance was sold on the spot market. We derived approximately 87% of our 2002 coal sales revenues from sales of coal under long-term contracts.

Our mining operations are inherently subject to changing conditions that can affect levels of production and production costs at particular mines for varying lengths of time and result in fluctuations in our profitability. Weather conditions, equipment replacement or repair, fires, variations in coal seam thickness, amounts of overburden, rock and other natural materials and other geological conditions, have had, and can be expected in the future to have, a significant impact on our operating results. For example, we were forced to temporarily idle our West Elk mine in Colorado for more than five months during 2000 following the detection of combustion gases in a portion of the mine. The temporary closure of this mine adversely affected our operating results in 2000. A prolonged disruption of production at any of our principal mines, particularly our Black Thunder operation in Wyoming, would have a material adverse effect on us. Other factors affecting the production and sale of our coal that can result in fluctuations in our profitability include the following:

- expiration or termination of, or sales price redeterminations or suspension of deliveries under, coal supply agreements;
- disruption or increases in the cost of transportation services;
- changes in laws or regulation, including permitting requirements;
- litigation;
- work stoppages or other labor difficulties; and
- changes in coal market and general economic conditions.

As our managing member, Arch Coal performs certain management and administrative functions on our behalf. Historically, we have paid selling, general and administrative services fees to Arch Coal. These fees were $2.3 million, $2.2 million, and $1.9 million for the years ended December 31, 2002, 2001 and 2000. These fees were not intended to represent the fair value of the services performed, nor did they approximate amounts that would be expected to be incurred if we were a stand-alone entity. In connection with the offering of the old notes, management of Arch Coal allocated additional expenses to us based on Arch Coal's best estimates of proportional or incremental costs, whichever is more representative of costs incurred by Arch Coal on our behalf. We will not be required to make payments for these additional expenses and the amounts of these expenses have been reflected as a capital contribution to us from Arch

Coal. The additional amounts allocated are reflected in "selling, general and administrative expenses" in the accompanying consolidated financial statements and are summarized in the following table:

	Year Ended December 31,		
	2000	2001	2002
	(In thousands)		
Net income (loss) as previously reported	$(11,708)	$ 42,119	$ 30,610
Adjustments for expenses not previously allocated	(9,041)	(10,777)	(10,701)
Net income (loss) after allocated expenses	$(20,749)	$ 31,342	$ 19,909

	Three Months Ended March 31,	
	2002	2003
	(In thousands)	
Net income (loss) as previously reported	$ 829	$ (6,873)
Adjustments for expenses not previously allocated	(2,665)	(3,294)
Net loss after allocated expenses	$(1,836)	$(10,167)

In connection with the offering of the old notes, certain amounts in the financial statements have been reclassified with no effect on previously reported net income (loss) or members' equity.

Results of Operations

Three Months Ended March 31, 2003 Compared with Three Months Ended March 31, 2002

Results for the three months ended March 31, 2003 benefited from higher average coal sales realizations and from improved earnings from our investment in Canyon Fuel. These improvements were offset slightly by increased production costs, due primarily to the impact of severe weather during the quarter. Additionally, our reported results were negatively impacted by the cumulative effect of a loss resulting from the adoption of Statement of Financial Accounting Standards No. 143, *Accounting for Asset Retirement Obligations* (FAS 143).

Operating results for the first quarter of 2003 versus the first quarter of 2002 and additional discussion of the results for the first quarter of 2003 are provided below.

Revenues

	Three Months Ended March 31,		Increase (Decrease)	
	2002	2003	$	%
	(In thousands, except percentages)			
Coal sales	$110,060	$113,288	$ 3,228	2.9%
Income from equity investment	1,268	8,151	6,883	542.8
Other revenues	2,509	3,138	629	25.1
Total	$113,837	$124,577	$10,740	9.4%

Coal sales. The increase in coal sales in the three months ended March 31, 2003 was primarily due to increased coal prices, offset by a reduction in the number of tons sold. We sold 15.8 million tons during the three months ended March 31, 2003 as compared to 16.2 million tons in the quarter ended March 31, 2002, a decline of 3.0%. Our average realized sales price improved from $6.77 per ton in the quarter ended March 31, 2002 to $7.18 per ton during the three months ended March 31, 2003. The increase in per ton coal sales realization was primarily due to higher contract prices.

Income from equity investment. In the first quarter of 2003, income from our investment in Canyon Fuel increased due to improved operating performance at certain of Canyon Fuel's mines as compared to the prior year's period, where one mine experienced geologic issues that impacted 2002 performance.

Costs and Expenses

	Three Months Ended March 31,		Increase (Decrease)	
	2002	2003	$	%
	(In thousands, except percentages)			
Cost of coal sales	$105,841	$106,004	$163	0.1%
Selling, general and administrative expenses	3,180	3,789	609	19.0
Amortization of coal supply agreements	164	95	(69)	(42.0)
Total	$109,185	$109,888	$703	0.1%

Cost of coal sales. Cost of coal sales remained flat in the three months ended March 31, 2003 as compared to the same period in 2002 despite lower production volumes. On a per ton sold basis, cost of coal sales was $6.72 for the three months ended March 31, 2003, as compared to $6.51 in the quarter ended March 31, 2002. The increase on a per ton basis is due to disruptions in production due to severe weather in March 2003 and increased diesel fuel costs.

Selling, general and administrative expenses. Selling, general and administrative expenses represent our proportional share of costs allocated from Arch Coal. The cost increase from the first quarter 2003 compared to same period in 2002 is a result of additional legal, personnel and information services costs.

Interest Expense, Net

	Three Months Ended March 31,		Increase (Decrease)	
	2002	2003	$	%
	(In thousands, except percentages)			
Interest expense	$ 9,609	$10,125	$ 516	5.4%
Interest income primarily from Arch Coal	(3,121)	(3,547)	(426)	(13.6)
Total	$ 6,488	$ 6,578	$ 90	1.4%

Interest expense. Interest expense increased during the first quarter of 2003 as compared to the first quarter of 2002 as a result of an increase in our cost of borrowing. We completed a refinancing of our term loans in April 2002. The new loans contained higher credit spreads than the previous loan.

Interest income primarily from Arch Coal. Our cash transactions are managed by Arch Coal. Cash paid to or from us that is not considered a distribution or a contribution is maintained as a receivable from Arch Coal. The receivable balance earns interest from Arch Coal at the prime interest rate. The increase in interest income primarily from Arch Coal is due to an increase in the amount of the receivable from Arch Coal from $283.5 million at March 31, 2002 to $361.1 million at March 31, 2003.

Net Income Before Cumulative Effect of Accounting Change

	Three Months Ended March 31,		Increase (Decrease)	
	2002	2003	$	%
	(In thousands, except percentage)			
Net income (loss) before cumulative effect of accounting change	$(1,836)	$8,111	$9,947	—

The increase in net income before cumulative effect of accounting change is primarily due to higher coal sales realizations and to increased income from our investment in Canyon Fuel, as discussed above.

Cumulative Effect of Accounting Change

Effective January 1, 2003, we adopted FAS 143, which requires legal obligations associated with the retirement of long-lived assets to be recognized at fair value at the time obligations are incurred. Upon initial recognition of a liability, that cost should be capitalized as part of the related long-lived asset and allocated to expense over the useful life of the asset. Application of FAS 143 resulted in a cumulative effect loss as of January 1, 2003 of $18.3 million.

Year Ended December 31, 2002, Compared to Year Ended December 31, 2001

Our results for 2002 were adversely impacted by the state of oversupply in the coal market that resulted from an extremely mild winter and a period of industrial economic weakness that dampened electricity demand. As a result, we reduced our rate of production from planned levels at our mining operations. Offsetting the impact of the overall production cuts was an improvement in operating performance at our West Elk mine, which had experienced production difficulties and increased costs in 2001 resulting from high methane levels.

Operating results for 2002 versus 2001 and additional discussion of the 2002 results are provided below.

Revenues

	Year Ended December 31,		Increase (Decrease)	
	2001	2002	$	%
	(In thousands, except percentages)			
Coal sales	$468,137	$492,191	$ 24,054	5.1%
Income from equity investment	26,250	7,774	(18,476)	(70.4)
Other revenues	21,326	14,215	(7,111)	(33.3)
Total	$515,713	$514,180	$ (1,533)	(0.3)%

Coal sales. The increase in coal sales in 2002 was the result of higher average pricing on coal shipped during 2002 as compared to 2001. Average realizations on a per ton basis were $6.79 per ton in 2002 as compared to $6.35 per ton in 2001. This increase was due in part to higher contract prices and in part to the mix of the tons sold. In 2002, a higher percentage of tons sold were from our West Elk mine in Colorado. The average realized sales price from this mine is generally higher than prices from our other operations. Production at the West Elk mine was constrained in 2001 due to higher than normal levels of methane gas in the coal seam. Partially offsetting the impact of higher average prices was a decrease in the number of tons sold, from 73.7 million tons in 2001 to 72.5 million tons in 2002.

Income from equity investment. The decrease in investment income from Canyon Fuel resulted from decreased operating earnings at Canyon Fuel due to the expiration of a favorable sales contract at the end of 2001, reduced operating results in early 2002 at one mine resulting from adverse geologic issues and a weak market environment for Utah coal throughout 2002. Additionally, in 2001, Canyon Fuel recognized recoveries of previously paid property taxes. Our share of these recoveries was $2.6 million.

Other revenues. The decrease in other revenues is primarily due to gains on land sales in 2001 of $5.4 million. There were no significant land sales in 2002. Additionally, we recognized $2.1 million of outlease royalties in 2001 from an outlease arrangement that terminated in 2001.

Costs and Expenses

	Year Ended December 31,		Increase (Decrease)	
	2001	2002	$	%
	(In thousands, except percentages)			
Cost of coal sales	$440,363	$450,144	$9,781	2.2%
Selling, general and administrative expenses	13,004	13,011	7	—
Amortization of coal supply agreements	1,976	1,201	(775)	(39.2)
Total	$455,343	$464,356	$9,013	2.0%

Cost of coal sales. The increase in cost of coal sales is due primarily to the change in sales mix noted above.

In addition, the following items impacted cost of coal sales in the period noted:

- Year ended December 31, 2002

We received a final insurance settlement of $9.4 million related to the temporary shut down of the West Elk mine following detection of combustion-related gases in a portion of the mine. This final insurance settlement has been recognized as a reduction in the cost of coal sales.

- Year ended December 31, 2001

We were notified by the Bureau of Land Management that we would receive a royalty rate reduction for certain tons mined at our West Elk mine. The rate reduction applies to a specified number of tons beginning October 1, 2001 and ending no later than October 1, 2005. The retroactive portion of the refund totaled $3.3 million and has been recognized as a reduction in the cost of coal sales.

Interest Expense, Net

	Year Ended December 31,		Increase (Decrease)	
	2001	2002	$	%
	(In thousands, except percentages)			
Interest expense	$ 44,637	$ 43,604	$(1,033)	(2.3)%
Interest income primarily from Arch Coal	(15,609)	(13,689)	1,920	12.3
Total	$ 29,028	$ 29,915	$ 887	3.1%

Interest expense. Interest expense decreased primarily as a result of lower interest rates on our outstanding variable rate borrowings.

Interest income primarily from Arch Coal. Interest income primarily from Arch Coal decreased due to a decrease in the interest rate on the note receivable from Arch Coal.

Net income

	Year Ended December 31,		Increase (Decrease)	
	2001	2002	$	%
	(In thousands, except percentage)			
Net income	$31,342	$19,909	$(11,433)	(36.5)%

The decrease in net income is primarily due to the decreases in our income from Canyon Fuel and the decrease in other revenues, as discussed above.

Year Ended December 31, 2001, Compared to Year Ended December 31, 2000

Results for 2001 were positively impacted by strong margins on the limited tonnage open to market-based pricing during the early part of 2001. Results for both 2001 and 2000 were negatively impacted by significant production difficulties at our West Elk mine. In 2000, the mine was idled from January 28, 2000 to July 12, 2000, following the detection of combustion gases in a portion of the mine. In 2001, the mine experienced high methane levels (unrelated to the combustion gases) that negatively impacted production. The operating losses at West Elk were offset to some extent by insurance settlements of $31.0 million in 2000 and $9.4 million 2001 under our business interruption policy.

Operating results for 2001 versus 2000 and additional discussion of the 2001 results are provided below.

Revenues

	Year Ended December 31,		Increase (Decrease)	
	2000	2001	$	%
	(In thousands, except percentages)			
Coal sales	$393,619	$468,137	$74,518	18.9%
Income from equity investment	12,837	26,250	13,413	104.5
Other revenues	10,130	21,326	11,196	110.5
Total	$416,586	$515,713	$99,127	23.8%

Coal sales. The increase in coal sales in 2001 was the result of 5.2 million additional tons shipped in 2001 compared to 2000, higher average pricing on coal shipped during 2001 as compared to 2000 and additional sales from our West Elk mine as compared to the previous year. Average realizations on a per ton basis were $6.35 per ton in 2001 as compared to $5.74 in 2000. The increase resulted from higher spot market pricing during the early part of 2001 on a limited number of spot market tons sold. The increase in tons sold resulted from higher production at our Black Thunder and West Elk mines, offset partially by the idling of our Coal Creek mine in 2000. Coal sales in 2000 were adversely impacted by reduced production at our West Elk mine due to its idling as discussed above. After moving to another section of the mine, production was hampered by methane gas in 2001, however, production and sales levels were significantly higher than 2000 levels.

Income from equity investment. During 2001, Canyon Fuel recognized recoveries of previously paid property taxes. Our share of these recoveries is $2.6 million. In addition, Canyon Fuel experienced improved performance at its three underground mines in Utah.

Other revenues. Other revenues increased in 2001 due to a $5.1 million gain on a land sale in Wyoming and the amortization of a $4.9 million deferred gain resulting from the renegotiation of a sales contract. The deferred gain was amortized over the remaining tons to be shipped under the contract.

Costs and Expenses

	Year Ended December 31,		Increase (Decrease)	
	2000	2001	$	%
	(In thousands, except percentages)			
Cost of coal sales	$383,608	$440,363	$56,755	14.8%
Selling, general and administrative expenses	10,991	13,004	2,013	18.3
Amortization of coal supply agreements	9,536	1,976	(7,560)	(79.3)
Total	$404,135	$455,343	$51,208	12.7%

Cost of coal sales. The increase in cost of coal sales resulted from increased tons sold and a change in mix, primarily from increased tons produced from our West Elk mine, which has a higher cost structure than the Black Thunder mine. Additional costs were incurred at our West Elk mine during 2001 resulting

from efforts to control methane gas levels. This was partially offset by $9.4 million of insurance proceeds received as the final insurance settlement from the temporary mine closure related to the year-2000 combustion gases. These insurance proceeds are reflected as a reduction in cost of coal sales. The costs associated with the West Elk mine closure in 2000 were partially offset by insurance proceeds of $31.0 million received in that year.

Selling, general and administrative expenses. The cost increase for the year ended 2001 compared to the prior year is a result of additional costs associated with bonus accruals.

Amortization of coal supply agreements. The decrease in amortization of coal supply agreements results from an above market contract that terminated in 2000.

Interest Expense, Net

	Year Ended December 31,		Increase (Decrease)	
	2000	2001	$	%
	(In thousands, except percentages)			
Interest expense	$ 46,957	$ 44,637	$(2,320)	(4.9)%
Interest income primarily from Arch Coal	(13,757)	(15,609)	(1,852)	(13.5)
Total	$ 33,200	$ 29,028	$(4,172)	(12.6)%

Interest expense. The reduction in interest expense results from lower interest rates on our $675.0 million non-amortizing term loan.

Interest income primarily from Arch Coal. The increase in interest income primarily from Arch Coal results from a higher average balance on the note receivable from Arch Coal.

Net Income (Loss)

	Year Ended December 31,		Increase (Decrease)	
	2000	2001	$	%
	(In thousands, except percentage)			
Net income (loss)	$(20,749)	$31,342	$52,091	—

Increased net income results from additional production and sales during 2001 compared to 2000, higher per ton sales realization, improved mining conditions at our West Elk mine and increased profitability from Canyon Fuel.

Outlook

Production Levels. We reduced our overall rate of coal production by approximately 8% during the first quarter of 2003. This was in addition to a reduction in overall production of approximately 1% during 2002. These actions were taken in response to unfavorable spot coal markets following an extremely mild winter in 2001-2002, a period of industrial economic weakness that dampened electricity demand and an effort by electric utilities to reduce coal stockpile levels. Although the timing of any recovery in coal markets remains uncertain, there have been indications that prices may return to more favorable levels in the future. These indications include more normal weather patterns, some indication of economic recovery and an overall decrease in coal production and utility stockpiles.

Postretirement Obligations. We expect to incur significantly higher expense charges related to postretirement obligations in 2003. Our portion of these obligations, which include increases in post-retirement healthcare and pension-related expenses, increased our costs by approximately $0.5 million during the first quarter of 2003 and are expected to increase non-cash costs by approximately $0.5 million per quarter from prior year levels for the remainder of the year.

Liquidity and Capital Resources

The following is a summary of cash provided by or used in each of the indicated types of activities during the three months ended March 31, 2003 and 2002:

	Three Months Ended March 31,	
	2002	2003
	(In thousands)	
Cash provided by (used in):		
Operating activities	$ 24,873	$ 7,878
Investing activities	(24,627)	(6,391)
Financing activities	—	(30)

Cash provided by operating activities decreased in the three months ended March 31, 2003 as compared to same period in 2002 due primarily to decreased distributions from Canyon Fuel and to an increase in our receivable from Arch Coal.

Cash used in investing activities decreased in the three months ended March 31, 2003 as compared to the similar period in 2002 due to decreased capital expenditures primarily at Black Thunder.

Expenditures for property, plant and equipment were $6.4 million and $21.9 million for the three months ended 2003 and 2002, respectively. Capital expenditures are made to improve and replace existing mining equipment, expand existing mines, develop new mines and improve the overall efficiency of mining operations. In the first quarter of 2002, we replaced several pieces of mobile equipment at Black Thunder.

The following is a summary of cash provided by or used in each of the indicated types of activities during the years ended December 31, 2002, 2001, and 2000:

	Year Ended December 31,		
	2000	2001	2002
	(In thousands)		
Cash provided by (used in):			
Operating activities	$ 22,279	$ 29,758	$ 68,080
Investing activities	(22,389)	(29,391)	(64,099)
Financing activities	—	—	(4,193)

Cash provided by operating activities increased in 2002 as compared to 2001 due primarily to improved operating performance and reduced requirements for working capital components other than inventories. Cash provided by operating activities increased in 2001 compared to 2000 due primarily to improved operating performance in 2001, increased distributions from our equity investment in Canyon Fuel, and reduced working capital requirements in 2001 compared to 2000. Results of operations in 2000 were negatively impacted by the detection of combustion related gases in our underground West Elk mine. The mine was idled for the period January 28, 2000 through July 12, 2000. The negative impact of this event was partially offset by $31 million in insurance proceeds received in 2000.

Cash used in investing activities increased in 2002 as compared to 2001 due to increased capital expenditures primarily at Black Thunder and increased prepaid royalty payments. Cash used in investing activities in 2001 increased compared to 2000 due primarily to higher capital expenditures in 2001 that were partially offset by proceeds on the sale of a tract of land in Wyoming. The increased capital additions in 2001 were attributable to various de-gasification systems that were constructed at West Elk to remove the methane gas that was encountered when the longwall was moved to a new section of the mine.

Expenditures for property, plant and equipment were $51.4 million, $32.1 million and $28.5 million for 2002, 2001 and 2000, respectively. The increase in capital expenditures in 2002 compared to 2001 resulted primarily from the scheduled purchase of assets from an operating lease and the replacement of several pieces of mobile equipment at Black Thunder.

Cash used in financing activities during 2002 represents costs associated with the debt refinancing that occurred in the first quarter of 2002, as described below. Our cash transactions are managed by Arch Coal. Cash paid to or from us that is not considered a distribution or a contribution is maintained in an Arch Coal receivable account. At December 31, 2002, 2001 and 2000, the receivable from Arch Coal was $333.8 million, $259.8 million and $189.2, respectively. The receivable is interest bearing and is payable on demand by us. However, we do not intend to demand payment of the receivable within the next year. Therefore, the receivable is classified on the consolidated balance sheets as long-term.

We generally satisfy our working capital requirements and fund our capital expenditures and debt-service obligations with cash generated from operations. We believe that cash generated from operations will be sufficient to meet our working capital requirements and anticipated capital expenditures for the next several years. Our ability to fund planned capital expenditures and meet our debt-service obligations will depend upon our future operating performance, which will be affected by prevailing economic conditions in the coal industry, and by financial, business and other factors, some of which are beyond our control.

On April 18, 2002, we refinanced our then existing credit facilities. The new credit facility included a five-year non-amortizing term loan for $150.0 million and a six-year non-amortizing term loan of $525.0 million. The rate of interest under both term loans was a floating rate based on LIBOR. The credit facility was secured by our ownership interest in all of our subsidiaries. We used the net proceeds from the sale of the old notes to repay and retire the outstanding indebtedness under our credit facility.

The terms of our LLC Agreement provide for a preferred return distribution in an amount equal to 4% of the preferred capital account balance, which was $2.4 million for each of the years ended December 31, 2000, 2001 and 2002. Preferred distributions made during the years ended December 31, 2002, 2001, and 2000 were $0.1 million in each year. Except for the preferred return distribution, distributions may generally be made at such times and in such amounts as Arch Coal, as the managing member, determines. We made no distributions other than the preferred return in the years ended December 31, 2002, 2001 and 2000.

We are exposed to commodity price risk related to our purchase of diesel fuel. We enter into forward purchase contracts and heating oil swaps to substantially eliminate volatility in the price of diesel fuel for our operations. The swap agreements essentially fix the price paid for diesel fuel by requiring us to pay a fixed heating oil price and receive a floating heating oil price. The changes in the floating heating oil price highly correlate to changes in diesel fuel prices. Gains and losses on terminations of heating oil swap agreements are deferred on the balance sheet (in other long-term liabilities) and amortized as an adjustment to diesel fuel cost over the original term of the terminated heating oil swap agreement as if it were still in place.

The discussion below presents the sensitivity of the market value of our financial instruments to selected changes in market rates and prices. The range of changes reflects our view of changes that are reasonably possible over a one-year period. Market values are the present value of projected future cash flows based on the market rates and prices chosen. The major accounting policies for these instruments are described in Note 1 to our consolidated financial statements.

Changes in interest rates have different impacts on the fixed-rate and variable-rate portions of our debt portfolio. A change in interest rates on the fixed portion of our debt portfolio impacts the net financial instrument position but has no impact on interest incurred or cash flows. A change in interest rates on the variable portion of the debt portfolio impacts the interest incurred and cash flows but does not impact the net financial instrument position.

The sensitivity analysis related to the fixed portion of our debt portfolio assumes an instantaneous 100-basis-point change in interest rates from their levels at December 31, 2002, with all other variables held constant. A 100-basis-point decrease in market interest rates would result in a $17.1 million increase in the fair value of the fixed portion of the debt at December 31, 2002. Based on the variable-rate debt included in our debt portfolio as of December 31, 2002, after considering the effect of the swap

agreements, a 100-basis-point increase in interest rates would result in an annualized additional $3.6 million of interest expense incurred based on December 31, 2002 debt levels. At December 31, 2002, a $.05 per gallon decrease in the price of heating oil would result in a $0.2 million decrease in the fair value of the financial position of the heating oil swap agreements.

Off-Balance Sheet Arrangements

We do not have any material off-balance sheet arrangements.

Contractual Obligations

The following is a summary of our significant contractual obligations as of December 31, 2002:

	Payments Due by Period			
	Less Than 1 Year	1-3 Years	4-5 Years	After 5 Years
	(In thousands)			
Long-term debt	$ —	$ —	$150,000	$525,000
Operating leases	4,281	3,338	2,853	866
Royalty leases	10,630	21,201	21,035	64,164
Unconditional purchase obligations	17,088	—	—	—
Total contractual cash obligations	$31,999	$24,539	$173,888	$590,030

Unconditional purchase obligations represent amounts committed for capital expenditures. In addition to these contractual obligations, we expect to make contributions of $7.6 million to our pension plan in 2003.

Contingencies

Reclamation

The federal Surface Mining Control and Reclamation Act of 1977 and similar state statutes require that mine property be restored in accordance with specified standards and an approved reclamation plan. We accrue for the costs of final mine closure reclamation in accordance with the provisions of FAS 143, which was adopted as of January 1, 2003. These costs relate to reclaiming the pit and support acreage at surface mines and sealing portals at deep mines. Other costs of final mine closure common to surface and underground mining are related to reclaiming refuse and slurry ponds, eliminating sedimentation and drainage control structures, and dismantling or demolishing equipment or buildings used in mining operations. The establishment of the final mine closure reclamation liability is based upon permit requirements and requires various estimates and assumptions, principally associated with costs and productivities.

We review our entire environmental liability periodically and make necessary adjustments, including permit changes and revisions to costs and productivities to reflect current experience. Our management believes it is making adequate provisions for all expected reclamation and other associated costs.

Legal Contingencies

We are party to claims and lawsuits with respect to various matters. We provide for costs related to contingencies, including environmental matters, when a loss is probable and the amount is reasonably determinable. After conferring with counsel, it is the opinion of management that the ultimate resolution of these claims, to the extent not previously provided for, will not have a material adverse effect on our consolidated financial condition, results of operations or liquidity.

Losses

Because the coal mining industry is subject to significant regulatory oversight and affected by the possibility of adverse pricing trends or other industry trends beyond our control, we may suffer losses in the future if legal and regulatory rulings, mine idlings and closures, adverse pricing trends or other factors affect our ability to mine and sell coal profitably.

Critical Accounting Policies

Our financial statements are prepared in accordance with accounting principles that are generally accepted in the United States. The preparation of these financial statements requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses as well as the disclosure of contingent assets and liabilities. Our management bases its estimates and judgments on historical experience and other factors that are believed to be reasonable under the circumstances. Actual results may differ from the estimates used under different assumptions or conditions. Note 1 to our consolidated financial statements provides a description of all significant accounting policies. We believe that of these significant accounting policies, the following may involve a higher degree of judgment or complexity.

Accrued Reclamation and Mine Closure Costs

The federal Surface Mining Control and Reclamation Act of 1977 and similar state statutes require that mine property be restored in accordance with specified standards and an approved reclamation plan. Significant reclamation activities include reclaiming refuse and slurry ponds, reclaiming the pit and support acreage at surface mines, and sealing portals at deep mines. We accrue for the cost of final mine closure reclamation over the estimated useful mining life of the property. We determine the total amount to be accrued on a mine-by-mine basis based upon current permit requirements and various estimates and assumptions, including estimates of disturbed acreage, cost estimates, and assumptions regarding productivity. Estimates of disturbed acreage are determined based on engineering data. Cost estimates are based upon historical internal or third-party costs, depending on how the work is expected to be performed. Productivity assumptions are based on historical experience with the equipment that is expected to be utilized in the reclamation activities. On at least an annual basis, we review our entire reclamation liability and makes necessary adjustments for permit changes as granted by state authorities, additional costs resulting from accelerated mine closures, and revisions to cost estimates and productivity assumptions, to reflect current experience. At December 31, 2002 and 2001, we had recorded reclamation and mine closure liabilities of $69.1 million and $62.9 million, respectively. While the precise amount of these future costs cannot be determined with certainty, as of December 31, 2002, we estimate that the aggregate undiscounted cost of final mine closure is approximately $220.6 million.

Effective January 1, 2003, we adopted FAS 143, *Accounting for Asset Retirement Obligations,* which significantly changes the way in which we account for our reclamation and mine closure liabilities. The statement requires legal obligations associated with the retirement of long-lived assets to be recognized at their fair value at the time that the obligations are incurred. Upon initial recognition of a liability, that cost is capitalized as part of the related long-lived asset and allocated to expense over the useful life of the asset. The initial adoption of FAS 143 resulted in a cumulative effect loss of $18.3 million as of January 1, 2003.

The amount of the asset retirement obligation depends on the estimates and assumptions discussed above, as well as the following:

- *Discount rate* — FAS 143 requires the asset retirement obligation to be recorded at its fair value. In accordance with the provisions of FAS 143, we utilized discounted cash flow techniques to estimate the fair value of our obligations. The rates that we used are based on rates for treasury bonds with maturities similar to expected mine lives, adjusted for our credit standing.

- *Third-party margin* — FAS 143 requires the measurement of an obligation to be based upon the amount a third party would demand to assume the obligation. Because we plan to perform a significant amount of our final mine closure reclamation activities with internal resources, a third-party margin was added to the estimated costs of these activities. This margin was estimated based on our historical experience with contractors performing certain types of reclamation activities. The inclusion of this margin will result in a recorded obligation that is greater than our estimates of our cost to perform the reclamation activities. If our cost estimates are accurate, the excess of the recorded obligation over the cost incurred to perform the work will be recorded as a gain at the time that reclamation work is completed.

At March 31, 2003, we had recorded asset retirement obligations of $112.6 million.

Employee Benefit Plans

We have non-contributory defined benefit pension plans covering certain of our salaried and non-union hourly employees. Benefits are generally based on the employee's years of service and compensation. We fund the plans in an amount not less than the minimum statutory funding requirements nor more than the maximum amount that can be deducted for federal income tax purposes. We account for our defined benefit plans in accordance with FAS 87, *Employer's Accounting for Pensions,* which requires amounts recognized in the financial statements to be determined on an actuarial basis.

We also currently provide certain postretirement medical/life insurance coverage for eligible employees. Generally, covered employees who terminate employment after meeting eligibility requirements are eligible for postretirement coverage for themselves and their dependents. The salaried employee postretirement medical/life plans are contributory, with retiree contributions adjusted periodically, and contain other cost-sharing features such as deductibles and coinsurance. The postretirement medical plan for retirees who were members of the United Mine Workers of America is not contributory. Our current funding policy is to fund the cost of all postretirement medical/life insurance benefits as they are paid. We account for our other postretirement benefits in accordance with FAS 106, *Employer's Accounting for Postretirement Benefits Other Than Pensions,* which requires amounts recognized in the financial statements to be determined on an actuarial basis.

Various actuarial assumptions are required to determine the amounts reported as obligations and costs related to the pension and postretirement benefit plans. These assumptions include the discount rate, future cost trend rates and future rates of return for pension plan assets. Each of these assumptions is discussed further below:

- The discount rate assumption reflects the rates available on high-quality fixed-income debt instruments at year end.

- Future cost trend rates include the rate of compensation increase for the pension obligation and the health care cost trend rate for other postretirement benefit obligations. The rate of compensation increase is determined based upon our long-term plans for such increases. The health care cost trend rate is determined based upon our own historical trends for health care costs as well as external data regarding such costs.

- Assumptions regarding future rates of return for pension plan assets are based on long-term historical actual return information for the mix of investments that comprise plan assets, and future estimates of long-term investment returns.

BUSINESS

We are one of the largest and most productive operators of compliance and low sulfur coal mines in the United States. We sold 72.5 million tons of coal in 2002 and 15.8 million tons of coal during the three months ended March 31, 2003, all of which was compliance and low sulfur coal. We have a total of seven operating mines. Our largest mine, Black Thunder, is located in Wyoming in the Powder River Basin, the largest and fastest-growing U.S. coal-producing region. Black Thunder is the second largest coal mine in the United States. We are the largest producer of coal in the Western Bituminous Region, where we directly own three mines in Colorado and Wyoming and a 65% interest in Canyon Fuel Company, LLC, which owns and operates three mines in Utah, one of which is scheduled to be idled by June 30, 2004.

As of March 31, 2003, we controlled approximately 1.9 billion tons of proven and probable compliance and low sulfur coal reserves. Approximately 93.5% of our reserves is compliance coal, which does not require generators of electricity to use sulfur dioxide reduction technologies to comply with the requirements of the Clean Air Act.

We sell substantially all of our coal to producers of electric power, most of whom are large, investment grade utilities. Currently, we have sales contracts in place for approximately 96% of our planned 2003 production and approximately 64% of our planned 2004 production. This provides us with a relatively reliable and stable revenue base through the end of 2004. Our goal with respect to the remainder of our planned production is to seek long-term supply agreements with our largest and best customers as coal markets strengthen.

Operations

As of March 31, 2003, we operated a total of seven mines, all located in the western United States. Coal is transported from our mining complexes to customers by railroad cars. As is customary in the industry, virtually all of our coal sales are made F.O.B. mine or loadout, meaning that customers are responsible for the cost of transporting purchased coal to their facilities. The following table provides the location and summary information regarding our principal mining complexes and the coal reserves associated with these operations as of December 31, 2002.

Mining Complex (Location)	Type of Mine(s)	Mining Equipment	Transportation	Tons Sold in 2002
				(In millions)
Black Thunder (WY)	Surface	D, SH(1)	UP/BN	65.1
Coal Creek (WY)(2)	Surface	—	UP/BN	—
West Elk (CO)	Underground	LW, C	UP	6.7
Skyline (UT)(3)	Underground	LW, C	UP	3.4
SUFCO (UT)(3)	Underground	LW, C	UP	7.2
Dugout Canyon (UT)(3)	Underground	LW, C	UP	2.0
Arch of Wyoming (WY)	Surface	D, SH(4)	UP	0.6
Total				85.0

D = Dragline
SH = Shovel/Truck
LW = Longwall
C = Continuous Miner

UP = Union Pacific Railroad
BN = Burlington Northern Railroad

(1) Utilizes 164-cubic-yard, 130-cubic-yard, 78-cubic-yard and 45-cubic-yard draglines and 53-cubic-yard, 60-cubic-yard and 82-cubic-yard shovels.

(2) Idled beginning in the third quarter of 2000 because of unfavorable conditions existing in the market environment.

(3) Operated by Canyon Fuel. Canyon Fuel is an equity investment, and its financial statements and tons produced are not consolidated into our financial statements and tons produced. Amounts represent 100% of Canyon Fuel's production and assigned reserves, of which we have a 65% interest. The Skyline mine is scheduled to be idled by June 30, 2004.

(4) Utilizes 76-cubic-yard dragline at Medicine Bow and a 32-cubic-yard dragline at Seminoe II.

Black Thunder. The Black Thunder mine is located in Campbell County, Wyoming on approximately 14,711 acres. Mining the approximately 68-foot coal seam are four draglines and seven shovels. There is no washing plant at Black Thunder. The coal is crushed through either the near pit crushing and conveying system or the primary system. Coal from these two crushing facilities is conveyed into one of two silos or a slot storage facility. Coal is shipped through two loadouts on trains operated by Burlington Northern and Union Pacific.

Coal Creek. The Coal Creek mine is located in Campbell County, Wyoming on approximately 6,720 acres. Coal Creek has been idle since July 2000. The equipment at the mine consists of one shovel, ten trucks and a loadout facility. The Coal Creek mine is located on a joint rail line operated by Burlington Northern and Union Pacific.

West Elk. The West Elk mine is an underground operation located in Gunnison County, Colorado on approximately 14,700 acres. The coal is mined by two continuous mines in support of a longwall. The loadout facility at the mine is serviced by the Union Pacific Railroad services the mine.

Medicine Bow. The Medicine Bow mine is located in Carbon County, Wyoming. The Medicine Bow mine has 20,352 permitted acres. Two draglines operate in the mine and the mined coal is processed through a preparation plant. The loadout facility at Medicine Bow is serviced by the Union Pacific Railroad.

Seminoe II. The Seminoe II mine controls 9,631 permitted acres. One dragline operates in the mine with the mined coal processed through a preparation plant with a capacity of 1,000 tons per hour. The loadout facility capacity is 5,000 tons per hour, and the loadout is serviced by the Union Pacific Railroad.

Skyline. Canyon Fuel's Skyline mine is an underground longwall mine located in Carbon County and Emery County, Utah on 11,300 acres. Three continuous miners support a longwall. The coal produced from the mine is crushed and loaded into trains at the mine. The loadout facility at Skyline is serviced by the Union Pacific Railroad. The Skyline mine is scheduled to be idled by June 30, 2004 because current market prices do not support expansion into an additional reserve base at the mine.

SUFCO. Canyon Fuel's SUFCO mine, an underground longwall mine, is located in Sevier County, Juab County and Emery County, Utah on 23,900 acres. Two continuous miners support the longwall. All of the coal produced from the mine is crushed at a facility located at the mine and trucked either directly to customers or to a train loadout located approximately 80 miles from the mine. The Union Pacific Railroad serves this loadout.

Dugout Canyon. Canyon Fuel's Dugout Canyon mine is an underground longwall mine located in Carbon, County, Utah on 13,700 acres. Two continuous miners support the longwall operation. The coal produced is crushed at the mine and trucked to a third party loadout served by the Union Pacific Railroad.

We currently own or lease the equipment utilized in our mining operations.

Coal Reserves

As of December 31, 2002, we estimate that we controlled approximately 1.9 billion tons of assigned and unassigned proven and probable recoverable reserves. Recoverable reserves include only saleable coal and do not include coal which would remain unextracted. Reserve estimates are prepared by our engineers and geologists and reviewed and updated periodically. Total recoverable reserve estimates and reserves dedicated to mines and complexes change from time to time to reflect mining activities, analysis of new engineering and geological data, changes in reserve holdings and other factors. Our recoverable reserves

consist of steam coal, which is coal used in steam boilers to make electricity. The following table presents our estimated recoverable coal reserves at December 31, 2002:

Total Recoverable Reserves

(tonnage in thousands)

Mine	Total Recoverable Reserves	Proven	Probable	Sulfur Content (lbs. per million Btus)			Reserve Control		Mining Method	
				<1.2	1.2-2.5	>2.5	Leased	Owned	Surface	Underground
Wyoming										
Black Thunder	854,496	838,793	15,703	796,070	50,517	7,909	849,659	4,837	854,496	—
Coal Creek	237,607	231,551	6,056	237,607	—	—	237,607	—	237,607	—
Medicine Bow	1,047	1,047	—	1,047	—	—	1,047	—	1,047	—
Seminoe II	296	296	—	296	—	—	296	—	296	—
Other	475,120	301,161	173,959	425,838	49,282	—	388,620	86,500	310,818	164,302
Colorado										
West Elk	154,338	121,550	32,788	152,256	2,082	—	149,696	4,642	—	154,338
Utah*										
Dugout	57,391	39,790	17,601	45,846	11,545	—	54,095	3,296	—	57,391
Skyline	27,930	16,449	11,481	27,930	—	—	27,930	—	—	27,930
SUFCO	95,886	38,063	57,823	93,053	2,833	—	93,933	1,953	—	95,886
Total	1,904,111	1,588,700	315,411	1,779,943	116,259	7,909	1,802,883	101,228	1,404,264	499,847

* Including 100% of the reserves held by Canyon Fuel, in which we have a 65% interest.

As of December 31, 2002, approximately 86,688 acres (which includes 100% of the acreage held by Canyon Fuel) of our total of approximately 180,833 acres of coal land were leased by a subsidiary of Arch Coal from the federal government. We have subleased those federal lands from that subsidiary of Arch Coal. In addition, approximately 41,200 acres were leased by us from state governments, and approximately 32,650 acres were leased by us from private lessors. These leases have terms expiring between 2004 and 2027, subject to readjustment or extension and to earlier termination for failure to meet development requirements.

All of the identified coal reserves held by us have been subject to preliminary coal seam analysis to test sulfur content. Of these reserves, approximately 93.5% consist of compliance coal. Accordingly, our reserves are primarily suitable for the domestic steam coal markets.

Our federal coal leases are administered by the U.S. Department of the Interior under the Federal Coal Leasing Amendments Act of 1976. These leases cover our principal reserves in Wyoming and other reserves in Utah and Colorado. The Bureau of Land Management has asserted the right to adjust the terms and conditions of these leases, including rent and royalties, after the first 20 years of their term and at ten-year intervals thereafter. Annual rents under our federal coal leases are now set at $3.00 per acre. Production royalties on federal leases are set by statute at 12.5% of the gross proceeds of coal mined and sold for surface-mined coal and 8% for underground-mined coal. The federal government limits by statute the amount of federal land that may be leased by any company and its affiliates at any time to 75,000 acres in any one state and 150,000 acres nationwide. As of March 31, 2003, we leased or had applied to lease 11,230 acres of federal land in Colorado, 40,909 acres in Utah and 37,348 acres in Wyoming.

Title to coal properties that we lease or purchase and the boundaries of such properties generally are verified at the time of leasing or acquisition. However, in cases involving less significant properties and consistent with industry practices, title and boundaries are not completely verified until such time as we prepare to mine such reserves. If defects in title or boundaries of undeveloped reserves are discovered in the future, control of and the right to mine such reserves could be adversely affected.

From time to time, private lessors or subleasors of land leased by us have sought to terminate such leases on the basis that we have failed to comply with the financial terms of the leases or that the mining and related operations conducted by us are not authorized by the leases. Some of these allegations relate to leases upon which we conduct operations material to our consolidated financial position, results of operations and liquidity, but we do not believe any pending claims by such leasors or subleasors have merit or will result in the termination of any material lease or sublease.

We must obtain permits from applicable state regulatory authorities before we begin to mine reserves. Applications for permits require extensive engineering and data analysis and presentation and must address a variety of environmental, health and safety matters associated with a proposed mining operation. These matters include the manner and sequencing of coal extraction, the storage, use and disposal of waste and other substances and other impacts on the environment, the construction of overburden fills and water containment areas and reclamation of the area after coal extraction. We are required to post bonds to secure our performance under our permits. As is typical in the coal industry, we strive to obtain mining permits within a time frame that allows us to mine reserves as planned on an uninterrupted basis. We generally begin preparing applications for permits for areas that we intend to mine up to three years in advance of their expected issuance date. Regulatory authorities have considerable discretion in the timing of permit issuance and the public has rights to comment on and otherwise engage in the permitting process, including through intervention in the courts.

Our reported coal reserves are those that could be economically and legally extracted or produced at the time of their determination. In determining whether our reserves meet this standard, we take into account, among other things, our potential inability to obtain a mining permit, the possible necessity of revising a mining plan, changes in estimated future costs, changes in future cash flows caused by changes in costs required to be incurred to meet regulatory requirements and obtaining mining permits, variations in quantity and quality of coal, and varying levels of demand and their effects on selling prices. We are not currently aware of matters which would significantly hinder our ability to obtain future mining permits with respect to our reserves.

The carrying cost of our coal reserves at December 31, 2002 was $577.8 million.

ARCH WESTERN FINANCE, LLC

The Issuer is a Delaware limited liability company and an indirectly wholly-owned subsidiary of Arch Western. It was formed on June 3, 2003 solely for the purpose of being the issuer of the old notes and the registered notes. The Issuer has no operations, and we do not expect that it will have operations in the future. The Issuer's only asset is the intercompany note issued by Thunder Basin Coal Company, L.L.C. evidencing the proceeds from the sale of the old notes that will be loaned to Thunder Basin and, in turn, loaned to us to repay our existing bank debt and for general purposes.

ARCH COAL, INC.

Arch Coal originally was organized as Arch Mineral Corporation in 1969. On July 1, 1997, Ashland Coal, Inc. then a majority-owned subsidiary of Ashland Inc., merged with a subsidiary of Arch Mineral Corporation. In connection with the merger, the name of Arch Mineral Corporation was changed to Arch Coal, Inc. On June 1, 1998, Arch Coal acquired the United States coal operations of Atlantic Richfield Company for an aggregate of approximately $1.14 billion in cash and combined these operations with its western operations to form Arch Western Resources, LLC. Arch Coal owns 99% of Arch Western, and an affiliate of BP p.l.c., the successor to Atlantic Richfield Company, owns the remaining 1% interest.

Arch Coal is the second largest and one of the most productive operators of compliance and low sulfur coal mines in the United States. Including our operations, as of March 31, 2003, Arch Coal controlled approximately 2.9 billion tons of proven and probable coal reserves. As of March 31, 2003, Arch Coal had 25 operating mines. Arch Coal sold 106.7 million tons of coal in 2002 and 22.7 million tons of coal during the three months ended March 31, 2003.

In addition to our operations, Arch Coal produces coal in Central Appalachia in the eastern United States. Arch Coal produces compliance and low sulfur coal exclusively, and 90% of its reserves are compliance quality or low sulfur. Arch Coal supplied the fuel for approximately 6% of the electricity used in the United States in 2002. In the past five years, Arch Coal has increased its coal production from 36.7 million tons in 1997 to 99.6 million tons in 2002, primarily as a result of selective acquisitions as well as the strategic development of existing reserves.

Arch Coal's common stock is listed on the New York Stock Exchange and traded under the symbol "ACI." Based on the closing price of Arch Coal common stock on July 31, 2003 of $20.55, its market capitalization was approximately $1.2 billion.

On May 29, 2003, Arch Coal entered into a definitive agreement to acquire (1) Vulcan, which owns all of the common equity of Triton, and (2) all of the preferred units of Triton, for a purchase price of $364.0 million. Consummation of the transaction is subject to various conditions, including the receipt by Arch Coal and Vulcan of all necessary governmental and regulatory consents and other customary conditions. Arch Coal will finance the acquisition with cash and borrowed funds.

Triton is the nation's seventh largest coal producer and the operator of two mines in the Powder River Basin. These mines, North Rochelle and Buckskin, produced a combined total of 42.2 million tons of coal in 2002 and are supported by approximately 744 million tons of proven and probable reserves. The North Rochelle mine produces 8,800 Btu super-compliance quality coal on a reserve base of approximately 250 million tons. In 2002, North Rochelle produced 23.9 million tons of coal. The Buckskin mine produces 8,400 Btu compliance quality coal on a reserve base of approximately 494 million tons. In 2002, Buckskin produced 18.3 million tons of coal.

The acquisition of Triton would increase Arch Coal's total reserves in the Powder River Basin by approximately 50%, from 1.6 billion tons to 2.3 billion tons. North Rochelle and Black Thunder are contiguously located, sharing a 5.5-mile property line. Arch Coal has identified expected synergies of approximately $18 million to $22 million annually that may be realized through the operational integration of Triton's North Rochelle mine and our Black Thunder mine. Although Arch Coal plans to integrate the operations of the Black Thunder and North Rochelle mines, Triton's financial results are not expected to be part of our consolidated financial results.

For further information about Arch Coal, see the documents incorporated by reference into this prospectus that Arch Coal has filed with the Securities and Exchange Commission which are listed under the heading "Where You Can Find More Information" and which are filed in the future under Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 until the exchange offer is completed.

MANAGEMENT

Our managing member is an indirect wholly owned subsidiary of Arch Coal. As a result, Arch Coal's management is effectively our management. The executive officers and directors of Arch Coal and their respective ages and positions are set forth below.

Name	Age	Title
Steven F. Leer	51	President and Chief Executive Officer and Director
Bradley M. Allbritten	46	Vice President — Marketing
C. Henry Besten, Jr.	55	Senior Vice President — Strategic Development
John W. Eaves	45	Executive Vice President and Chief Operating Officer
Sheila B. Feldman	48	Vice President — Human Resources
Robert G. Jones	46	Vice President — Law & General Counsel
Robert J. Messey	57	Senior Vice President and Chief Financial Officer
David B. Peugh	48	Vice President — Business Development
Kenneth G. Woodring	53	Executive Vice President — Mining Operations
James R. Boyd	57	Chairman of the Board and Director
Frank M. Burke	63	Director
Douglas H. Hunt	50	Director
Thomas A. Lockhart	67	Director
James L. Parker	66	Director
A. Michael Perry	67	Director
Robert G. Potter	64	Director
Theodore D. Sands	57	Director

Set forth below is a description of the backgrounds of these executive officers and directors of Arch Coal.

Steven F. Leer has been Arch Coal's President and Chief Executive Officer and a director of Arch Coal since 1992. He is also a Director of the Norfolk Southern Corporation and Natural Resource Partners, L.P. and Chairman of the Center for Energy and Economic Development and the National Coal Council.

Bradley M. Allbritten has been Arch Coal's Vice President — Marketing since August 2002. From March 2000 to February 2003, Mr. Allbritten was Arch Coal's Vice President — Human Resources. Mr. Allbritten also served as Arch Coal's Director of Human Resources from February 1999 through February 2000. From January 1995 to February 1999, Mr. Allbritten served as Human Resources Manager for Atlantic Richfield Company.

C. Henry Besten, Jr. has been Arch Coal's Senior Vice President — Strategic Development since December 2002. Mr. Besten is also President of Arch Coal's Arch Energy Resources, Inc. subsidiary and has served in that capacity since July 1997. From July 1997 to December 2002, Mr. Besten served as Vice President — Strategic Marketing of Arch Coal. Mr. Besten also served as Acting Chief Financial Officer of Arch Coal from December 1999 through November 2000.

John W. Eaves has been Arch Coal's Executive Vice President and Chief Operating Officer since December 2002. From February 2000 to December 2002, Mr. Eaves served as Senior Vice President - -Marketing of Arch Coal and from September 1995 to December 2002 as President of Arch Coal's Arch Coal Sales Company, Inc. subsidiary. Mr. Eaves also served as Vice President — Marketing of Arch Coal from July 1997 through February 2000.

Sheila B. Feldman has been Arch Coal's Vice President — Human Resources since February 2003. From 1997 to February 2003, Ms. Feldman was the Vice President — Human Resources and Public Affairs of Solutia Inc.

Robert G. Jones has been Arch Coal's Vice President — Law & General Counsel since March 2000. Mr. Jones served as Arch Coal's Assistant General Counsel from July 1997 through February 2000 and as Senior Counsel from August 1993 to July 1997.

Robert J. Messey has been Arch Coal's Senior Vice President and Chief Financial Officer since December 2000. Prior to joining Arch Coal, Mr. Messey served as vice president of financial services of Jacobs Engineering Group Inc. from January 1999 and, prior to that, served as senior vice president and chief financial officer of Sverdrup Corporation from 1992. Mr. Messey serves on the board of directors of Baldor Electric Company.

David B. Peugh has been Arch Coal's Vice President — Business Development since 1993. Mr. Peugh is a Director of Natural Resource Partners, L.P.

Kenneth G. Woodring has been Arch Coal's Executive Vice President — Mining Operations since July 1997. Mr. Woodring served as Senior Vice President — Operations of Ashland Coal from 1989 through July 1997.

James R. Boyd, Arch Coal's Chairman of the Board, has been a director of Arch Coal since 1990. He served as Senior Vice President and Group Operating Officer of Ashland Inc., a multi-industry company with operations in chemicals, motor oil, car care products and highway construction, from 1989 until his retirement in January 2002.

Frank M. Burke, Jr. has been a director of Arch Coal since September 2000. He has served as Chairman, Chief Executive Officer and Managing General Partner of Burke, Mayborn Company, Ltd., a private investment and consulting company, since 1984. Mr. Burke is also a director of Kaneb Services, LLC, Xanser Corporation, Kaneb Pipe Line Company (general partner of Kaneb Pipe Line Partners, LP), a member of the Board of Managers of Dorchester Minerals Management GP LLC (general partner of Dorchester Minerals, L.P.) and a member of the National Petroleum Council.

Douglas H. Hunt has been a director of Arch Coal since 1995 and, since May 1995, has served as Director of Acquisitions of Petro-Hunt, L.L.C., a private oil and gas exploration and production company.

Thomas A. Lockhart has been a director of Arch Coal since February 2003 and a member of the Wyoming State House of Representatives since 2000. Mr. Lockhart worked for PacificCorp, an electric utility, for over 30 years and retired in 1998 as a Vice President. Mr. Lockhart is also a director of Blue Cross Blue Shield of Wyoming and First Interstate Bank of Casper, Wyoming.

James L. Parker has been a director of Arch Coal since 1995. He served as President of Hunt Petroleum Corporation, a private oil and gas exploration and production company, from 1990 until his retirement in February 2001. Mr. Parker has served as President and a director of Hunt Coal Corporation, a subsidiary of Hunt Petroleum Corporation, since 1994.

A. Michael Perry has been a director of Arch Coal since 1998. He served as Chairman of Bank One, West Virginia, N.A. from 1993 and as its Chief Executive Officer from 1983 to his retirement in June 2001. Mr. Perry is also a director of Champion Industries, Inc.

Robert G. Potter became a director of Arch Coal in April 2001. He was Chairman and Chief Executive Officer of Solutia Inc., a producer and marketer of a variety of high performance chemical-based materials, from 1997 until his retirement in 1999. Mr. Potter served for 32 years with Monsanto Company prior to its spin-off of Solutia in 1997, most recently as the Chief Executive of its chemical businesses. Mr. Potter is a Director of Stepan Company and of certain private companies of which he is also an investor.

Theodore D. Sands has been a director of Arch Coal since 1999 and, since February 1999, has served as President of HAAS Capital, LLC, a private consulting and investment company. Mr. Sands is also a director of Mosiac Group Inc., Protein Sciences Corporation and Terra Nitrogen Corporation. Mr. Sands served as Managing Director, Investment Banking for the Global Metals/ Mining Group of Merrill Lynch & Co. from 1982 until February 1999.

THE EXCHANGE OFFER

Purpose and Effect

The Issuer issued the old notes on June 25, 2003 in a private placement to a limited number of qualified institutional buyers, as defined under the Securities Act. In connection with that issuance, the Issuer, Arch Western and the subsidiary guarantors entered into the indenture and, with Arch Coal, the registration rights agreement. These agreements require that we file a registration statement under the Securities Act with respect to the registered notes to be issued in the exchange offer and, upon the effectiveness of the registration statement, offer to you the opportunity to exchange your old notes for a like principal amount of registered notes. The registered notes will be issued without a restrictive legend, and, except as set forth below, we believe that the registered notes may be reoffered and resold by you without registration under the Securities Act. After we complete the exchange offer, our obligations with respect to the registration of the old notes will terminate, except as provided in the last paragraph of this section. A copy of the indenture and the registration rights agreement have been filed as exhibits to the registration statement of which this prospectus is part.

Based on an interpretation by the staff of the SEC set forth in no-action letters issued to third parties unrelated to us, if you are not our "affiliate" within the meaning of Rule 405 under the Securities Act or a broker-dealer referred to in the next paragraph, we believe that registered notes to be issued to you in the exchange offer may be offered for resale, resold and otherwise transferred by you, without compliance with the registration and prospectus delivery provisions of the Securities Act. This interpretation, however, is based on your representations to us that:

(1) the registered notes to be issued to you in the exchange offer are acquired in the ordinary course of your business;

(2) you are not engaging in and do not intend to engage in a distribution of the registered notes to be issued to you in the exchange offer;

(3) you have no arrangement or understanding with any person to participate in the distribution of the registered notes to be issued to you in the exchange offer; and

(4) you are not an "affiliate" of ours, as defined under Rule 405 of the Securities Act.

If you tender your old notes in the exchange offer for the purpose of participating in a distribution of the registered notes to be issued to you in the exchange offer, you cannot rely on this interpretation by the staff of the SEC. Under those circumstances, you must comply with the registration and prospectus delivery requirements of the Securities Act in connection with a secondary resale transaction. Each broker-dealer that receives registered notes in the exchange offer for its own account in exchange for old notes that were acquired by the broker-dealer as a result of market-making activities or other trading activities, must acknowledge that it will deliver a prospectus meeting the requirements of the Securities Act in connection with any resales of those registered notes. See "Plan of Distribution."

If (i) due to any change in law or applicable interpretations thereof by the SEC's staff, the Issuer, Arch Coal, Arch Western and the subsidiary guarantors determine that they are not permitted to effect the exchange offer; (ii) for any other reason the exchange offer is not consummated within 225 days of the date of issuance of the old notes; (iii) any initial purchaser of the old notes so requests with respect to old notes that are not eligible to be exchanged for registered notes in the exchange offer and that are held by it following consummation of the exchange offer; (iv) any holder (other than an initial purchaser of old notes) is not eligible to participate in the exchange offer; or (v) you are an initial purchaser of old notes that does not receive freely tradeable registered notes in exchange for old notes constituting any portion of an unsold allotment, we will register your old notes in a "shelf" registration statement on an appropriate form pursuant to Rule 415 under the Securities Act. If we are obligated to file a shelf registration statement, we will be required to keep the shelf registration statement effective until the earliest of (a) two years from the date the shelf registration statement is declared effective by the SEC or (b) such shorter period that will terminate when all securities covered by the shelf registration statement have been

sold pursuant to the shelf registration statement. Other than as set forth in this paragraph, you will not have the right to require us to register your old notes under the Securities Act. See "— Procedures for Tendering" below.

We will, in the event a shelf registration statement is filed, among other things, provide to each holder for whom the shelf registration statement was filed a copy of the shelf registration statement, and each amendment of the shelf registration statement and each amendment or supplement to the prospectus included in the shelf registration statement, notify each of those holders when the shelf registration statement has been filed with the SEC and when the shelf registration statement or any post-effective amendment to it has become effective and take certain other actions as are required to permit unrestricted resales of the old notes. A holder selling old notes pursuant to the shelf registration statement generally would be required to be named as a selling security holder in the related prospectus and to deliver a prospectus to purchasers, will be subject to certain of the civil liability provisions under the Securities Act in connection with such sales and will be bound by the provisions of the registration rights agreement which are applicable to that holder (including certain indemnification obligations).

We will pay additional cash interest on the old notes, subject to certain exceptions, if:

(1) the registration statement of which this prospectus is part is not declared effective on or prior to the 180th day following the date of the issuance of the old notes;

(2) the exchange offer is not consummated on or prior to the 225th day following the date of the issuance of the old notes; or

(3) if required, a shelf registration statement with respect to the old notes has not been filed with the SEC on or prior to the 60th day following the date the obligation to file the shelf registration statement arises

(each such event referred to in clauses (1) through (3) above, a "Registration Default") from and including the date on such Registration Default shall occur to but excluding the date on which all Registration Defaults have been cured.

The rate of additional interest will be at the rate equal to 0.25% of the principal amount of the old notes (determined daily) with respect to the first 90-day period following such Registration Default. The amount of additional interest will increase by an additional 0.25% per annum to a maximum of 1.00% per annum for each subsequent 90-day period until the Registration Default has been cured. We will pay the additional interest on regular interest payment dates. The additional interest will be in addition to any other interest payable from time to time with respect to the notes.

All references in the indenture, in any context, to any payment of principal, purchase prices in connection with a purchase of notes, and interest or any other amount payable on or with respect to any of the notes, shall be deemed to include payment of any additional cash interest pursuant to the registration rights agreement.

Consequences of Failure to Exchange

After we complete the exchange offer, if you have not tendered your old notes, you will not have any further registration rights, except as set forth above. Your old notes will continue to be subject to certain restrictions on transfer. Therefore, the liquidity of the market for your old notes could be adversely affected upon completion of the exchange offer if you do not participate in the exchange offer.

Terms of the Exchange Offer

Upon the terms and subject to the conditions set forth in this prospectus and in the letter of transmittal, we will accept any and all old notes validly tendered and not withdrawn prior to 5:00 p.m., New York City time, on the expiration date. We will issue $1,000 principal amount of registered notes in exchange for each $1,000 principal amount of old notes accepted in the exchange offer. You may tender

some or all of your old notes pursuant to the exchange offer. However, old notes may be tendered only in integral multiples of $1,000 principal amount.

The form and terms of the registered notes are substantially the same as the form and terms of the old notes, except that the registered notes to be issued in the exchange offer have been registered under the Securities Act and will not bear legends restricting their transfer. The registered notes will be issued pursuant to, and entitled to the benefits of, the indenture. The indenture also governs the old notes. The registered notes and the old notes will be deemed one issue of notes under the indenture.

As of the date of this prospectus, $700.0 million in aggregate principal amount of 6 3/4% Senior Notes due 2013 were outstanding. This prospectus, together with the letter of transmittal, is being sent to all registered holders and to others believed to have beneficial interests in the old notes. You do not have any appraisal or dissenters' rights in connection with the exchange offer under the General Corporation Law of the State of Delaware or the indenture. We intend to conduct the exchange offer in accordance with the applicable requirements of the Exchange Act and the rules and regulations of the SEC promulgated under the Exchange Act.

We will be deemed to have accepted validly tendered outstanding notes when, as, and if we have given oral or written notice of our acceptance to the exchange agent. The exchange agent will act as our agent for the tendering holders for the purpose of receiving the registered notes from us. If we do not accept any tendered notes because of an invalid tender, the occurrence of certain other events set forth in this prospectus or otherwise, we will return certificates for any unaccepted old notes, without expense, to the tendering holder as promptly as practicable after the expiration date.

You will not be required to pay brokerage commissions or fees or, except as set forth below under " — Transfer Taxes," transfer taxes with respect to the exchange of your old notes in the exchange offer. We will pay all charges and expenses, other than certain applicable taxes, in connection with the exchange offer. See " — Fees and Expenses" below.

Expiration Date; Amendments

The exchange offer will expire at 5:00 p.m., New York City time, on , 2002, unless we determine, in our sole discretion, to extend the exchange offer, in which case, it will expire at the later date and time to which it is extended. We currently do not intend to extend the exchange offer, although we reserve the right to do so. If we extend the exchange offer, we will give oral or written notice of the extension to the exchange agent and give each registered holder notice by means of a press release or other public announcement of any extension prior to 9:00 a.m., New York City time, on the next business day after the scheduled expiration date.

We also reserve the right, in our sole discretion:

(1) to delay accepting any old notes or, if any of the conditions set forth below under " — Conditions" have not been satisfied or waived, to terminate the exchange offer by giving oral or written notice of such delay or termination to the exchange agent; or

(2) to amend the terms of the exchange offer in any manner by complying with Rule 14e-l(d) under the Exchange Act to the extent that rule applies.

We acknowledge and undertake to comply with the provisions of Rule 14e-l(c) under the Exchange Act, which requires us to pay the consideration offered, or return the old notes surrendered for exchange, promptly after the termination or withdrawal of the exchange offer. We will notify you promptly of any extension, termination or amendment.

Procedures for Tendering

Book-Entry Interests

The old notes were issued as global securities in fully registered form without interest coupons. Beneficial interests in the global securities, held by direct or indirect participants in DTC, are shown on, and transfers of these interests are effected only through, records maintained in book-entry form by DTC with respect to its participants.

If you hold your old notes in the form of book-entry interests and you wish to tender your old notes for exchange pursuant to the exchange offer, you must transmit to the exchange agent on or prior to the expiration date either:

(1) a written or facsimile copy of a properly completed and duly executed letter of transmittal, including all other documents required by such letter of transmittal, to the exchange agent at the address set forth on the cover page of the letter of transmittal; or

(2) a computer-generated message transmitted by means of DTC's Automated Tender Offer Program system and received by the exchange agent and forming a part of a confirmation of book-entry transfer, in which you acknowledge and agree to be bound by the terms of the letter of transmittal.

In addition, in order to deliver old notes held in the form of book-entry interests:

(1) a timely confirmation of book-entry transfer of such notes into the exchange agent's account at DTC pursuant to the procedure for book-entry transfers described below under " — Book-Entry Transfer" must be received by the exchange agent prior to the expiration date; or

(2) you must comply with the guaranteed delivery procedures described below.

The method of delivery of old notes and the letter of transmittal and all other required documents to the exchange agent is at your election and risk. Instead of delivery by mail, we recommend that you use an overnight or hand delivery service. In all cases, sufficient time should be allowed to assure delivery to the exchange agent before the expiration date. You should not send the letter of transmittal or old notes to us. You may request your broker, dealer, commercial bank, trust company, or nominee to effect the above transactions for you.

Certificated Old Notes

Only registered holders of certificated old notes may tender those notes in the exchange offer. If your old notes are certificated notes and you wish to tender those notes for exchange pursuant to the exchange offer, you must transmit to the exchange agent on or prior to the expiration date, a written or facsimile copy of a properly completed and duly executed letter of transmittal, including all other required documents, to the address set forth below under " — Exchange Agent." In addition, in order to validly tender your certificated old notes:

(1) the certificates representing your old notes must be received by the exchange agent prior to the expiration date; or

(2) you must comply with the guaranteed delivery procedures described below.

Procedures Applicable to All Holders

If you tender an old note and you do not withdraw the tender prior to the expiration date, you will have made an agreement with us in accordance with the terms and subject to the conditions set forth in this prospectus and in the letter of transmittal.

If your old notes are registered in the name of a broker, dealer, commercial bank, trust company or other nominee and you wish to tender your notes, you should contact the registered holder promptly and instruct the registered holder to tender on your behalf. If you wish to tender on your own behalf, you

must, prior to completing and executing the letter of transmittal and delivering your old notes, either make appropriate arrangements to register ownership of the old notes in your name or obtain a properly completed bond power from the registered holder. The transfer of registered ownership may take considerable time.

Signatures on a letter of transmittal or a notice of withdrawal must be guaranteed by an eligible institution unless:

(1) old notes tendered in the exchange offer are tendered either

(A) by a registered holder who has not completed the box entitled "Special Registration Instructions" or "Special Delivery Instructions" on the letter of transmittal or

(B) for the account of an eligible institution; and

(2) the box entitled "Special Registration Instructions" on the letter of transmittal has not been completed.

If signatures on a letter of transmittal or a notice of withdrawal are required to be guaranteed, the guarantee must be by a financial institution, which includes most banks, savings and loan associations and brokerage houses, that is a participant in the Securities Transfer Agents Medallion Program, the New York Stock Exchange Medallion Program or the Stock Exchanges Medallion Program.

If the letter of transmittal is signed by a person other than you, your old notes must be endorsed or accompanied by a properly completed bond power and signed by you as your name appears on those old notes.

If the letter of transmittal or any old notes or bond powers are signed by trustees, executors, administrators, guardians, attorneys-in-fact, officers of corporations, or others acting in a fiduciary or representative capacity, those persons should so indicate when signing. Unless we waive this requirement, in this instance you must submit with the letter of transmittal proper evidence satisfactory to us of their authority to act on your behalf.

We will determine, in our sole discretion, all questions regarding the validity, form, eligibility, including time of receipt, acceptance and withdrawal of tendered old notes. This determination will be final and binding. We reserve the absolute right to reject any and all old notes not properly tendered or any old notes our acceptance of which would, in the opinion of our counsel, be unlawful. We also reserve the right to waive any defects, irregularities or conditions of tender as to particular old notes. Our interpretation of the terms and conditions of the exchange offer, including the instructions in the letter of transmittal, will be final and binding on all parties.

You must cure any defects or irregularities in connection with tenders of your old notes within the time period we will determine unless we waive that defect or irregularity. Although we intend to notify you of defects or irregularities with respect to your tender of old notes, neither we, the exchange agent nor any other person will incur any liability for failure to give this notification. Your tender will not be deemed to have been made and your notes will be returned to you if:

(1) you improperly tender your old notes;

(2) you have not cured any defects or irregularities in your tender; and

(3) we have not waived those defects, irregularities or improper tender.

In this event, the exchange agent will return your notes, unless otherwise provided in the letter of transmittal, as soon as practicable following the expiration of the exchange offer.

In addition, we reserve the right in our sole discretion to:

(1) purchase or make offers for, or offer registered notes for, any old notes that remain outstanding subsequent to the expiration of the exchange offer;

(2) terminate the exchange offer; or

(3) to the extent permitted by applicable law, purchase notes in the open market, in privately negotiated transactions or otherwise.

The terms of any of these purchases or offers could differ from the terms of the exchange offer.

By tendering old notes in the exchange offer, you will represent to us that, among other things:

(1) the registered notes to be acquired by you in the exchange offer are being acquired in the ordinary course of your business;

(2) you are not engaging in and do not intend to engage in a distribution of the registered notes to be acquired by you in the exchange offer;

(3) you do not have an arrangement or understanding with any person to participate in the distribution of the registered notes to be acquired by you in the exchange offer; and

(4) you are not our "affiliate," as defined under Rule 405 of the Securities Act.

In all cases, issuance of registered notes in exchange for old notes that are accepted for exchange in the exchange offer will be made only after timely receipt by the exchange agent of certificates for your old notes or a timely book-entry confirmation of your old notes into the exchange agent's account at DTC, a properly completed and duly executed letter of transmittal, or a computer-generated message instead of the letter of transmittal, and all other required documents. If any tendered old notes are not accepted for any reason set forth in the terms and conditions of the exchange offer or if old notes are submitted for a greater principal amount than you desire to exchange, the unaccepted or non-exchanged old notes, or old notes in substitution therefor, will be returned without expense to you. In addition, in the case of old notes tendered by book-entry transfer into the exchange agent's account at DTC pursuant to the book-entry transfer procedures described below, the non-exchanged old notes will be credited to your account maintained with DTC, as promptly as practicable after the expiration or termination of the exchange offer.

Guaranteed Delivery Procedures

If you desire to tender your old notes in the exchange offer and your old notes are not immediately available, you may tender your old notes if:

(1) you tender your old notes through an eligible financial institution;

(2) on or prior to 5:00 p.m., New York City time, on the expiration date, the exchange agent receives from an eligible institution, a written or facsimile copy of a properly completed and duly executed letter of transmittal and notice of guaranteed delivery, substantially in the form provided by us; and

(3) the certificates for all certificated old notes, in proper form for transfer, or a book-entry confirmation, and all other documents required by the letter of transmittal, are received by the exchange agent within three New York Stock Exchange trading days after the date of execution of the notice of guaranteed delivery.

The notice of guaranteed delivery may be sent by facsimile transmission, mail or hand delivery. The notice of guaranteed delivery must set forth:

(1) your name and address;

(2) the amount of old notes you are tendering; and

(3) a statement that your tender is being made by the notice of guaranteed delivery and that you guarantee that within three New York Stock Exchange trading days after the execution of the notice

of guaranteed delivery, the eligible institution will deliver the following documents to the exchange agent:

(A) the certificates for all certificated old notes being tendered, in proper form for transfer or a book-entry confirmation of tender;

(B) a written or facsimile copy of the letter of transmittal, or a book-entry confirmation instead of the letter of transmittal; and

(C) any other documents required by the letter of transmittal.

Book-Entry Transfer

The exchange agent will establish an account with respect to the book-entry interests at DTC for purposes of the exchange offer promptly after the date of this prospectus. You must deliver your book-entry interest by book-entry transfer to the account maintained by the exchange agent at DTC. Any financial institution that is a participant in DTC's systems may make book-entry delivery of book-entry interests by causing DTC to transfer the book-entry interests into the exchange agent's account at DTC in accordance with DTC's procedures for transfer.

If one of the following situations occur:

(1) you cannot deliver a book-entry confirmation of book-entry delivery of your book-entry interests into the exchange agent's account at DTC; or

(2) you cannot deliver all other documents required by the letter of transmittal to the exchange agent prior to the expiration date,

then you must tender your book-entry interests according to the guaranteed delivery procedures discussed above.

Withdrawal Rights

You may withdraw tenders of your old notes at any time prior to 5:00 p.m., New York City time, on the expiration date.

For your withdrawal to be effective, the exchange agent must receive a written or facsimile transmission notice of withdrawal at its address set forth below under " — Exchange Agent" prior to 5:00 p.m., New York City time, on the expiration date.

The notice of withdrawal must:

(1) state your name;

(2) identify the specific old notes to be withdrawn, including the certificate number or numbers and the principal amount of withdrawn notes;

(3) be signed by you in the same manner as you signed the letter of transmittal when you tendered your old notes, including any required signature guarantees or be accompanied by documents of transfer sufficient for the exchange agent to register the transfer of the old notes into your name; and

(4) specify the name in which the old notes are to be registered, if different from yours.

We will determine all questions regarding the validity, form and eligibility, including time of receipt, of withdrawal notices. Our determination will be final and binding on all parties. Any old notes tendered and withdrawn will be deemed not to have been validly tendered for exchange for purposes of the exchange offer. Any old notes which have been tendered for exchange but which are not exchanged for any reason will be returned to you without cost as soon as practicable after withdrawal, rejection of tender or termination of the exchange offer. Properly withdrawn old notes may be retendered by following one of

the procedures described under " — Procedures for Tendering" above at any time on or prior to 5:00 p.m., New York City time, on the expiration date.

Conditions

Notwithstanding any other provision of the exchange offer and subject to our obligations under the registration rights agreement, we will not be required to accept for exchange, or to issue registered notes in exchange for, any old notes and may terminate or amend the exchange offer, if at any time before the acceptance of any old notes for exchange any of the following events occur:

(1) any injunction, order or decree has been issued by any court or any governmental agency that would prohibit, prevent or otherwise materially impair our ability to proceed with the exchange offer; or

(2) the exchange offer violates any applicable law or any applicable interpretation of the staff of the SEC.

These conditions are for our sole benefit, and we may assert them regardless of the circumstances giving rise to them, subject to applicable law. We also may waive in whole or in part at any time and from time to time any particular condition in our sole discretion. If we waive a condition, we may be required in order to comply with applicable securities laws to extend the expiration date of the exchange offer. Our failure at any time to exercise any of the foregoing rights will not be deemed a waiver of these rights and these rights will be deemed ongoing rights which may be asserted at any time and from time to time.

In addition, we will not accept for exchange any old notes tendered, and no registered notes will be issued in exchange for any of those old notes, if at the time the old notes are tendered any stop order is threatened by the SEC or in effect with respect to the registration statement of which this prospectus is a part or the qualification of the indenture under the Trust Indenture Act of 1939.

The exchange offer is not conditioned on any minimum principal amount of old notes being tendered for exchange.

Exchange Agent

We have appointed The Bank of New York as exchange agent for the exchange offer. Questions, requests for assistance and requests for additional copies of the prospectus, the letter of transmittal and other related documents should be directed to the exchange agent addressed as follows:

By Registered or Certified Mail, by Hand or by Overnight Courier:

The Bank of New York

101 Barclay Street, 8W
New York, New York 10286
Attention: Corporate Trust Administration

By Facsimile: (212) 815-5707 ***By Telephone: (212) 815-2923***

Attention: Corporate Trust Administration

The exchange agent also acts as trustee under the indenture.

Fees and Expenses

We will not pay brokers, dealers, or others soliciting acceptances of the exchange offer. The principal solicitation is being made by mail. Additional solicitations, however, may be made in person or by telephone by our officers and employees.

We will pay the estimated cash expenses to be incurred in connection with the exchange offer. These are estimated in the aggregate to be approximately $ which includes fees and expenses of the exchange agent, accounting, legal, printing and related fees and expenses.

Transfer Taxes

You will not be obligated to pay any transfer taxes in connection with a tender of your old notes for exchange unless you instruct us to register registered notes in the name of, or request that old notes not tendered or not accepted in the exchange offer be returned to, a person other than the registered tendering holder, in which event the registered tendering holder will be responsible for the payment of any applicable transfer tax.

Accounting Treatment

We will not recognize any gain or loss for accounting purposes upon the consummation of the exchange offer. We will amortize the expense of the exchange offer over the term of the registered notes under generally accepted accounting principles.

DESCRIPTION OF THE REGISTERED NOTES

The old notes were issued and the registered notes will be issued under an indenture dated as of June 25, 2003, among the Issuer, Arch Western, the Subsidiary Guarantors and The Bank of New York, as trustee, which has been filed as an exhibit to the registration statement of which this prospectus is part. Upon the effectiveness of the registration statement relating to the exchange offer, the Indenture will be subject to and governed by the Trust Indenture Act of 1939. The terms of the Notes include those stated in the Indenture and those made part of the Indenture by reference to the Trust Indenture Act. The Security Documents referred to below under the heading "Security" define the terms of the security interest that will secure the Notes.

On June 25, 2003, we issued $700.0 million aggregate principal amount of old notes under the Indenture. The terms of the registered notes are identical in all material respects to the old notes, except for certain transfer restrictions and registration and other rights relating to the exchange of the old notes for registered notes. The trustee will authenticate and deliver registered notes for original issue only in exchange for a like principal amount of old notes. Any old notes that remain outstanding after the consummation of the exchange offer, together with the registered notes, will be treated as a single class of securities under the Indenture. Accordingly, all references herein to specified percentages in aggregate principal amount of outstanding Notes shall be deemed to mean, at any time after the exchange offer is consummated, such percentage in aggregate principal amount of the old notes and registered notes then outstanding.

You can find the definitions of certain terms used in this description under the subheading "Certain Definitions." In this description, "Arch Western" refers only to Arch Western Resources, LLC and not to any of its subsidiaries, the "Issuer" refers to Arch Western Finance, LLC, a wholly owned Subsidiary of Arch Western, and "Arch Coal" refers to Arch Coal, Inc. and not to any of its subsidiaries.

You are encouraged to read the Indenture, the Security Documents and the Registration Rights Agreement filed as exhibits to the registration statement of which this prospectus is a part and referred to under the heading "Exchange Offer; Registration Rights" because they, and not this description, define your rights as a holder of Notes. Copies of the Indenture, the Security Documents and the Registration Rights Agreement are available upon request to Arch Western at the address indicated under "Where You Can Find More Information."

Principal, Maturity and Interest

The Issuer may issue up to $700.0 million aggregate principal amount of registered notes in this exchange offer and, subject to compliance with the limitations described under "— Certain Covenants — Limitation on Debt," may in the future issue an unlimited principal amount of additional notes at later dates under the same Indenture (the "Additional Notes"). Any Additional Notes that the Issuer issues in the future will be identical in all material respects to the Notes that the Issuer has issued and will issue in this exchange offer and will form a single series with such Notes, except that Additional Notes issued in the future will have different issuance dates and may have different issuance prices. The Issuer will issue registered notes only in fully registered form without coupons, in denominations of $1,000 and integral multiples of $1,000.

The Notes will mature on July 1, 2013.

Interest on the Notes will accrue at a rate of 6.75% per annum and will be payable semi-annually in arrears on January 1 and July 1, commencing on January 1, 2004. The Issuer will pay interest to those persons who were holders of record on the June 15 or December 15 immediately preceding each interest payment date. Interest on the Notes will accrue from the date of original issuance or, if interest has already been paid, from the date it was most recently paid. Interest will be computed on the basis of a 360-day year comprised of twelve 30-day months.

The interest rate on the Notes will increase if:

(1) the registration statements of which this prospectus is a part is not declared effective on a timely basis;

(2) the exchange offer is not consummated on a timely basis; or

(3) certain other conditions are not satisfied as described under "Exchange Offer; Registration Rights."

Any interest payable as a result of any such increase in interest rate is referred to as "Special Interest," and all references to interest in this description include Special Interest. You should refer to the description under the heading "Exchange Offer; Registration Rights" for a more detailed description of the circumstances under which the interest rate will increase.

Ranking

The Notes will be:

- senior obligations of the Issuer and
- secured by a first-priority security interest in the Arch Coal Notes.

The Notes will be unconditionally guaranteed on a senior basis by Arch Western and all of its Domestic Subsidiaries other than Canyon Fuel. The Guarantees will be:

- equal in right of payment to any future senior debt of the Guarantors;
- effectively subordinated to all future secured debt of the Guarantors to the extent of the assets securing such debt;
- senior in right of payment to any future subordinated debt of the Guarantors; and
- effectively subordinated to any existing and future liabilities of any Subsidiaries of Arch Western that are not Guarantors.

As of the date of this prospectus, all of Arch Western's Subsidiaries are "Restricted Subsidiaries." However, under the circumstances described below under the caption "— Certain Covenants — Designation of Restricted and Unrestricted Subsidiaries," Arch Western is permitted to designate certain of its Subsidiaries as "Unrestricted Subsidiaries." Arch Western's Unrestricted Subsidiaries will not be subject to many of the restrictive covenants in the Indenture. Arch Western's Unrestricted Subsidiaries will not Guarantee the Notes.

In addition, as of the date of this prospectus, there are no Foreign Subsidiaries, and the only Subsidiary of Arch Western that will not Guarantee the Notes is Canyon Fuel. In the event of a bankruptcy, liquidation or reorganization of any of these non-guarantor Subsidiaries, the non-guarantor Subsidiaries will pay the holders of their debt and their trade creditors before they will be able to distribute any of their assets to Arch Western or a Subsidiary Guarantor. Arch Western's equity interest in Canyon Fuel represented 11% of the consolidated assets of Arch Western and its subsidiaries at March 31, 2003 and contributed 2% of the total revenues of Arch Western and its subsidiaries in 2002.

Note Guarantees

The Arch Western Guarantee

Arch Western will unconditionally guarantee (the "Arch Western Guarantee") all of the Issuer's obligations under the Notes, including its obligations to pay principal, interest, and premium, if any, with respect to the Notes. The Arch Western Guarantee will be joint and several with any other Note Guarantee, will be a general unsecured obligation of Arch Western and will rank *pari passu* with all existing and future Debt of Arch Western that is not, by its terms, expressly subordinated in right of payment of the Arch Western Guarantee.

The Subsidiary Guarantees

The Notes will be guaranteed by each existing Domestic Subsidiary of Arch Western (excluding Canyon Fuel) and all future Domestic Subsidiaries. The Indenture requires that each existing and future Restricted Subsidiary that is not otherwise a Guarantor that guarantees any other Indebtedness of Arch Western or any of its Restricted Subsidiaries guarantees the Notes.

Each of the Subsidiary Guarantors will unconditionally guarantee, on a joint and several basis with all other Note Guarantees, all of the Issuer's obligations under the Notes, including its obligations to pay principal, interest, and premium, if any, with respect to the Notes. The Subsidiary Guarantees will be general unsecured obligations of the Subsidiary Guarantors and will rank *pari passu* with all existing and future debt of the Subsidiary Guarantors that is not, by its terms, expressly subordinated in right of payment to the Subsidiary Guarantees. The obligations of each Guarantor are limited to the maximum amount which, after giving effect to all other contingent and fixed liabilities of such Guarantor and after giving effect to any collections from or payments made by or on behalf of any other Guarantor in respect of the obligations of such other Guarantor under its Guarantee or pursuant to its contribution obligations under the Indenture, will result in the obligations of such Guarantor under its Guarantee not constituting a fraudulent conveyance or fraudulent transfer under federal or state law. See "Risk Factors — Risks Related to the Registered Notes — Federal and state fraudulent conveyance laws may permit a court to void the registered notes and guarantees, and if that occurs, you may not recover payment on the registered notes." Each Subsidiary Guarantor that makes a payment or distribution under a Subsidiary Guarantee will be entitled to a contribution from each other Subsidiary Guarantor in an amount *pro rata,* based on the net assets of each Subsidiary Guarantor determined in accordance with GAAP. Except as provided in "Certain Covenants — Limitation on Asset Sales," Arch Western will not be restricted from selling or otherwise disposing of any of the Subsidiary Guarantors.

The Indenture provides that:

(i) in the event of a sale or other disposition, by way of merger, consolidation or otherwise, of all the Capital Stock of any Subsidiary Guarantor to any Person that is not an Affiliate of Arch Western, such Subsidiary Guarantor will be released and relieved of any obligations under its Subsidiary Guarantee; *provided* that the Net Available Cash from such sale or other disposition is applied in accordance with the applicable provisions of the Indenture. See "Certain Covenants — Limitation on Asset Sales";

(ii) upon the release or discharge of another Guarantee of a Subsidiary Guarantor that resulted in the creation of the Subsidiary Guarantee of such Subsidiary Guarantor, except a discharge or release by or as a result of payment under such other Guarantee, such Subsidiary Guarantor will be released and relieved of any obligations under its Subsidiary Guarantee; and

(iii) upon the designation of any Subsidiary Guarantor as an Unrestricted Subsidiary in accordance with the terms of the Indenture, such Subsidiary Guarantor will be released and relieved of any obligations under its Subsidiary Guarantee.

Security

The Notes will be secured by a first-priority security interest in the Arch Coal Notes. As of March 31, 2003, there were $361.1 million of outstanding Arch Coal Notes. The outstanding amount of Arch Coal Notes will increase by the amount of any Restricted Payment to, or Permitted Investment in, Arch Coal or any of its Affiliates (other than Arch Western or its Restricted Subsidiaries) and will decrease to the extent Arch Coal repays amounts owing pursuant to the Arch Coal Notes.

The Lien securing the Notes will be released upon (1) a satisfaction and discharge of the Indenture and (2) a legal defeasance as described under "— Defeasance."

Subject to the covenant described under "— Certain Covenants — Limitation on Debt," Arch Western can Incur a Lien on the Arch Coal Notes to secure Debt under a credit facility in an aggregate

principal amount not to exceed $100.0 million at any time outstanding, which Liens will be equal and ratable with the Liens securing the Notes. In such event, the Issuer, Arch Western, the administrative agent under such credit facility, the Trustee on behalf of the holders of the Notes and a collateral trustee (the "Collateral Trustee") will amend the Security Documents and enter into a collateral trust agreement (the "Collateral Trust Agreement"). Pursuant to the terms of the Collateral Trust Agreement, the Collateral Trustee will be appointed as collateral agent for each of the secured parties and will hold the liens and security interests in the Arch Coal Notes granted pursuant to the Security Documents with sole authority to exercise remedies under the Security Documents. The Collateral Trustee will agree to act as mortgagee under all mortgages, beneficiary under all deeds of trust and as secured party under the applicable security agreements, to follow the instructions provided to it under the Collateral Trust Agreement and to carry out certain other duties.

Under the Collateral Trust Agreement, the Liens securing the Notes and such credit facility may not be enforced by the holders of the Notes or the lenders under the new credit facility, except for certain limited exceptions involving payment or bankruptcy Events of Default under the Indenture (each, a "Triggering Event"). If a Triggering Event has occurred and is continuing, the actions of the Collateral Trustee will be directed by the Trustee, as directed by holders of at least a majority in principal amount of the Notes, and administrative agent under the new credit facility. All proceeds of the Arch Coal Notes will be ratably shared among all holders of the Notes and the lenders under the new credit facility, if any.

Optional Redemption

Except as set forth in the next paragraph, the Notes will not be redeemable at the option of the Issuer prior to July 1, 2008. Starting on that date, the Issuer may redeem all or any portion of the Notes, at once or over time, after giving the required notice under the Indenture. The Notes may be redeemed at the redemption prices set forth below, plus accrued and unpaid interest to the redemption date (subject to the right of holders of record on the relevant record date to receive interest due on the relevant interest payment date). The following prices are for Notes redeemed during the 12-month period commencing on July 1 of the years set forth below, and are expressed as percentages of principal amount:

Year	Redemption Price
2008	103.375%
2009	102.250%
2010	101.125%
2011 and thereafter	100.000%

In addition, at any time and from time to time, prior to July 1, 2006, the Issuer may redeem up to a maximum of 35% of the original aggregate principal amount of the Notes (calculated giving effect to any issuance of Additional Notes) with the proceeds of one or more Public Equity Offerings, at a redemption price equal to 106.750% of the principal amount thereof, plus accrued and unpaid interest to the redemption date (subject to the right of holders of record on the relevant record date to receive interest due on the relevant interest payment date); *provided, however,* that after giving effect to any such redemption, at least 65% of the original aggregate principal amount of the Notes (calculated giving effect to any issuance of Additional Notes) remains outstanding (excluding Notes held by Arch Coal or any of its Subsidiaries). Any such redemption shall be made within 75 days of such Public Equity Offering upon not less than 30 nor more than 60 days' prior notice.

Sinking Fund

There will be no mandatory sinking fund payments for the Notes.

Repurchase at the Option of Holders Upon a Change of Control

Upon the occurrence of a Change of Control, each holder of Notes shall have the right to require the Issuer to repurchase all or any part of such holder's Notes pursuant to the offer described below (the "Change of Control Offer") at a purchase price (the "Change of Control Purchase Price") equal to 101% of the principal amount thereof, plus accrued and unpaid interest to the repurchase date (subject to the right of holders of record on the relevant record date to receive interest due on the relevant interest payment date). If the repurchase date is after a record date and on or before the relevant interest payment date, the accrued and unpaid interest, if any, will be paid to the person or entity in whose name the Note is registered at the close of business on that record date, and no additional interest will be payable to holders whose Notes shall be subject to redemption.

Within 30 days following any Change of Control, the Issuer shall:

(a) cause a notice of the Change of Control Offer to be sent at least once to the Dow Jones News Service or similar business news service in the United States; and

(b) send, by first-class mail, with a copy to the Trustee, to each holder of Notes, at such holder's address appearing in the Security Register, a notice stating:

(1) that a Change of Control has occurred and a Change of Control Offer is being made pursuant to the covenant entitled "Repurchase at the Option of Holders Upon a Change of Control" and that all Notes timely tendered will be accepted for payment;

(2) the Change of Control Purchase Price and the repurchase date, which shall be, subject to any contrary requirements of applicable law, a business day no earlier than 30 days nor later than 60 days from the date such notice is mailed;

(3) the circumstances and relevant facts regarding the Change of Control (including information with respect to *pro forma* historical income, cash flow and capitalization after giving effect to the Change of Control); and

(4) the procedures that holders of Notes must follow in order to tender their Notes (or portions thereof) for payment, and the procedures that holders of Notes must follow in order to withdraw an election to tender Notes (or portions thereof) for payment.

The Issuer will not be required to make a Change of Control Offer following a Change of Control if a third party makes the Change of Control Offer in the manner, at the times and otherwise in compliance with the requirements set forth in the Indenture applicable to a Change of Control Offer made by the Issuer and purchases all Notes validly tendered and not withdrawn under such Change of Control Offer.

The Issuer will comply, to the extent applicable, with the requirements of Section 14(e) of the Exchange Act and any other securities laws or regulations in connection with the repurchase of Notes pursuant to a Change of Control Offer. To the extent that the provisions of any securities laws or regulations conflict with the provisions of this covenant, the Issuer will comply with the applicable securities laws and regulations and will not be deemed to have breached its obligations under this covenant by virtue of such compliance.

The Issuer and Arch Western have no present intention to engage in a transaction involving a Change of Control, although it is possible that they would decide to do so in the future. Subject to certain covenants described below, Arch Western could, in the future, enter into certain transactions, including acquisitions, refinancings or other recapitalizations, that would not constitute a Change of Control under the Indenture, but that could increase the amount of debt outstanding at such time or otherwise affect its capital structure or credit ratings.

The definition of Change of Control includes a phrase relating to the sale, transfer, assignment, lease, conveyance or other disposition of "all or substantially all" the Property of Arch Western and its Restricted Subsidiaries, considered as a whole. Although there is a developing body of case law interpreting the phrase "substantially all," there is no precise established definition of the phrase under applicable law. Accordingly, if Arch Western and its Restricted Subsidiaries, considered as a whole, dispose of less than all of this Property by any of the means described above, the ability of a holder of Notes to require the Issuer to repurchase its Notes may be uncertain. In such a case, holders of the Notes may not be able to resolve this uncertainty without resorting to legal action.

Future debt of Arch Western may contain prohibitions of certain events which would constitute a Change of Control or require such debt to be repurchased or repaid upon a Change of Control. In addition, the Issuer's ability to pay cash to holders of Notes upon a repurchase may be limited by Arch Western's then existing financial resources. The Issuer cannot assure you that sufficient funds will be available when necessary to make any required repurchases. The Issuer's failure to repurchase Notes in connection with a Change of Control would result in a default under the Indenture. Such a default could, in turn, constitute a default under debt of the Guarantors. The Issuer's obligation to make an offer to repurchase the Notes as a result of a Change of Control may be waived or modified at any time prior to the occurrence of such Change of Control with the written consent of the holders of at least a majority in aggregate principal amount of the Notes. See "— Amendments and Waivers."

Certain Covenants

Covenant Termination. Set forth below are summaries of certain covenants contained in the Indenture. Upon the first date that:

(a) the Notes have Investment Grade Ratings from both Rating Agencies; and

(b) no Default or Event of Default has occurred and is continuing under the Indenture,

Arch Western and its Restricted Subsidiaries will cease to be subject to the following provisions of the Indenture:

- "— Limitation on Debt;"
- "— Limitation on Restricted Payments;"
- "— Limitation on Asset Sales;"
- "— Limitation on Restrictions on Distributions from Restricted Subsidiaries;"
- "— Limitation on Transactions with Affiliates;"
- clause (a)(i) and (b) of "— Limitation on Sale and Leaseback Transactions;"
- "— Designation of Restricted and Unrestricted Subsidiaries;" and
- clause (e) of the first paragraph of "— Merger, Consolidation and Sale of Property"

(collectively, the "Specified Covenants"). As a result, the Notes will be entitled to substantially less protection from and after the date of termination of the covenants.

Limitation on Debt. The Issuer shall not Incur any Debt other than the Notes and any Additional Notes. Arch Western shall not, and shall not permit any Restricted Subsidiary to, Incur, directly or indirectly, any Debt unless, after giving effect to the application of the proceeds thereof, no Default or Event of Default would occur as a consequence of such Incurrence or be continuing following such Incurrence and either:

(1) such Debt is Debt of Arch Western or a Subsidiary Guarantor and, after giving effect to the Incurrence of such Debt and the application of the proceeds thereof, Consolidated Interest Coverage Ratio of Arch Western would be at least 2.0 to 1.0, or

(2) such Debt is Permitted Debt.

The term "Permitted Debt" is defined to include the following:

(a) Debt of the Issuer evidenced by the Notes and the Note Guarantees thereof;

(b) Debt of Arch Western or a Restricted Subsidiary in respect of Capital Lease Obligations and Purchase Money Debt; *provided* that:

(1) the aggregate principal amount of such Debt does not exceed the Fair Market Value (on the date of the Incurrence thereof) of the Property acquired, constructed or leased, and

(2) the aggregate principal amount of all Debt Incurred and then outstanding pursuant to this clause (b) (together with all Permitted Refinancing Debt Incurred and then outstanding in respect of Debt previously Incurred pursuant to this clause (b)) does not exceed, at any one time outstanding, 5% of Consolidated Net Tangible Assets;

(c) Debt of Arch Western owing to and held by any Restricted Subsidiary and Debt of a Restricted Subsidiary owing to and held by Arch Western or any Restricted Subsidiary; *provided, however,* that (1) any subsequent issue or transfer of Capital Stock or other event that results in any such Restricted Subsidiary ceasing to be a Restricted Subsidiary or any subsequent transfer of any such Debt (except to Arch Western or a Restricted Subsidiary) shall be deemed, in each case, to constitute the Incurrence of such Debt by the issuer thereof and (2) if a Guarantor is the obligor on such Debt, such Debt is subordinated in right of payment to the Note Guarantee of such Guarantor;

(d) Debt under Interest Rate Agreements entered into by Arch Western or a Restricted Subsidiary for the purpose of managing interest rate risk in the ordinary course of the financial management of Arch Western or such Restricted Subsidiary and not for speculative purposes, *provided* that the obligations under such agreements are directly related to payment obligations on Debt otherwise permitted by the terms of this covenant;

(e) Debt under Currency Exchange Protection Agreements entered into by Arch Western or a Restricted Subsidiary for the purpose of managing currency exchange rate risks directly related to transactions entered into by Arch Western or such Restricted Subsidiary in the ordinary course of business and not for speculative purposes;

(f) Debt under Commodity Price Protection Agreements entered into by Arch Western or a Restricted Subsidiary in the ordinary course of the financial management of Arch Western or such Restricted Subsidiary and not for speculative purposes;

(g) Debt in connection with one or more standby letters of credit or performance or surety bonds or completion guarantees issued by Arch Western or a Restricted Subsidiary in the ordinary course of business or pursuant to self-insurance obligations and not in connection with the borrowing of money or the obtaining of advances or credit;

(h) Debt of Arch Western or a Restricted Subsidiary outstanding on the Issue Date not otherwise described in clauses (a) through (g) above;

(i) other Debt of Arch Western or any Subsidiary Guarantor in an aggregate principal amount outstanding at any one time not to exceed $100.0 million;

(j) Permitted Refinancing Debt Incurred in respect of Debt Incurred pursuant to clause (1) of the first paragraph of this covenant and clauses (b) and (h) above; and

(k) Debt consisting of installment payment obligations to the federal government in connection with the acquisition of coal leases in the ordinary course of business and consistent with past practices.

Notwithstanding anything to the contrary contained in this covenant,

(a) Arch Western shall not permit any Restricted Subsidiary that is not a Guarantor to Incur any Debt pursuant to this covenant if the proceeds thereof are used, directly or indirectly, to Refinance any Debt of any Guarantor; and

(b) accrual of interest, accretion or amortization of original issue discount and the payment of interest or dividends in the form of additional Debt, will be deemed not to be an Incurrence of Debt for purposes of this covenant.

For purposes of determining compliance with this covenant in the event that an item of Debt meets the criteria of more than one of the categories of Permitted Debt described in clauses (a) through (j) above or is entitled to be incurred pursuant to clause (1) of the first paragraph of this covenant, Arch Western shall, in its sole discretion, classify such item of Debt in any manner that complies with this covenant.

Limitation on Restricted Payments. Arch Western shall not make, and shall not permit any Restricted Subsidiary to make, directly or indirectly, any Restricted Payment if at the time of, and after giving effect to, such proposed Restricted Payment,

(a) a Default or Event of Default shall have occurred and be continuing;

(b) Arch Western could not Incur at least $1.00 of additional Debt pursuant to clause (1) of the first paragraph of the covenant described under "— Limitation on Debt;" or

(c) the aggregate amount of such Restricted Payment and all other Restricted Payments declared or made since the Issue Date (the amount of any Restricted Payment, if made other than in cash, to be based upon Fair Market Value at the time of such Restricted Payment) would exceed an amount equal to the sum of:

(1) 50% of the aggregate amount of Consolidated Net Income of Arch Western accrued during the period (treated as one accounting period) from the beginning of the fiscal quarter during which the Issue Date occurs to the end of the most recent fiscal quarter ending at least 45 days prior to the date of such Restricted Payment (or if the aggregate amount of Consolidated Net Income of Arch Western for such period shall be a deficit, minus 100% of such deficit), plus

(2) 100% of the Capital Stock Sale Proceeds, plus

(3) the sum of:

(A) the aggregate net cash proceeds received by Arch Western or any Restricted Subsidiary from the issuance or sale after the Issue Date of convertible or exchangeable Debt that has been converted into or exchanged for Capital Stock (other than Disqualified Stock) of Arch Western, and

(B) the aggregate amount by which Debt (other than Subordinated Obligations) of Arch Western or any Restricted Subsidiary is reduced on Arch Western's consolidated balance sheet on or after the Issue Date upon the conversion or exchange of any Debt issued or sold on or prior to the Issue Date that is convertible or exchangeable for Capital Stock (other than Disqualified Stock) of Arch Western,

excluding, in the case of clause (A) or (B):

(x) any such Debt issued or sold to Arch Western or a Subsidiary of Arch Western or an employee stock ownership plan or trust established by Arch Coal or any such Subsidiary for the benefit of their employees, and

(y) the aggregate amount of any cash or other Property distributed by Arch Western or any Restricted Subsidiary upon any such conversion or exchange;

plus

(4) an amount equal to the sum of:

(A) the net reduction in Investments in any Person other than Arch Western or a Restricted Subsidiary resulting from dividends, repayments of loans or advances or other transfers of Property, in each case to Arch Western or any Restricted Subsidiary from such Person, and

(B) the portion (proportionate to Arch Western's equity interest in such Unrestricted Subsidiary) of the Fair Market Value of the net assets of an Unrestricted Subsidiary of Arch Western at the time such Unrestricted Subsidiary is designated a Restricted Subsidiary;

provided, however, that the foregoing sum shall not exceed, in the case of any Person, the amount of Investments previously made (and treated as a Restricted Payment) by Arch Western or any Restricted Subsidiary in such Person.

Notwithstanding the foregoing limitation, Arch Western may:

(a) pay dividends on its Capital Stock within 60 days of the declaration thereof if, on the declaration date, such dividends could have been paid in compliance with the Indenture; *provided, however,* that such dividend shall be included in the calculation of the amount of Restricted Payments;

(b) purchase, repurchase, redeem, legally defease, acquire or retire for value Capital Stock of Arch Western or Subordinated Obligations in exchange for, or out of the proceeds of the substantially concurrent sale of, Capital Stock of Arch Western (other than Disqualified Stock and other than Capital Stock issued or sold to a Subsidiary of Arch Coal or an employee stock ownership plan or trust established by Arch Coal or any such Subsidiary for the benefit of their employees); *provided, however,* that

(1) such purchase, repurchase, redemption, legal defeasance, acquisition or retirement shall be excluded in the calculation of the amount of Restricted Payments and

(2) the Capital Stock Sale Proceeds from such exchange or sale shall be excluded from the calculation pursuant to clause (c)(2) above;

(c) purchase, repurchase, redeem, legally defease, acquire or retire for value any Subordinated Obligations in exchange for, or out of the proceeds of the substantially concurrent sale of, Permitted Refinancing Debt; *provided, however,* that such purchase, repurchase, redemption, legal defeasance, acquisition or retirement shall be excluded in the calculation of the amount of Restricted Payments;

(d) repurchase shares of, or options to purchase shares of, common stock of Arch Western or any of its Subsidiaries from current or former officers, directors or employees of Arch Western or any of its Subsidiaries (or permitted transferees of such current or former officers, directors or employees), pursuant to the terms of agreements (including employment agreements) or plans (or amendments thereto) approved by the Board of Directors under which such individuals purchase or sell, or are granted the option to purchase or sell, shares of such common stock; *provided, however,* that: (1) the aggregate amount of such repurchases shall not exceed $2.5 million in any calendar year and (2) at the time of such repurchase, no other Default or Event of Default shall have occurred and be continuing (or result therefrom); *provided further, however,* that such repurchases shall be included in the calculation of the amount of Restricted Payments;

(e) so long as no Default or Event of Default has occurred and is continuing and Arch Western is a limited liability company, make distributions to the ARCO Member (as defined in the LLC Agreement), with respect to any period after March 31, 2003, not to exceed the Tax Amount allocated to such member under the LLC Agreement for such period; *provided, however,* that such distributions shall be included in the calculation of the amount of Restricted Payments;

(f) so long as no Default or Event of Default has occurred and is continuing, make distributions of the Preferred Return (as defined in the LLC Agreement) to the ARCO Member (as defined in the LLC Agreement) pursuant to the LLC Agreement in effect on the Issue Date; *provided, however,* that such distribution shall be included in the calculation of the amount of Restricted Payments; and

(g) so long as (i) no Default or Event of Default has occurred and is continuing and (ii) Arch Western could incur at least $1.00 of additional Debt pursuant to clause (l) of the first paragraph of the covenant described under "— Limitation on Debt," make loans or advances in cash to Arch Coal out of Available Cash as of the date of such loan or advance; *provided, however,* that such loans or advances shall be included in the calculation of the amount of Restricted Payments.

Notwithstanding the prior two paragraphs, any Restricted Payment to, or Permitted Investments in, Arch Coal or any of its Affiliates (other than Arch Western or a Restricted Subsidiary) shall be in the form of a loan for cash which shall be evidenced by Arch Coal Notes that are immediately pledged to the Trustee on behalf of the holders of the Notes.

Limitation on Liens. Arch Western shall not, and shall not permit any Restricted Subsidiary to, directly or indirectly, Incur or suffer to exist, any Lien on the Arch Coal Notes, except for the Liens securing the Notes and Additional Notes and Liens described in clause (k) of the definition of Permitted Liens.

Arch Western shall not, and shall not permit any Restricted Subsidiary to, directly or indirectly, Incur or suffer to exist, any Lien (other than Permitted Liens) upon any of its Property (including Capital Stock of a Restricted Subsidiary), whether owned at the Issue Date or thereafter acquired, or any interest therein or any income or profits therefrom, unless it has made or will make effective provision whereby the Notes or any Note Guarantee will be secured by such Lien equally and ratably with (or, if such other Debt constitutes Subordinated Obligations, prior to) all other Debt of Arch Western or any Restricted Subsidiary secured by such Lien for so long as such other Debt is secured by such Lien.

Limitation on Asset Sales. Arch Western shall not, and shall not permit any Restricted Subsidiary, to, directly or indirectly, sell, transfer or otherwise dispose of (including by means of a merger, consolidation or similar transaction) any shares of Capital Stock of the Issuer, Arch Western Notes or the Arch Coal Notes. Arch Western shall not, and shall not permit any Restricted Subsidiary to, directly or indirectly, consummate any Asset Sale unless:

(a) Arch Western or such Restricted Subsidiary receives consideration at the time of such Asset Sale at least equal to the Fair Market Value of the Property subject to such Asset Sale;

(b) at least 75% of the consideration paid to Arch Western or such Restricted Subsidiary in connection with such Asset Sale is in the form of cash or Cash Equivalents or the assumption by the purchaser of liabilities of Arch Western or any Restricted Subsidiary (other than contingent liabilities or liabilities that are by their terms subordinated to the Notes) as a result of which Arch Western and the Restricted Subsidiaries are no longer obligated with respect to such liabilities; and

(c) Arch Western delivers an Officers' Certificate to the Trustee certifying that such Asset Sale complies with the foregoing clauses (a) and (b).

The Net Available Cash (or any portion thereof) from Asset Sales may be applied by Arch Western or a Restricted Subsidiary to the extent Arch Western or such Restricted Subsidiary elects (or is required by the terms of any Debt) to:

(a) Repay any Debt of Arch Western or such Restricted Subsidiary (other than Subordinated Obligations); or

(b) reinvest in Additional Assets (including by means of an Investment in Additional Assets by a Restricted Subsidiary with Net Available Cash received by Arch Western or another Restricted Subsidiary).

Any Net Available Cash from an Asset Sale (other than an Asset Sale consisting of all of the Capital Stock of Canyon Fuel or Mountain Coal Company, L.L.C.) not applied in accordance with the preceding paragraph within 365 days from the date of the receipt of such Net Available Cash or that is not segregated from the general funds of Arch Western for investment in identified Additional Assets in respect of a project that shall have been commenced, and for which binding contractual commitments have been entered into, prior to the end of such 365-day period and that shall not have been completed or abandoned shall constitute "Excess Proceeds;" *provided, however,* that the amount of any Net Available Cash that ceases to be so segregated as contemplated above and any Net Available Cash that is segregated in respect of a project that is abandoned or completed shall also constitute "Excess Proceeds" at the time any such Net Available Cash ceases to be so segregated or at the time the relevant project is so abandoned or completed, as applicable; *provided further, however,* that the amount of any Net Available Cash that continues to be segregated for investment and that is not actually reinvested within twenty-four months from the date of the receipt of such Net Available Cash shall also constitute "Excess Proceeds." Any Net Available Cash from an Asset Sale consisting of all of the Capital Stock of Canyon Fuel or Mountain Coal Company, L.L.C. not applied in accordance with the preceding paragraph within 365 days from the date of the receipt of such Net Available Cash shall be segregated from the general funds of Arch Western and invested in cash or Cash Equivalents pending application in accordance with the preceding paragraph.

When the aggregate amount of Excess Proceeds (including income earned on such Excess Proceeds) exceeds $20.0 million, the Issuer will be required to make an offer to repurchase (the "Prepayment Offer") the Notes, which offer shall be in the amount of the Allocable Excess Proceeds (rounded to the nearest $1,000), on a *pro rata* basis according to principal amount, at a purchase price equal to 100% of the principal amount thereof, plus accrued and unpaid interest to the repurchase date (subject to the right of holders of record on the relevant record date to receive interest due on the relevant interest payment date), in accordance with the procedures (including prorating in the event of oversubscription) set forth in the Indenture. To the extent that any portion of the amount of Net Available Cash remains after compliance with the preceding sentence and *provided* that all holders of Notes have been given the opportunity to tender their Notes for repurchase in accordance with the Indenture, Arch Western or such Restricted Subsidiary may use such remaining amount for any purpose permitted by the Indenture, and the amount of Excess Proceeds will be reset to zero.

The term "Allocable Excess Proceeds" shall mean the product of:

(a) the Excess Proceeds and

(b) a fraction,

(1) the numerator of which is the aggregate principal amount of the Notes outstanding on the date of the Prepayment Offer, and

(2) the denominator of which is the sum of the aggregate principal amount of the Notes outstanding on the date of the Prepayment Offer and the aggregate principal amount of other Debt of Arch Western outstanding on the date of the Prepayment Offer that is *pari passu* in right of payment with the Arch Western Guarantee and subject to terms and conditions in respect of Asset Sales similar in all material respects to this covenant and requiring Arch Western to make an offer to repurchase such Debt at substantially the same time as the Prepayment Offer.

Within five business days after the Issuer is obligated to make a Prepayment Offer as described in the preceding paragraph, the Issuer shall send a written notice, by first-class mail, to the holders of Notes, accompanied by such information regarding Arch Western and its Subsidiaries as the Issuer in good faith believes will enable such holders to make an informed decision with respect to such Prepayment Offer. Such notice shall state, among other things, the purchase price and the repurchase date, which shall be, subject to any contrary requirements of applicable law, a business day no earlier than 30 days nor later than 60 days from the date such notice is mailed.

The Issuer will comply, to the extent applicable, with the requirements of Section 14(e) of the Exchange Act and any other securities laws or regulations in connection with the repurchase of Notes pursuant to this covenant. To the extent that the provisions of any securities laws or regulations conflict with provisions of this covenant, the Issuer will comply with the applicable securities laws and regulations and will not be deemed to have breached its obligations under this covenant by virtue thereof.

Limitation on Restrictions on Distributions from Restricted Subsidiaries. Arch Western shall not, and shall not permit any Restricted Subsidiary to, directly or indirectly, create or otherwise cause or suffer to exist any consensual restriction on the right of any Restricted Subsidiary to:

(a) pay dividends, in cash or otherwise, or make any other distributions on or in respect of its Capital Stock, or pay any Debt or other obligation owed, to Arch Western or any other Restricted Subsidiary;

(b) make any loans or advances to Arch Western or any other Restricted Subsidiary; or

(c) transfer any of its Property to Arch Western or any other Restricted Subsidiary.

The foregoing limitations will not apply:

(1) with respect to clauses (a), (b) and (c), to restrictions:

(A) in effect on the Issue Date (including, without limitation, restrictions pursuant to the Notes and the Indenture);

(B) relating to Debt of a Restricted Subsidiary of Arch Western and existing at the time it became a Restricted Subsidiary if such restriction was not created in connection with or in anticipation of the transaction or series of transactions pursuant to which such Restricted Subsidiary became a Restricted Subsidiary or was acquired by Arch Western; or

(C) that result from any amendment, restatement, renewal or replacement of an agreement referred to in clause (1)(A) or (B) above or in clause (2)(A) or (B) below, *provided* such restrictions are not less favorable, taken as a whole, to the holders of Notes than those under the agreement evidencing the Debt so Refinanced, and

(2) with respect to clause (c) only, to restrictions:

(A) relating to Debt that is permitted to be Incurred and secured without also securing the Notes pursuant to the covenants described under "— Limitation on Debt" and "— Limitation on Liens" that limit the right of the debtor to dispose of the Property securing such Debt;

(B) encumbering Property at the time such Property was acquired by Arch Western or any of its Restricted Subsidiaries, so long as such restrictions relate solely to the Property so acquired and were not created in connection with or in anticipation of such acquisition;

(C) resulting from customary provisions restricting subletting or assignment of leases or customary provisions in other agreements that restrict assignment of such agreements or rights thereunder; or

(D) customary restrictions contained in asset sale agreements limiting the transfer of such Property pending the closing of such sale.

Limitation on Transactions with Affiliates. Arch Western shall not, and shall not permit any Restricted Subsidiary to, directly or indirectly, conduct any business or enter into or suffer to exist any transaction or series of transactions (including the purchase, sale, transfer, assignment, lease, conveyance

or exchange of any Property or the rendering of any service) with, or for the benefit of, any Affiliate of Arch Western (an "Affiliate Transaction"), unless:

(a) the terms of such Affiliate Transaction are:

(1) set forth in writing;

(2) in the best interest of Arch Western or such Restricted Subsidiary, as the case may be; and

(3) no less favorable to Arch Western or such Restricted Subsidiary, as the case may be, than those that could be obtained in a comparable arm's-length transaction with a Person that is not an Affiliate of Arch Western;

(b) if such Affiliate Transaction involves aggregate payments or value in excess of $5.0 million, the Board of Directors (including at least a majority of the disinterested members of the Board of Directors) approves such Affiliate Transaction and, in its good faith judgment, believes that such Affiliate Transaction complies with clauses (a)(2) and (3) of this paragraph as evidenced by a Board Resolution promptly delivered to the Trustee; *provided, however,* if there are no disinterested members of the Board of Directors, Arch Western shall receive a written opinion from an Independent Financial Advisor described in clause (c) below; and

(c) if such Affiliate Transaction involves aggregate payments or value in excess of $25.0 million, Arch Western obtains a written opinion from an Independent Financial Advisor to the effect that the consideration to be paid or received in connection with such Affiliate Transaction is fair, from a financial point of view, to Arch Western and its Restricted Subsidiaries.

Notwithstanding the foregoing limitation, Arch Western or any Restricted Subsidiary may enter into or suffer to exist the following:

(a) any transaction or series of transactions between Arch Western and one or more Restricted Subsidiaries or between two or more Restricted Subsidiaries in the ordinary course of business, *provided* that no more than 5% of the total voting power of the Voting Stock (on a fully diluted basis) of any such Restricted Subsidiary is owned by an Affiliate of Arch Western (other than a Restricted Subsidiary);

(b) any Restricted Payment (other than an Investment) permitted to be made pursuant to the first paragraph of the covenant described under "— Limitation on Restricted Payments;"

(c) the payment of compensation (including amounts paid pursuant to employee benefit plans) for the personal services of officers, directors and employees of Arch Western or any of its Restricted Subsidiaries, so long as the Board of Directors in good faith shall have approved the terms thereof and deemed the services theretofore or thereafter to be performed for such compensation to be fair consideration therefor;

(d) loans and advances to employees made in the ordinary course of business permitted by law and consistent with the past practices of Arch Western or such Restricted Subsidiary, as the case may be, *provided* that such loans and advances do not exceed $2.5 million in the aggregate at any one time outstanding;

(e) agreements in effect on the Issue Date and described in this prospectus and any modifications, extensions or renewals thereto that are no less favorable to Arch Western or any Restricted Subsidiary than such agreements as in effect on the Issue Date; and

(f) the Arch Coal Notes.

Limitation on Sale and Leaseback Transactions. Arch Western shall not, and shall not permit any of its Restricted Subsidies to, enter into any Sale and Leaseback Transaction with respect to any Property unless:

(a) Arch Western or such Restricted Subsidiary would be entitled to:

(1) Incur Debt in an amount equal to the Attributable Debt with respect to such Sale and Leaseback Transaction pursuant to the covenant described under "— Limitation on Debt;" and

(2) create a Lien on such Property securing such Attributable Debt without also securing the Notes or the applicable Note Guarantee pursuant to the covenant described under "— Limitation on Liens;" and

(b) such Sale and Leaseback Transaction is effected in compliance with the covenant described under "— Limitation on Asset Sales."

Designation of Restricted and Unrestricted Subsidiaries. The Board of Directors may designate any Restricted Subsidiary (other than the Issuer) to be an Unrestricted Subsidiary if that designation (which would constitute an Investment in such Subsidiary) would not result in a breach of the covenant described under "— Limitation on Restricted Payments" or otherwise cause a Default. If a Restricted Subsidiary is designated as an Unrestricted Subsidiary, the aggregate Fair Market Value of all outstanding Investments owned by Arch Western and its Restricted Subsidiaries in the Subsidiary properly designated will be deemed to be an Investment made as of the time of the designation as set forth under the definition of "Investment" and will reduce the amount available for Restricted Payments under the first paragraph of the "— Limitation on Restricted Payments" covenant or Permitted Investments, as determined by Arch Western. That designation will only be permitted if the Investment would be permitted at that time and if the Restricted Subsidiary otherwise meets the definition of an Unrestricted Subsidiary.

The Board of Directors may also designate any Subsidiary of Arch Western to be an Unrestricted Subsidiary if:

(a) the Subsidiary to be so designated does not own any Capital Stock or Debt of, or own or hold any Lien on any Property of, Arch Western or any other Restricted Subsidiary and is not required to be a Guarantor pursuant to the Indenture; and

(b) either:

(1) the Subsidiary to be so designated has total assets of $1,000 or less; or

(2) such designation is effective immediately upon such entity becoming a Subsidiary of Arch Western.

Unless so designated as an Unrestricted Subsidiary, any Person that becomes a Subsidiary of Arch Western will be classified as a Restricted Subsidiary; *provided, however,* that such Subsidiary shall not be designated a Restricted Subsidiary and shall be automatically classified as an Unrestricted Subsidiary if either of the requirements set forth in clauses (x) and (y) of the second immediately following paragraph will not be satisfied after giving *pro forma* effect to such classification or if such Person is a Subsidiary of an Unrestricted Subsidiary.

In addition, neither Arch Western nor any of its Restricted Subsidiaries shall at any time be directly or indirectly liable for any Debt that provides that the holder thereof may (with the passage of time or notice or both) declare a default thereon or cause the payment thereof to be accelerated or payable prior to its Stated Maturity upon the occurrence of a default with respect to any Debt, Lien or other obligation of any Unrestricted Subsidiary (including any right to take enforcement action against such Unrestricted Subsidiary).

The Board of Directors may designate any Unrestricted Subsidiary to be a Restricted Subsidiary if, immediately after giving *pro forma* effect to such designation,

(x) Arch Western could Incur at least $1.00 of additional Debt pursuant to clause (1) of the first paragraph of the covenant described under "— Limitation on Debt," and

(y) no Default or Event of Default shall have occurred and be continuing or would result therefrom.

Any such designation or redesignation by the Board of Directors will be evidenced by filing with the Trustee a Board Resolution giving effect to such designation or redesignation and an Officers' Certificate that:

(a) certifies that such designation or redesignation complies with the foregoing provisions; and

(b) gives the effective date of such designation or redesignation,

such filing with the Trustee to occur within 45 days after the end of the fiscal quarter of Arch Western in which such designation or redesignation is made (or, in the case of a designation or redesignation made during the last fiscal quarter of Arch Western's fiscal year, within 90 days after the end of such fiscal year).

Guarantees by Restricted Subsidiaries. Arch Western shall not permit any Restricted Subsidiary that is not a Guarantor, directly or indirectly, to Guarantee or secure the payment of any other Debt of Arch Western or any of its Restricted Subsidiaries unless such Restricted Subsidiary simultaneously executes and delivers a supplemental indenture to the Indenture providing for a Subsidiary Guarantee of the payment of the Notes by such Restricted Subsidiary; *provided* that this paragraph shall not be applicable to:

(i) any Guarantee of any Restricted Subsidiary that existed at the time such Person became a Restricted Subsidiary and was not incurred in connection with, or in contemplation of, such Person becoming a Restricted Subsidiary;

(ii) any Guarantee arising under or in connection with performance bonds, indemnity bonds, surety bonds or letters of credit or bankers' acceptances; or

(iii) Permitted Liens.

If the Guaranteed Debt is a Subordinated Obligation, the Guarantee of such Guaranteed Debt must be subordinated in right of payment to the Subsidiary Guarantee to at least the extent that the Guaranteed Debt is subordinated to the Notes or the applicable Subsidiary Guarantee.

Merger, Consolidation and Sale of Property

The Issuer shall not merge, consolidate or amalgamate with or into any other Person. Arch Western shall not merge, consolidate or amalgamate with or into any other Person (other than a merger of a Wholly Owned Restricted Subsidiary of Arch Western into Arch Western) or sell, transfer, assign, lease, convey or otherwise dispose of all or substantially all its Property in any one transaction or series of transactions unless:

(a) Arch Western is the Surviving Person or the Surviving Person (if other than Arch Western) formed by such merger, consolidation or amalgamation or to which such sale, transfer, assignment, lease, conveyance or disposition is made shall be a limited liability company or corporation organized and existing under the laws of the United States of America, any state thereof or the District of Columbia;

(b) the Surviving Person (if other than Arch Western) expressly assumes, by supplemental indenture in form satisfactory to the Trustee, executed and delivered to the Trustee by such Surviving Person, the due and punctual performance and observance of all the obligations of the Indenture, the Arch Western Guarantee or the Security Documents, to be performed by Arch Western;

(c) in the case of a sale, transfer, assignment, lease, conveyance or other disposition of all or substantially all the Property, such Property shall have been transferred as an entirety or virtually as an entirety to one Person;

(d) immediately before and after giving effect to such transaction or series of transactions on a *pro forma* basis (and treating, for purposes of this clause (d) and clause (e) below, any Debt that becomes, or is anticipated to become, an obligation of the Surviving Person or any Restricted Subsidiary as a result of such transaction or series of transactions as having been Incurred by the Surviving Person or such Restricted Subsidiary at the time of such transaction or series of transactions), no Default or Event of Default shall have occurred and be continuing;

(e) immediately after giving effect to such transaction or series of transactions on a *pro forma* basis, at least $1.00 of additional Debt would be able to be Incurred under clause (1) of the first paragraph of the covenant described under "— Certain Covenants — Limitation on Debt;"

(f) Arch Western shall deliver, or cause to be delivered, to the Trustee, in form and substance reasonably satisfactory to the Trustee, an Officers' Certificate and an Opinion of Counsel, each stating that such transaction or series of transactions and the supplemental indenture, if any, in respect thereto comply with this covenant and that all conditions precedent herein provided for relating to such transaction or series of transactions have been satisfied; and

(g) Arch Western shall have delivered to the Trustee an Opinion of Counsel to the effect that the holders will not recognize income, gain or loss for Federal income tax purposes as a result of such transaction and will be subject to Federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such transaction had not occurred.

Arch Western shall not permit any Subsidiary Guarantor to consolidate with or merge with or into any Person or sell, assign, transfer, convey or otherwise dispose of, all or substantially all of its assets, in one or more related transactions, to any Person unless Arch Western has delivered to the Trustee an Officers' Certificate and Opinion of Counsel stating that the transaction complies with the following conditions and each of the following conditions is satisfied:

(a) the other Person is Arch Western or any Wholly Owned Restricted Subsidiary that is a Subsidiary Guarantor or becomes a Subsidiary Guarantor concurrently with the transaction; or

(b) (1) either (x) the Subsidiary Guarantor shall be the Surviving Person or (y) the entity formed by such consolidation or into which the Subsidiary Guarantor is merged, expressly assumes, by a Guarantee or a supplemental indenture in form satisfactory to the Trustee, executed and delivered to the Trustee by such surviving Person the due and punctual performance and observance of all the obligations of such Subsidiary Guarantor under the Subsidiary Guarantee; and

(2) the Surviving Person, if other than the Subsidiary Guarantor, is a corporation or limited liability company organized under the laws of the United States, any state thereof or the District of Columbia and immediately after giving effect to the transaction and any related Incurrence of Debt of, no Default or Event of Default shall have occurred and be continuing; or

(c) the transaction constitutes a sale or other disposition (including by way of consolidation or merger) of the Subsidiary Guarantor or the sale or disposition of all or substantially all the assets of the Subsidiary Guarantor (in each case other than to another Subsidiary Guarantor) and at the time of such transaction after giving *pro forma* effect thereto, the provisions of clause (d) of the first paragraph of this covenant would be satisfied, the transaction is otherwise permitted by the Indenture and the Subsidiary Guarantor is released from its Subsidiary Guarantee at the time of such transaction in accordance with the Indenture.

The Surviving Person shall succeed to, and be substituted for, and may exercise every right and power of Arch Western under the Indenture (or of the Subsidiary Guarantor under the Subsidiary Guarantee, as the case may be), but Arch Western, in the case of:

(a) a sale, transfer, assignment, conveyance or other disposition (unless such sale, transfer, assignment, conveyance or other disposition is of all the assets of Arch Western as an entirety or virtually as an entirety); or

(b) a lease,

shall not be released from any of the obligations or covenants under the Indenture.

Payments for Consents

Arch Western will not, and will not permit any of its Subsidiaries to, directly or indirectly, pay or cause to be paid any consideration, whether by way of interest, fee or otherwise, to any holder of any Notes for or as an inducement to any consent, waiver or amendment of any of the terms or provisions of the Indenture or the Notes unless such consideration is offered to be paid or is paid to all holders of the Notes that consent, waive or agree to amend in the time frame set forth in the solicitation documents relating to such consent, waiver or agreement.

SEC Reports

Notwithstanding that Arch Coal or Arch Western may not be subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act, Arch Coal and Arch Western shall file with the Commission and provide the Trustee and holders of Notes with such annual reports and such information, documents and other reports as are specified in Sections 13 and 15(d) of the Exchange Act and applicable to a U.S. corporation subject to such Sections, such information, documents and reports to be so filed with the Commission and provided at the times specified for the filing of such information, documents and reports under such Sections; *provided, however*, that Arch Coal and Arch Western shall not be so obligated to file such information, documents and reports with the Commission if the Commission does not permit such filings; *provided further, however*, that Arch Coal and Arch Western will be required to provide to the Trustee and the holders of Notes any such information, documents or reports that are not are so filed.

Events of Default

Events of Default in respect of the Notes include:

(1) failure to make the payment of any interest on the Notes when the same becomes due and payable, and such failure continues for a period of 30 days;

(2) failure to make the payment of any principal of, or premium, if any, on, any of the Notes when the same becomes due and payable at its Stated Maturity, upon acceleration, redemption, optional redemption, required repurchase or otherwise;

(3) failure to comply with the covenant described under "— Repurchase at the Option of Holders Upon a Change of Control," "— Certain Covenants — Limitations on Asset Sales" and "— Merger, Consolidation and Sale of Property;"

(4) failure to comply with any other covenant or agreement in the Notes, the Indenture, the Note Guarantees or the Security Documents (other than a failure that is the subject of the foregoing clause (1), (2) or (3)), and such failure continues for 60 days after written notice is given to the Issuer as provided below;

(5) a default under any Debt by Arch Western or any Restricted Subsidiary that results in acceleration of the maturity of such Debt, or failure to pay any such Debt at maturity, in an aggregate amount greater than $25.0 million or its foreign currency equivalent at the time (the "cross acceleration provisions");

(6) any judgment or judgments for the payment of money in an aggregate amount in excess of $25.0 million (or its foreign currency equivalent at the time) that shall be rendered against Arch Western or any Restricted Subsidiary and that shall not be waived, satisfied or discharged for any period of 30 consecutive days during which a stay of enforcement shall not be in effect (the "judgment default provisions");

(7) certain events involving bankruptcy, insolvency or reorganization of Arch Coal, Arch Western, the Issuer, any Guarantor or any other Significant Subsidiary (the "bankruptcy provisions");

(8) any Note Guarantee shall be held in any judicial proceeding to be unenforceable or invalid or shall cease for any reason to be in full force and effect or any Guarantor, or any Person acting on behalf of any Guarantor, shall deny or disaffirm its obligations under any Note Guarantee; and

(9) the legal impairment of the security interests under the Security Documents for any reason other than the satisfaction in full of all obligations under the Indenture and discharge of the Security Documents or any security interest created thereunder shall be declared invalid or unenforceable or Arch Western or any of its Subsidiaries asserting, in any pleading in any court of competent jurisdiction, that any such security interest is invalid or unenforceable (the "security default provisions").

A Default under clause (4) is not an Event of Default until the Trustee or the holders of not less than 25% in aggregate principal amount of the Notes then outstanding notify Arch Western or the Issuer of the Default and Arch Western or the Issuer does not cure such Default within the time specified after receipt of such notice. Such notice must specify the Default, demand that it be remedied and state that such notice is a "Notice of Default."

Arch Western shall deliver to the Trustee, within 30 days after the occurrence thereof, written notice in the form of an Officers' Certificate of any event that with the giving of notice or the lapse of time or both would become an Event of Default, its status and what action is being taken or proposed to be taken with respect thereto.

If an Event of Default with respect to the Notes (other than an Event of Default resulting from the bankruptcy provisions) shall have occurred and be continuing, the Trustee or the registered holders of not less than 25% in aggregate principal amount of the Notes then outstanding may declare to be immediately due and payable the principal amount of all the Notes then outstanding, plus accrued but unpaid interest to the date of acceleration. In case an Event of Default resulting the bankruptcy provisions shall occur, such amount with respect to all the Notes shall be due and payable immediately without any declaration or other act on the part of the Trustee or the holders of the Notes. After any such acceleration, but before a judgment or decree based on acceleration is obtained by the Trustee, the registered holders of at least a majority in aggregate principal amount of the Notes then outstanding may, under certain circumstances, rescind and annul such acceleration if all Events of Default, other than the nonpayment of accelerated principal, premium or interest, have been cured or waived as provided in the Indenture.

Subject to the provisions of the Indenture relating to the duties of the Trustee, in case an Event of Default shall occur and be continuing, the Trustee will be under no obligation to exercise any of its rights or powers under the Indenture at the request or direction of any of the holders of the Notes, unless such holders shall have offered to the Trustee reasonable indemnity. Subject to such provisions for the indemnification of the Trustee, the holders of at least a majority in aggregate principal amount of the Notes then outstanding will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the Trustee or exercising any trust or power conferred on the Trustee with respect to the Notes.

No holder of Notes will have any right to institute any proceeding with respect to the Indenture, or for the appointment of a receiver or trustee, or for any remedy thereunder, unless:

(a) such holder has previously given to the Trustee written notice of a continuing Event of Default;

(b) the registered holders of at least 25% in aggregate principal amount of the Notes then outstanding have made a written request and offered reasonable indemnity to the Trustee to institute such proceeding as Trustee; and

(c) the Trustee shall not have received from the registered holders of at least a majority in aggregate principal amount of the Notes then outstanding a direction inconsistent with such request and shall have failed to institute such proceeding within 60 days.

However, such limitations do not apply to a suit instituted by a holder of any Note for enforcement of payment of the principal of, and premium, if any, or interest on, such Note on or after the respective due dates expressed in such Note.

Amendments and Waivers

Subject to certain exceptions, Arch Western, the Issuer and the Trustee with the consent of the registered holders of at least a majority in aggregate principal amount of the Notes then outstanding (including consents obtained in connection with a tender offer or exchange offer for the Notes) may amend the Indenture and the Notes, the Note Guarantees or the Security Documents and the registered holders of at least a majority in aggregate principal amount of the Notes outstanding may waive any past default or compliance with any provisions of the Indenture, the Notes, the Note Guarantees or the Security Documents (except a default in the payment of principal, premium or interest and certain covenants and provisions of the Indenture which cannot be amended without the consent of each holder of an outstanding Note). However, without the consent of each holder of an outstanding Note, no amendment may, among other things,

(1) reduce the amount of Notes whose holders must consent to an amendment or waiver;

(2) reduce the rate of, or extend the time for payment of, interest on any Note;

(3) reduce the principal of, or extend the Stated Maturity of, any Note;

(4) make any Note payable in money other than that stated in the Note;

(5) impair the right of any holder of the Notes to receive payment of principal of, premium, if any, and interest, on, such holder's Notes on or after the due dates therefor or to institute suit for the enforcement of any payment on or with respect to such holder's Notes;

(6) release any security interest that may have been granted in favor of the holders of the Notes other than pursuant to the terms of such security interest;

(7) reduce the premium payable upon the redemption of any Note or change the time at which any Note may be redeemed, as described under "— Optional Redemption;"

(8) reduce the premium payable upon a Change of Control or, at any time after a Change of Control has occurred, change the time at which the Change of Control Offer relating thereto must be made or at which the Notes must be repurchased pursuant to such Change of Control Offer;

(9) at any time after the Issuer is obligated to make a Prepayment Offer with the Excess Proceeds from Asset Sales, change the time at which such Prepayment Offer must be made or at which the Notes must be repurchased pursuant thereto;

(10) modify or change any provision of the Indenture affecting the ranking of the Notes or the Note Guarantees in a manner adverse to the holders of the Notes (it being understood that amendments or waivers of Security Documents or releases of Liens on the Arch Coal Notes do not relate to ranking); or

(11) release any Guarantor from any of its obligations under its Note Guarantee or the Indenture other than in accordance with the provisions of the Indenture, or amend or modify any provision relating to such release.

The Indenture and the Notes may be amended by Arch Western, the Issuer and the Trustee without the consent of any holder of the Notes to:

(a) cure any ambiguity, omission, defect or inconsistency in any manner that is not adverse in any material respect to any holder of the Notes;

(b) provide for the assumption by a Surviving Person of the obligations of Arch Western under the Indenture;

(c) provide for uncertificated Notes in addition to or in place of certificated Notes (*provided* that the uncertificated Notes are issued in registered form for purposes of Section 163(f) of the Code, or in a manner such that the uncertificated Notes are described in Section 163(f)(2)(B) of the Code);

(d) add Note Guarantees with respect to the Notes or confirm and evidence the release, termination or discharge of any security or Note Guarantee when such release, termination or discharge is permitted by the Indenture;

(e) secure the Notes, add to the covenants of the Issuer for the benefit of the holders of the Notes or surrender any right or power conferred upon the Issuer;

(f) make any change that does not adversely affect the rights of any holder of the Notes;

(g) comply with any requirement of the Commission in connection with the qualification of the Indenture under the Trust Indenture Act; or

(h) provide for the issuance of Additional Notes in accordance with the Indenture.

The consent of the holders of the Notes is not necessary to approve the particular form of any proposed amendment. It is sufficient if such consent approves the substance of the proposed amendment. After an amendment becomes effective, the Issuer is required to mail to each registered holder of the Notes at such holder's address appearing in the Security Register a notice briefly describing such amendment. However, the failure to give such notice to all holders of the Notes, or any defect therein, will not impair or affect the validity of the amendment.

Defeasance

Arch Western and the Issuer at any time may terminate all of their obligations under the Notes and the Indenture ("legal defeasance"), except for certain obligations, including those respecting the defeasance trust and obligations to register the transfer or exchange of the Notes, to replace mutilated, destroyed, lost or stolen Notes and to maintain a registrar and paying agent in respect of the Notes. Arch Western and the Issuer at any time may terminate:

(1) their obligations under the covenants described under "— Repurchase at the Option of Holders Upon a Change of Control" and "— Certain Covenants;"

(2) the operation of the cross acceleration provisions, the judgment default provisions and the bankruptcy provisions with respect to Significant Subsidiaries described under "— Events of Default" above; and

(3) the limitations contained in clause (e) under the first paragraph of "— Merger, Consolidation and Sale of Property" above ("covenant defeasance").

Arch Western and the Issuer may exercise their legal defeasance option notwithstanding their prior exercise of its covenant defeasance option.

If Arch Western and the Issuer exercise their legal defeasance option, payment of the Notes may not be accelerated because of an Event of Default with respect thereto. If Arch Western and the Issuer exercise their covenant defeasance option, payment of the Notes may not be accelerated because of an Event of Default specified in clause (4) (with respect to the covenants described under "— Certain

Covenants"), (5), (6) or (7) (with respect only to Significant Subsidiaries) under "— Events of Default" above or because of the failure to comply with clause (e) under the first paragraph of "— Merger, Consolidation and Sale of Property" above.

The legal defeasance option or the covenant defeasance option may be exercised only if:

(a) Arch Western or the Issuer irrevocably deposit in trust with the Trustee money or U.S. Government Obligations for the payment of principal of, premium, if any, and interest on the Notes to maturity or redemption, as the case may be;

(b) Arch Western or the Issuer delivers to the Trustee a certificate from a nationally recognized firm of independent certified public accountants expressing their opinion that the payments of principal, premium, if any, and interest when due and without reinvestment on the deposited U.S. Government Obligations plus any deposited money without investment will provide cash at such times and in such amounts as will be sufficient to pay principal, premium, if any, and interest when due on all the Notes to be defeased to maturity or redemption, as the case may be;

(c) 123 days pass after the deposit is made, and during the 123-day period, no Default described in clause (7) under "— Events of Default" occurs with respect to Arch Western or the Issuer or any other Person making such deposit which is continuing at the end of the period;

(d) no Default or Event of Default has occurred and is continuing on the date of such deposit and after giving effect thereto;

(e) such deposit does not constitute a default under any other agreement or instrument binding on Arch Western or any of its Restricted Subsidiaries;

(f) Arch Western or the Issuer delivers to the Trustee an Opinion of Counsel to the effect that the trust resulting from the deposit does not constitute, or is qualified as, a regulated investment company under the Investment Company Act of 1940;

(g) in the case of the legal defeasance option, Arch Western or the Issuer delivers to the Trustee an Opinion of Counsel stating that:

(1) Arch Western or the Issuer has received from the Internal Revenue Service a ruling, or

(2) since the date of the Indenture there has been a change in the applicable Federal income tax law, to the effect that, and based thereon such Opinion of Counsel shall confirm that, the holders of the Notes will not recognize income, gain or loss for Federal income tax purposes as a result of such defeasance and will be subject to Federal income tax on the same amounts, in the same manner and at the same time as would have been the case if such defeasance has not occurred;

(h) in the case of the covenant defeasance option, Arch Western or the Issuer delivers to the Trustee an Opinion of Counsel to the effect that the holders of the Notes will not recognize income, gain or loss for Federal income tax purposes as a result of such covenant defeasance and will be subject to Federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such covenant defeasance had not occurred; and

(i) Arch Western or the Issuer delivers to the Trustee an Officers' Certificate and an Opinion of Counsel, each stating that all conditions precedent to the defeasance and discharge of the Notes have been complied with as required by the Indenture.

Governing Law

The Indenture and the Notes are governed by the internal laws of the State of New York.

The Trustee

The Bank of New York is the Trustee under the Indenture.

Except during the continuance of an Event of Default, the Trustee will perform only such duties as are specifically set forth in the Indenture. During the existence of an Event of Default, the Trustee will exercise such of the rights and powers vested in it under the Indenture and use the same degree of care and skill in its exercise as a prudent person would exercise under the circumstances in the conduct of such person's own affairs.

Certain Definitions

Set forth below is a summary of certain of the defined terms used in the Indenture. Reference is made to the Indenture for the full definition of all such terms as well as any other capitalized terms used herein for which no definition is provided. Unless the context otherwise requires, an accounting term not otherwise defined has the meaning assigned to it in accordance with GAAP.

"Additional Assets" means:

(a) any Property (other than cash, Cash Equivalent and securities) to be owned by Arch Western or any of its Restricted Subsidiaries and used in a Permitted Business; or

(b) Capital Stock of a Person that becomes a Restricted Subsidiary as a result of the acquisition of such Capital Stock by Arch Western or another Restricted Subsidiary from any Person other than Arch Western or an Affiliate of Arch Western; *provided, however,* that, in the case of clause (b), such Restricted Subsidiary is primarily engaged in a Permitted Business.

"Affiliate" of any specified Person means:

(a) any other Person directly or indirectly controlling or controlled by or under direct or indirect common control with such specified Person; or

(b) any other Person who is a director or officer of:

(1) such specified Person;

(2) any Subsidiary of such specified Person; or

(3) any Person described in clause (a) above.

For the purposes of this definition, "control," when used with respect to any Person, means the power to direct the management and policies of such Person, directly or indirectly, whether through the ownership of voting securities, by contract or otherwise; and the terms "controlling" and "controlled" have meanings correlative to the foregoing. For purposes of the covenants described under "— Certain Covenants — Limitation on Transactions with Affiliates" and "Limitation on Asset Sales" and the definition of "Additional Assets" only, "Affiliate" shall also mean any beneficial owner of shares representing 5% or more of the total voting power of the Voting Stock (on a fully diluted basis) of Arch Western or of rights or warrants to purchase such Voting Stock (whether or not currently exercisable) and any Person who would be an Affiliate of any such beneficial owner pursuant to the first sentence hereof.

"Arch Coal Notes" means all existing and future unsubordinated demand promissory notes issued by Arch Coal to Arch Western as consideration for loans and advances made by Arch Western to Arch Coal or any of its Affiliates (other than Arch Western or a Restricted Subsidiary), which shall bear interest payable no less frequently than quarterly from the date made until paid in full at a rate per annum no less favorable to Arch Western than if such loan or advance had been made by an unaffiliated financial institution.

"Arch Western Note" means a demand promissory note issued by Arch Western to the Issuer as consideration for the proceeds from the offering of the Notes or any Additional Notes advanced to Arch Western by the Issuer. Each Arch Western Note issued will be in an amount equal to the aggregate principal amount of the Notes or Additional Notes issued.

"Asset Sale" means any sale, lease, transfer, issuance or other disposition (or series of related sales, leases, transfers, issuances or dispositions) by Arch Western or any of its Restricted Subsidiaries, including any disposition by means of a merger, consolidation or similar transaction (each referred to for the purposes of this definition as a "disposition"), of

(a) any shares of Capital Stock of a Restricted Subsidiary (other than directors' qualifying shares); or

(b) any other Property of Arch Western or any of its Restricted Subsidiaries outside of the ordinary course of business of Arch Western or such Restricted Subsidiary,

other than, in the case of clause (a) or (b) above,

(1) any disposition by a Restricted Subsidiary to Arch Western or by Arch Western or its Restricted Subsidiary to a Restricted Subsidiary;

(2) any disposition that constitutes a Permitted Investment or Restricted Payment permitted by the covenant described under "— Certain Covenants — Limitation on Restricted Payments;"

(3) any disposition effected in compliance with the first paragraph of the covenant described under "— Merger, Consolidation and Sale of Property;" and

(4) any disposition in a single transaction or a series of related transactions of assets for aggregate consideration of less than $5.0 million.

"Attributable Debt" in respect of a Sale and Leaseback Transaction means, at any date of determination,

(a) if such Sale and Leaseback Transaction is a Capital Lease Obligation, the amount of Debt represented thereby according to the definition of "Capital Lease Obligations;" and

(b) in all other instances, the greater of:

(1) the Fair Market Value of the Property subject to such Sale and Leaseback Transaction; and

(2) the present value (discounted at the interest rate borne by the Notes, compounded annually) of the total obligations of the lessee for rental payments during the remaining term of the lease included in such Sale and Leaseback Transaction (including any period for which such lease has been extended).

"Available Cash" means, as of any date, the cash of Arch Western as of such date less amounts necessary to pay for operating expenses, interest, principal and sinking fund payments on indebtedness, capital expenditures, improvements and replacements, contingencies, reserves and other expenses of Arch Western and its Subsidiaries and less any Net Available Cash received from an Asset Sale consisting of all of the Capital Stock of Canyon Fuel or Mountain Coal Company, L.L.C. not used to Repay any Debt of Arch Western (other than Subordinated Obligations) or reinvest in Additional Assets (including by reason of an Investment in Additional Assets by a Restricted Subsidiary with Net Available Cash received by Arch Western).

"Average Life" means, as of any date of determination, with respect to any Debt or Preferred Stock, the quotient obtained by dividing:

(a) the sum of the product of the numbers of years (rounded to the nearest one-twelfth of one year) from the date of determination to the dates of each successive scheduled principal payment of

such Debt or redemption or similar payment with respect to such Preferred Stock multiplied by the amount of such payment by

(b) the sum of all such payments.

"Board of Directors" means the board of directors, or equivalent, of Arch Western; *provided, however,* that if no such entity exists, "Board of Director" means the board of directors of Arch Coal or, if Arch Coal does not control Arch Western, the board of directors, or equivalent, of the Person that controls Arch Western; *provided further, however,* that for purposes of Affiliate Transactions with Arch Coal or its Affiliates (other than Arch Western or a Restricted Subsidiary) under "— Certain Covenants — Limitations on Transactions with Affiliates," "Board of Directors" shall mean the board of directors, or equivalent, of Arch Western.

"Canyon Fuel" means Canyon Fuel Company, LLC, a limited liability company organized and existing under the laws of the State of Delaware.

"Capital Lease Obligations" means any obligation under a lease that is required to be capitalized for financial reporting purposes in accordance with GAAP; and the amount of Debt represented by such obligation shall be the capitalized amount of such obligations determined in accordance with GAAP; and the Stated Maturity thereof shall be the date of the last payment of rent or any other amount due under such lease prior to the first date upon which such lease may be terminated by the lessee without payment of a penalty. For purposes of "— Certain Covenants — Limitation on Liens," a Capital Lease Obligation shall be deemed secured by a Lien on the Property being leased.

"Capital Stock" means, with respect to any Person, any shares or other equivalents (however designated) of any class of corporate stock or partnership or limited liability company interests or any other participations, rights, warrants, options or other interests in the nature of an equity interest in such Person, including Preferred Stock, but excluding any debt security convertible or exchangeable into such equity interest.

"Capital Stock Sale Proceeds" means the aggregate cash proceeds received by Arch Western from the issuance or sale (other than to a Subsidiary of Arch Coal or an employee stock ownership plan or trust established by Arch Coal or any such Subsidiary for the benefit of their employees) by Arch Western of its Capital Stock (other than Disqualified Stock) after the Issue Date, net of attorneys' fees, accountants' fees, underwriters' or placement agents' fees, discounts or commissions and brokerage, consultant and other fees actually incurred in connection with such issuance or sale and net of taxes or Tax Amount paid or payable as a result thereof.

"Cash Equivalents" means any of the following:

(a) Investments in U.S. Government Obligations maturing within 365 days of the date of acquisition thereof;

(b) Investments in time deposit accounts, certificates of deposit and money market deposits maturing within 90 days of the date of acquisition thereof issued by a bank or trust company organized under the laws of the United States of America or any state thereof having capital, surplus and undivided profits aggregating in excess of $500 million and whose long-term debt is rated "A-3" or "A-" or higher according to Moody's or S&P (or such similar equivalent rating by at least one "nationally recognized statistical rating organization" (as defined in Rule 436 under the Securities Act));

(c) repurchase obligations with a term of not more than 30 days for underlying securities of the types described in clause (a) entered into with:

(1) a bank meeting the qualifications described in clause (b) above or

(2) any primary government securities dealer reporting to the Market Reports Division of the Federal Reserve Bank of New York;

(d) Investments in commercial paper, maturing not more than 90 days after the date of acquisition, issued by a corporation (other than an Affiliate of Arch Western) organized and in existence under the laws of the United States of America with a rating at the time as of which any Investment therein is made of "P-1" (or higher) according to Moody's or "A-1" (or higher) according to S&P (or such similar equivalent rating by at least one "nationally recognized statistical rating organization" (as defined in Rule 436 under the Securities Act)); and

(e) direct obligations (or certificates representing an ownership interest in such obligations) of any state of the United States of America (including any agency or instrumentality thereof) for the payment of which the full faith and credit of such state is pledged and which are not callable or redeemable at the issuer's option; *provided* that:

(1) the long-term debt of such state is rated "A-3" or "A-" or higher according to Moody's or S&P (or such similar equivalent rating by at least one "nationally recognized statistical rating organization" (as defined in Rule 436 under the Securities Act)), and

(2) such obligations mature within 180 days of the date of acquisition thereof.

"Change of Control" means the occurrence of any of the following events:

(a) any "person" or "group" (as such terms are used in Sections 13(d) and 14(d) of the Exchange Act or any successor provisions to either of the foregoing), including any group acting for the purpose of acquiring, holding, voting or disposing of securities within the meaning of Rule 13d-5(b)(1) under the Exchange Act, other than Arch Coal, becomes the "beneficial owner" (as defined in Rule 13d-3 under the Exchange Act, except that a person will be deemed to have "beneficial ownership" of all shares that any such person has the right to acquire, whether such right is exercisable immediately or only after the passage of time), directly or indirectly, of 50% or more of the total voting power of the Voting Stock of Arch Western (for purposes of this clause (a), such person or group shall be deemed to beneficially own any Voting Stock of a corporation held by any other corporation (the "parent corporation") so long as such person or group beneficially owns, directly or indirectly, in the aggregate at least a majority of the total voting power of the Voting Stock of such parent corporation); or

(b) the sale, transfer, assignment, lease, conveyance or other disposition, directly or indirectly, of all or substantially all the Property of Arch Western and its Restricted Subsidiaries, considered as a whole (other than a disposition of such Property as an entirety or virtually as an entirety to a Wholly Owned Restricted Subsidiary of Arch Western), shall have occurred, or Arch Western merges, consolidates or amalgamates with or into any other Person or any other Person merges, consolidates or amalgamates with or into Arch Western in any such event pursuant to a transaction in which the outstanding Voting Stock of Arch Western is reclassified into or exchanged for cash, securities or other Property, other than any such transaction where:

(1) the outstanding Voting Stock of Arch Western is reclassified into or exchanged for other Voting Stock of Arch Western or for Voting Stock of the Surviving Person, and

(2) the holders of the Voting Stock of Arch Western immediately prior to such transaction own, directly or indirectly, not less than a majority of the Voting Stock of Arch Western, or the Surviving Person immediately after such transaction and in substantially the same proportion as before the transaction; or

(c) during any period of two consecutive years, individuals who at the beginning of such period constituted the Board of Directors (together with any new directors whose election or appointment by such Board or whose nomination for election by the shareholders of Arch Western, Arch Coal or such other Person who controls Arch Western, as applicable, was approved by a vote of not less than three-fourths of the directors then still in office who were either directors at the beginning of such period or whose election or nomination for election was previously so approved) cease for any reason to constitute at least a majority of the Board of Directors then in office; or

(d) the adoption of any plan of liquidation or dissolution of Arch Coal, Arch Western or the Issuer; or

(e) the first day on which (1) Arch Coal's direct or indirect percentage ownership of the Capital Stock of Arch Western is less than 80% or (2) Arch Coal ceases to control (as defined in the definition of "Affiliate") Arch Western.

"Code" means the Internal Revenue Code of 1986, as amended.

"Commission" means the U.S. Securities and Exchange Commission.

"Commodity Price Protection Agreement" means, in respect of a Person, any forward contract, commodity swap agreement, commodity option agreement or other similar agreement or arrangement designed to protect such Person against fluctuations in commodity prices.

"Consolidated Current Liabilities" means, as of any date of determination, the aggregate amount of liabilities of Arch Western and its consolidated Restricted Subsidiaries which may properly be classified as current liabilities (including taxes accrued as estimated), after eliminating:

(a) all intercompany items between Arch Western and any Restricted Subsidiary or between Restricted Subsidiaries; and

(b) all current maturities of long-term Debt.

"Consolidated Interest Coverage Ratio" of a Person means, as of any date of determination, the ratio of:

(a) the aggregate amount of EBITDA of such Person for the most recent four consecutive fiscal quarters ending at least 45 days prior to such determination date to

(b) Consolidated Interest Expense of such Person for such four fiscal quarters;

provided, however, that:

(1) if

(A) since the beginning of such period such Person or any Restricted Subsidiary of such Person has Incurred any Debt that remains outstanding or Repaid any Debt or

(B) the transaction giving rise to the need to calculate the Consolidated Interest Coverage Ratio is an Incurrence or Repayment of Debt,

Consolidated Interest Expense for such period shall be calculated after giving effect on a *pro forma* basis to such Incurrence or Repayment as if such Debt was Incurred or Repaid on the first day of such period, *provided* that, in the event of any such Repayment of Debt, EBITDA for such period shall be calculated as if such Person or such Restricted Subsidiary of such Person had not earned any interest income actually earned during such period in respect of the funds used to Repay such Debt, and

(2) if

(A) since the beginning of such period such Person or any Restricted Subsidiary of such Person shall have made any Asset Sale or an Investment (by merger or otherwise) in any Restricted Subsidiary of such Person (or any Person which becomes a Restricted Subsidiary of such Person) or an acquisition of Property which constitutes all or substantially all of an operating unit of a business;

(B) the transaction giving rise to the need to calculate the Consolidated Interest Coverage Ratio is such an Asset Sale, Investment or acquisition; or

(C) since the beginning of such period any other Person (that subsequently became a Restricted Subsidiary of such Person or was merged with or into such Person or any

Restricted Subsidiary of such Person since the beginning of such period) shall have made such an Asset Sale, Investment or acquisition,

then EBITDA for such period shall be calculated after giving *pro forma* effect to such Asset Sale, Investment or acquisition as if such Asset Sale, Investment or acquisition had occurred on the first day of such period.

If any Debt bears a floating rate of interest and is being given *pro forma* effect, the interest expense on such Debt shall be calculated as if the base interest rate in effect for such floating rate of interest on the date of determination had been the applicable base interest rate for the entire period (taking into account any Interest Rate Agreement applicable to such Debt if such Interest Rate Agreement has a remaining term in excess of 12 months). In the event the Capital Stock of any Restricted Subsidiary of such Person is sold during the period, such Person shall be deemed, for purposes of clause (1) above, to have Repaid during such period the Debt of such Restricted Subsidiary to the extent such Person and its continuing Restricted Subsidiaries are no longer liable for such Debt after such sale.

"Consolidated Interest Expense" of a Person means, for any period, the total interest expense of such Person and its consolidated Restricted Subsidiaries, plus, to the extent not included in such total interest expense, and to the extent Incurred by such Person or its Restricted Subsidiaries,

(a) interest expense attributable Capital Lease Obligations;

(b) amortization of debt discount and debt issuance cost, including commitment fees;

(c) capitalized interest;

(d) non-cash interest expense;

(e) commissions, discounts and other fees and charges owed with respect to letters of credit and banker's acceptance financing;

(f) net costs associated with Hedging Obligations (including amortization of fees);

(g) Disqualified Stock Dividends;

(h) Preferred Stock Dividends;

(i) interest Incurred in connection with Investments in discontinued operations;

(j) interest accruing on any Debt of any other Person to the extent such Debt is Guaranteed by such Person or any of its Restricted Subsidiaries; and

(k) the cash contributions to any employee stock ownership plan or similar trust to the extent such contributions are used by such plan or trust to pay interest or fees to any Person (other than such Person) in connection with Debt Incurred by such plan or trust.

"Consolidated Net Income" of a Person means, for any period, the net income (loss) of such Person and its consolidated Restricted Subsidiaries; *provided, however*, that there shall not be included in such Consolidated Net Income:

(a) any net income (loss) of any other Person (other than such Person) if such other Person is not a Restricted Subsidiary, except that:

(1) subject to the exclusion contained in clause (c) below, equity of such Person and its consolidated Restricted Subsidiaries in the net income of any such other Person for such period shall be included in such Consolidated Net Income up to the aggregate amount of cash distributed by such other Person during such period to such Person or its Restricted Subsidiary as a dividend or other distribution (subject, in the case of a dividend or other distribution to a Restricted Subsidiary, to the limitations contained in clause (b) below), and

(2) the equity of such Person and its consolidated Restricted Subsidiaries in a net loss of any other Person for such period shall be included in determining such Consolidated Net Income

to the extent such Person or any Restricted Subsidiary of such Person has actually contributed, lent or transferred cash to such other Person;

(b) any net income (loss) of any Restricted Subsidiary if such Restricted Subsidiary is subject to restrictions, directly or indirectly, on the payment of dividends or the making of distributions, directly or indirectly, to such Person, except that:

(1) subject to the exclusion contained in clause (c) below, the equity of such Person and its consolidated Restricted Subsidiaries in the net income of any such Restricted Subsidiary for such period shall be included in such Consolidated Net Income up to the aggregate amount of cash distributed by such Restricted Subsidiary during such period to such Person or another Restricted Subsidiary as a dividend or other distribution (subject, in the case of a dividend or other distribution to another Restricted Subsidiary, to the limitation contained in this clause); and

(2) the equity of such Person and its consolidated Restricted Subsidiaries in a net loss of any such Restricted Subsidiary for such period shall be included in determining such Consolidated Net Income;

(c) any gain (but not loss) realized upon the sale or other disposition of any Property of such Person or any of its consolidated Subsidiaries (including pursuant to any Sale and Leaseback Transaction) that is not sold or otherwise disposed of in the ordinary course of business;

(d) any extraordinary gain or loss;

(e) the cumulative effect of a change in accounting principles; and

(f) any non-cash compensation expense realized for grants of performance shares, stock options or other rights to officers, directors and employees of such Person or any Restricted Subsidiary, *provided* that such shares, options or other rights can be redeemed at the option of the holder only for Capital Stock of such Person (other than Disqualified Stock).

Notwithstanding the foregoing, for purposes of the covenant described under "— Certain Covenants — Limitation on Restricted Payments" only, there shall be excluded from Consolidated Net Income any dividends, repayments of loans or advances or other transfers of Property from Unrestricted Subsidiaries to such Person or a Restricted Subsidiary to the extent such dividends, repayments or transfers increase the amount of Restricted Payments permitted under such covenant pursuant to clause (c)(4) thereof.

"Consolidated Net Tangible Assets" means, as of any date of determination, the sum of the amounts that would appear on a consolidated balance sheet of Arch Western and its consolidated Restricted Subsidiaries, less any amounts attributable to non-Wholly Owned Restricted Subsidiaries that are not consolidated with Arch Western and plus the portion of the consolidated net tangible assets of a non-Wholly Owned Restricted Subsidiary that is not consolidated with Arch Western equal to the percentage of its outstanding Capital Stock owned by Arch Western and its Restricted Subsidiaries, as of the end of the most recent fiscal quarter ending at least 45 days prior to such determination date as the total assets (less accumulated depreciation and amortization, allowances for doubtful receivables, other applicable reserves and other properly deductible items) of Arch Western and its Restricted Subsidiaries, after giving effect to purchase accounting and after deducting therefrom Consolidated Current Liabilities and, to the extent otherwise included, the amounts of (without duplication):

(a) the excess of cost over fair market value of assets or businesses acquired;

(b) any revaluation or other write-up in book value of assets subsequent to the last day of the fiscal quarter of Arch Western immediately preceding the Issue Date as a result of a change in the method of valuation in accordance with GAAP; and

(c) unamortized debt discount and expenses and other unamortized deferred charges, goodwill, patents, trademarks, service marks, trade names, copyrights, licenses, organization or developmental expenses and other intangible items.

"Currency Exchange Protection Agreement" means, in respect of a Person, any foreign exchange contract, currency swap agreement, currency option or other similar agreement or arrangement designed to protect such Person against fluctuations in currency exchange rates.

"Debt" means, with respect to any Person on any date of determination (without duplication):

(a) the principal of and premium (if any) in respect of:

(1) debt of such Person for money borrowed, and

(2) debt evidenced by notes, debentures, bonds or other similar instruments for the payment of which such Person is responsible or liable;

(b) all Capital Lease Obligations of such Person and all Attributable Debt in respect of Sale and Leaseback Transactions entered into by such Person;

(c) all obligations of such Person representing the deferred purchase price of Property, all conditional sale obligations of such Person and all obligations of such Person under any title retention agreement (but excluding trade accounts payable arising in the ordinary course of business);

(d) all obligations of such Person for the reimbursement of any obligor on any letter of credit, banker's acceptance or similar credit transaction (other than obligations with respect to letters of credit securing obligations (other than obligations described in (a) through (c) above) entered into in the ordinary course of business of such Person to the extent such letters of credit are not drawn upon or, if and to the extent drawn upon, such drawing is reimbursed no later than the third business day following receipt by such Person of a demand for reimbursement following payment on the letter of credit);

(e) the amount of all obligations of such Person with respect to the Repayment of any Disqualified Stock or, with respect to any Subsidiary of such Person, any Preferred Stock (but excluding, in each case, any accrued dividends);

(f) all obligations of the type referred to in clauses (a) through (e) above of other Persons and all dividends of other Persons for the payment of which, in either case, such Person is responsible or liable, directly or indirectly, as obligor, guarantor or otherwise, including by means of any Guarantee;

(g) all obligations of the type referred to in clauses (a) through (f) above of other Persons secured by any Lien on any Property of such Person (whether or not such obligation is assumed by such Person), the amount of such obligation being deemed to be the lesser of the Fair Market Value of such Property and the amount of the obligation so secured; and

(h) to the extent not otherwise included in this definition, Hedging Obligations of such Person.

The amount of Debt of any Person at any date shall be the outstanding balance, or the accreted value of such Debt in the case of Debt issued with original issue discount, at such date of all unconditional obligations as described above and the maximum liability, upon the occurrence of the contingency giving rise to the obligation, of any contingent obligations at such date. The amount of Debt represented by a Hedging Obligation shall be equal to:

(1) zero if such Hedging Obligation has been Incurred pursuant to clause (d), (e) or (f) of the second paragraph of the covenant described under "— Certain Covenants — Limitation on Debt," or

(2) the notional amount of such Hedging Obligation if not Incurred pursuant to such clauses.

"Default" means any event which is, or after notice or passage of time or both would be, an Event of Default.

"Disqualified Stock" means any Capital Stock of a Person or any of its Restricted Subsidiaries that by its terms (or by the terms of any security into which it is convertible or for which it is exchangeable, in either case at the option of the holder thereof) or otherwise:

(a) matures or is mandatorily redeemable pursuant to a sinking fund obligation or otherwise;

(b) is or may become redeemable or repurchaseable at the option of the holder thereof, in whole or in part; or

(c) is convertible or exchangeable at the option of the holder thereof for Debt or Disqualified Stock,

on or prior to, in the case of clause (a), (b) or (c), the first anniversary of the Stated Maturity of the Notes.

"Disqualified Stock Dividends" of a Person means all dividends with respect to Disqualified Stock of such Person held by Persons other than a Wholly Owned Restricted Subsidiary of such Person. The amount of any such dividend shall be equal to the quotient of such dividend divided by the difference between one and the maximum statutory federal income tax rate (expressed as a decimal number between 1 and 0) then applicable to such Person (or if such Person is a limited liability company, the tax rate used to calculate the Tax Amount).

"Domestic Subsidiary" means any Restricted Subsidiary of Arch Western other than a Foreign Subsidiary.

"EBITDA" of a Person means, for any period, an amount equal to, for such Person and its consolidated Restricted Subsidiaries:

(a) the sum of Consolidated Net Income for such period, plus the following to the extent reducing Consolidated Net Income for such period:

(1) the provision for taxes based on income or profits or utilized in computing net loss;

(2) Consolidated Interest Expense;

(3) depreciation;

(4) amortization of intangibles;

(5) any other non-cash items (other than any such non-cash item to the extent that it represents an accrual of, or reserve for, cash expenditures in any future period); and

(6) to the extent not included in (1) through (5) above, the portion of any of the items described in (1) through (5) above of a non-Wholly Owned Restricted Subsidiary that is not consolidated with such Person equal to the percentage of the outstanding common Capital Stock of the non-Wholly Owned Restricted Subsidiary owned by such Person and its Restricted Subsidiaries, minus

(b) all non-cash items increasing Consolidated Net Income for such period (other than any such non-cash item to the extent that it will result in the receipt of cash payments in any future period).

Notwithstanding the foregoing clause (a), the provision for taxes and the depreciation, amortization and non-cash items of a Restricted Subsidiary shall be added to Consolidated Net Income to compute EBITDA only to the extent (and in the same proportion) that the net income of such Restricted Subsidiary was included in calculating Consolidated Net Income and only if a corresponding amount would be permitted at the date of determination to be dividended to such Person by such Restricted Subsidiary without prior approval (that has not been obtained), pursuant to the terms of its charter and all agreements, instruments, judgments, decrees, orders, statutes, rules and governmental regulations applicable to such Restricted Subsidiary or its shareholders or members.

"Event of Default" has the meaning set forth under "— Events of Default."

"Exchange Act" means the Securities Exchange Act of 1934, as amended.

"Exchange Notes" means the notes issued in exchange for the Notes issued in this offering or any Additional Note pursuant to the registration rights agreement described under "Exchange Offer; Registration Rights" or any similar registration rights agreement with respect to any Additional Notes.

"Fair Market Value" means, with respect to any Property, the price that could be negotiated in an arm's-length free market transaction, for cash, between a willing seller and a willing buyer, neither of whom is under undue pressure or compulsion to complete the transaction. Fair Market Value shall be determined, except as otherwise provided,

(a) if such Property has a Fair Market Value equal to or less than $5.0 million, by any Officer; or

(b) if such Property has a Fair Market Value in excess of $5.0 million, by at least a majority of the disinterested members of the Board of Directors and evidenced by a Board Resolution, dated within 30 days of the relevant transaction, delivered to the Trustee.

"Foreign Subsidiary" means any Subsidiary of Arch Western that is not organized under the laws of the United States of America or any state thereof or the District of Columbia.

"GAAP" means United States generally accepted accounting principles as in effect on the Issue Date, including those set forth in:

(a) the opinions and pronouncements of the Accounting Principles Board of the American Institute of Certified Public Accountants;

(b) the statements and pronouncements of the Financial Accounting Standards Board;

(c) such other statements by such other entity as approved by a significant segment of the accounting profession; and

(d) the rules and regulations of the Commission governing the inclusion of financial statements (including *pro forma* financial statements) in periodic reports required to be filed pursuant to Section 13 of the Exchange Act, including opinions and pronouncements in staff accounting bulletins and similar written statements from the accounting staff of the Commission.

"Guarantee" means any obligation, contingent or otherwise, of any Person directly or indirectly guaranteeing any Debt of any other Person and any obligation, direct or indirect, contingent or otherwise, of such Person:

(a) to purchase or pay (or advance or supply funds for the purchase or payment of) such Debt of such other Person (whether arising by virtue of partnership arrangements, or by agreements to keep-well, to purchase assets, goods, securities or services, to take-or-pay or to maintain financial statement conditions or otherwise); or

(b) entered into for the purpose of assuring in any other manner the obligee against loss in respect thereof (in whole or in part);

provided, however, that the term "Guarantee" shall not include:

(1) endorsements for collection or deposit in the ordinary course of business; or

(2) a contractual commitment by one Person to invest in another Person for so long as such Investment is reasonably expected to constitute a Permitted Investment under clause (a), (b) or (c) of the definition of "Permitted Investment."

The term "Guarantee" used as a verb has a corresponding meaning.

"Guarantor" means Arch Western, the Subsidiary Guarantors, and any Subsidiary of Arch Western that has issued a Guarantee in favor of the Notes.

"Hedging Obligation" of any Person means any obligation of such Person pursuant to any Interest Rate Agreement, Currency Exchange Protection Agreement, Commodity Price Protection Agreement or any other similar agreement or arrangement.

"holder" means a Person in whose name a Note is registered in the Security Register.

"Incur" means, with respect to any Debt or other obligation of any Person, to create, issue, incur (by merger, conversion, exchange or otherwise), extend, assume, Guarantee or become liable in respect of such Debt or other obligation or the recording, as required pursuant to GAAP or otherwise, of any such Debt or obligation on the balance sheet of such Person (and "Incurrence" and "Incurred" shall have meanings correlative to the foregoing); *provided, however,* that any Debt or other obligations of a Person existing at the time such Person becomes a Subsidiary (whether by merger, consolidation, acquisition or otherwise) shall be deemed to be Incurred by such Subsidiary at the time it becomes a Subsidiary; and *provided further, however,* that solely for purposes of determining compliance with "— Certain Covenants — Limitation on Debt," amortization of debt discount shall not be deemed to be the Incurrence of Debt, *provided* that in the case of Debt sold at a discount, the amount of such Debt Incurred shall at all times be the aggregate principal amount at Stated Maturity.

"Independent Financial Advisor" means an investment banking firm of national standing or any third party appraiser of national standing, *provided* that such firm or appraiser is not an Affiliate of Arch Western.

"Interest Rate Agreement" means, for any Person, any interest rate swap agreement, interest rate cap agreement, interest rate collar agreement or other similar agreement designed to protect against fluctuations in interest rates.

"Investment" by any Person means any direct or indirect loan, advance or other extension of credit or capital contribution (by means of transfers of cash or other Property to others or payments for Property or services for the account or use of others, or otherwise) to, or Incurrence of a Guarantee of any obligation of, or purchase or acquisition of Capital Stock, bonds, notes, debentures or other securities or evidence of Debt issued by, any other Person. For purposes of the covenants described under "— Certain Covenants — Limitation on Restricted Payments" and "— Designation of Restricted and Unrestricted Subsidiaries" and the definition of "Restricted Payment," the term "Investment" shall include the portion (proportionate to Arch Western's or a Restricted Subsidiary's equity interest in such Subsidiary) of the Fair Market Value of the net assets of any Subsidiary of Arch Western at the time that such Subsidiary is designated an Unrestricted Subsidiary; *provided, however,* that upon a redesignation of such Subsidiary as a Restricted Subsidiary, Arch Western shall be deemed to continue to have a permanent "Investment" in an Unrestricted Subsidiary of an amount (if positive) equal to:

(a) Arch Western's "Investment" in such Subsidiary at the time of such redesignation, less

(b) the portion (proportionate to Arch Western's or a Restricted Subsidiary's equity interest in such Subsidiary) of the Fair Market Value of the net assets of such Subsidiary at the time of such redesignation.

In determining the amount of any Investment made by transfer of any Property other than cash, such Property shall be valued at its Fair Market Value at the time of such Investment.

"Investment Grade Rating" means a rating equal to or higher than Baa3 (or the equivalent) by Moody's and BBB- (or the equivalent) by S&P.

"Issue Date" means the date on which the Notes are initially issued.

"Lien" means, with respect to any Property of any Person, any mortgage or deed of trust, pledge, hypothecation, assignment, deposit arrangement, security interest, lien, charge, easement (other than any easement not materially impairing usefulness or marketability), encumbrance, preference, priority or other security agreement or preferential arrangement of any kind or nature whatsoever on or with respect to such Property (including any Capital Lease Obligation, conditional sale or other title retention agreement

having substantially the same economic effect as any of the foregoing or any Sale and Leaseback Transaction).

"LLC Agreement" means the Limited Liability Company Agreement of Arch Western Resources LLC dated as of June 1, 1998 between Arch Western Acquisition Corporation and Delta Housing, Inc.

"Moody's" means Moody's Investors Service, Inc. or any successor to the rating agency business thereof.

"Net Available Cash" from any Asset Sale means cash payments received therefrom (including any cash payments received by way of deferred payment of principal pursuant to a note or installment receivable or otherwise, but only as and when received, but excluding any other consideration received in the form of assumption by the acquiring Person of Debt or other obligations relating to the Property that is the subject of such Asset Sale or received in any other non-cash form), in each case net of:

(a) all legal, title and recording tax expenses, commissions and other fees and expenses incurred, and all Federal, state, provincial, foreign and local taxes required to be accrued as a liability under GAAP, as a consequence of such Asset Sale;

(b) all payments made on or in respect of any Debt that is secured by any Property subject to such Asset Sale, in accordance with the terms of any Lien upon such Property, or which must by its terms, or in order to obtain a necessary consent to such Asset Sale, or by applicable law, be repaid out of the proceeds from such Asset Sale;

(c) all distributions and other payments required to be made to minority interest holders in Subsidiaries or joint ventures as a result of such Asset Sale; and

(d) the deduction of appropriate amounts provided by the seller as a reserve, in accordance with GAAP, against any liabilities associated with the Property disposed of in such Asset Sale and retained by Arch Western or any Restricted Subsidiary after such Asset Sale.

"Note Guarantees" means the Arch Western Guarantee, and the Subsidiary Guarantees.

"Officer" means the Chief Executive Officer, the President, the Chief Financial Officer or any Executive Vice President of Arch Western, or, in the event no such officers exist, of Arch Coal or the Person who controls Arch Western.

"Officers' Certificate" means a certificate signed by two Officers, at least one of whom shall be the principal executive officer or principal financial officer, and delivered to the Trustee.

"Opinion of Counsel" means a written opinion from legal counsel who is acceptable to the Trustee. The counsel may be an employee of or counsel to Arch Western or the Trustee.

"Permitted Business" means any business that is related, ancillary or complementary to the businesses of Arch Western and its Restricted Subsidiaries on the Issue Date.

"Permitted Investment" means any Investment by Arch Western or its Restricted Subsidiary in:

(a) Arch Western or any Restricted Subsidiary;

(b) any Person that will, upon the making of such Investment, become a Restricted Subsidiary, *provided* that the primary business of such Restricted Subsidiary is a Permitted Business;

(c) any Person if as a result of such Investment such Person is merged or consolidated with or into, or transfers or conveys all or substantially all its Property to, Arch Western or its Restricted Subsidiary, *provided* that such Person's primary business is a Permitted Business;

(d) Cash Equivalents;

(e) receivables owing to Arch Western or its Restricted Subsidiary, if created or acquired in the ordinary course of business and payable or dischargeable in accordance with customary trade terms;

provided, however, that such trade terms may include such concessionary trade terms as Arch Western or such Restricted Subsidiary deems reasonable under the circumstances;

(f) payroll, travel and similar advances to cover matters that are expected at the time of such advances ultimately to be treated as expenses for accounting purposes and that are made in the ordinary course of business;

(g) loans and advances to employees made in the ordinary course of business permitted by law and consistent with past practices of Arch Western or such Restricted Subsidiary, as the case may be; *provided* that such loans and advances do not exceed $2.5 million in the aggregate at any one time outstanding;

(h) stock, obligations or other securities received in settlement of debts created in the ordinary course of business and owing to Arch Western or a Restricted Subsidiary or in satisfaction of judgments;

(i) any Person to the extent such Investment represents the non-cash portion of the consideration received in connection with an Asset Sale consummated in compliance with the covenant described under "— Certain Covenants — Limitation on Asset Sales;"

(j) Investments in Permitted Joint Ventures in an aggregate amount, together with all other Investments made pursuant to this clause (j), not to exceed 5.0% of Consolidated Net Tangible Assets; and

(k) other Investments made for Fair Market Value that do not exceed $50.0 million in the aggregate outstanding at any one time.

"Permitted Joint Ventures" means any Person which is, directly or indirectly, through its Subsidiaries or otherwise, engaged principally in a Permitted Business, and the Capital Stock (or securities convertible into Capital Stock) of which is owned by Arch Western or one or more of its Restricted Subsidiaries and one or more other Person other than Arch Coal or any of its Subsidiaries or Affiliates.

"Permitted Liens" means:

(a) Liens to secure Debt permitted to be Incurred under clause (b) of the second paragraph of the covenant described under "— Certain Covenants — Limitation on Debt" and other purchase money Liens to finance Property of Arch Coal or any of its Restricted Subsidiaries; *provided* that any such Lien may not extend to any Property of Arch Western or any Restricted Subsidiary, other than the Property acquired, constructed or leased and any improvements or accessions to such Property (including, in the case of the acquisition of Capital Stock of a Person that becomes a Restricted Subsidiary, Liens on the Property of the Person whose Capital Stock was acquired);

(b) Liens for taxes, assessments or governmental charges or levies on the Property of Arch Western or any Restricted Subsidiary if the same shall not at the time be delinquent or thereafter can be paid without penalty, or are being contested in good faith and by appropriate proceedings promptly instituted and diligently concluded, *provided* that any reserve or other appropriate provision that shall be required in conformity with GAAP shall have been made therefor;

(c) Liens imposed by law, such as carriers', warehousemen's and mechanics' Liens and other similar Liens, on the Property of Arch Western or any Restricted Subsidiary arising in the ordinary course of business and securing payment of obligations that are not more than 60 days past due or are being contested in good faith and by appropriate proceedings;

(d) Liens on the Property of Arch Western or any Restricted Subsidiary Incurred in the ordinary course of business to secure performance of obligations with respect to statutory or regulatory requirements, performance or return-of-money bonds, surety bonds or other obligations of a like nature and Incurred in a manner consistent with industry practice, in each case which are not Incurred in connection with the borrowing of money, the obtaining of advances or credit or the payment of the deferred purchase price of Property and which do not in the aggregate impair in any

material respect the use of Property in the operation of the business of Arch Western and the Restricted Subsidiaries taken as a whole;

(e) Liens on Property at the time Arch Western or any Restricted Subsidiary acquired such Property, including any acquisition by means of a merger or consolidation with or into Arch Western or any Restricted Subsidiary; *provided, however,* that any such Lien may not extend to any other Property of Arch Western or any Restricted Subsidiary; *provided further, however,* that such Liens shall not have been Incurred in anticipation of or in connection with the transaction or series of transactions pursuant to which such Property was acquired by Arch Western or any Restricted Subsidiary;

(f) Liens on the Property of a Person at the time such Person becomes a Restricted Subsidiary; *provided, however,* that any such Lien may not extend to any other Property of Arch Western or any other Restricted Subsidiary that is not a direct Subsidiary of such Person; *provided further, however,* that any such Lien was not Incurred in anticipation of or in connection with the transaction or series of transactions pursuant to which such Person became a Restricted Subsidiary;

(g) pledges or deposits by Arch Western or any Restricted Subsidiary under workers' compensation laws, unemployment insurance laws or similar legislation, or good faith deposits in connection with bids, tenders, contracts (other than for the payment of Debt) or leases to which Arch Western or any Restricted Subsidiary is party, or deposits to secure public or statutory obligations of Arch Western, or deposits for the payment of rent, in each case Incurred in the ordinary course of business;

(h) utility easements, building restrictions and such other encumbrances or charges against real Property as are of a nature generally existing with respect to properties of a similar character;

(i) Liens existing on the Issue Date not otherwise described in clauses (a) through (h) above;

(j) Liens on the Property of Arch Coal or any Restricted Subsidiary to secure any Refinancing, in whole or in part, of any Debt secured by Liens referred to in clause (a), (e), (f) or (i) above; *provided, however,* that any such Lien shall be limited to all or part of the same Property that secured the original Lien (together with improvements and accessions to such Property), and the aggregate principal amount of Debt that is secured by such Lien shall not be increased to an amount greater than the sum of:

(1) the outstanding principal amount, or, if greater, the committed amount, of the Debt secured by Liens described under clause (a), (e), (f) or (i) above, as the case may be, at the time the original Lien became a Permitted Lien under the Indenture, and

(2) an amount necessary to pay any fees and expenses, including premiums and defeasance costs, incurred by Arch Western or such Restricted Subsidiary in connection with such Refinancing;

(k) Liens on the Arch Coal Notes to secure Debt under a credit facility of Arch Western in an aggregate principal amount not to exceed $100.0 million at any one time outstanding; and

(l) Liens not otherwise permitted by clauses (a) through (k) above encumbering Property having an aggregate Fair Market Value not in excess of 5.0% of Consolidated Net Tangible Assets.

"Permitted Refinancing Debt" means any Debt that Refinances any other Debt, including any successive Refinancings, so long as:

(a) such Debt is in an aggregate principal amount (or if Incurred with original issue discount, an aggregate issue price) not in excess of the sum of:

(1) the aggregate principal amount (or if Incurred with original issue discount, the aggregate accreted value) then outstanding of the Debt being Refinanced, and

(2) an amount necessary to pay any fees and expenses, including premiums and defeasance costs, related to such Refinancing;

(b) the Average Life of such Debt is equal to or greater than the Average Life of the Debt being Refinanced;

(c) the Stated Maturity of such Debt is no earlier than the Stated Maturity of the Debt being Refinanced; and

(d) the new Debt shall not be senior in right of payment to the Debt that is being Refinanced;

provided, however, that Permitted Refinancing Debt shall not include:

(x) Debt of a Subsidiary of Arch Western that is not a Subsidiary Guarantor that Refinances Debt of Arch Western or a Subsidiary Guarantor, or

(y) Debt of Arch Western or a Restricted Subsidiary that Refinances Debt of an Unrestricted Subsidiary.

"Person" means any individual, corporation, company (including any limited liability company), association, partnership, joint venture, trust, unincorporated organization, government or any agency or political subdivision thereof or any other entity.

"Preferred Stock" means any Capital Stock of a Person, however designated, which entitles the holder thereof to a preference with respect to the payment of dividends, or as to the distribution of assets upon any voluntary or involuntary liquidation or dissolution of such Person, over shares of any other class of Capital Stock issued by such Person.

"Preferred Stock Dividends" of a Person means all dividends with respect to Preferred Stock of Restricted Subsidiaries of such Person held by Persons other than such Person or a Wholly Owned Restricted Subsidiary of such Person. The amount of any such dividend shall be equal to the quotient of such dividend divided by the difference between one and the maximum statutory federal income rate (expressed as a decimal number between 1 and 0) then applicable to the issuer of such Preferred Stock (or if the issuer is a limited liability company, the tax rate used to calculate the Tax Amount).

"pro forma" means, with respect to any calculation made or required to be made pursuant to the terms hereof, a calculation performed in accordance with Article 11 of Regulation S-X promulgated under the Securities Act, as interpreted in good faith by the Board of Directors after consultation with the independent certified public accountants of Arch Western, or otherwise a calculation made in good faith by the Board of Directors after consultation with the independent certified public accountants of Arch Western, as the case may be.

"Property" means, with respect to any Person, any interest of such Person in any kind of property or asset, whether real, personal or mixed, or tangible or intangible, including Capital Stock in, and other securities of, any other Person. For purposes of any calculation required pursuant to the Indenture, the value of any Property shall be its Fair Market Value.

"Public Equity Offering" means an underwritten public offering of common Capital Stock (other than Disqualified Stock) of Arch Western pursuant to an effective registration statement under the Securities Act.

"Purchase Money Debt" means Debt:

(a) consisting of the deferred purchase price of Property, conditional sale obligations, obligations under any title retention agreement, other purchase money obligations and obligations in respect of industrial revenue bonds, in each case where the maturity of such Debt does not exceed the anticipated useful life of the Property being financed; and

(b) Incurred to finance the acquisition, construction or lease by Arch Western or a Restricted Subsidiary of such Property, including additions and improvements thereto;

provided, however, that such Debt is Incurred within 180 days after the acquisition, construction or lease of such Property by Arch Western or such Restricted Subsidiary.

"Rating Agencies" means Moody's and S&P.

"Refinance" means, in respect of any Debt, to refinance, extend, renew, refund or Repay, or to issue other Debt, in exchange or replacement for, such Debt. "Refinanced" and "Refinancing" shall have correlative meanings.

"Repay" means, in respect of any Debt, to repay, prepay, repurchase, redeem, legally defease or otherwise retire such Debt. "Repayment" and "Repaid" shall have correlative meanings. For purposes of the covenant described under "— Certain Covenants — Limitation on Asset Sales" and the definition of "Consolidated Interest Coverage Ratio," Debt shall be considered to have been Repaid only to the extent the related loan commitment, if any, shall have been permanently reduced in connection therewith.

"Restricted Payment" means:

(a) any dividend or distribution (whether made in cash, securities or other Property) declared or paid on or with respect to any shares of Capital Stock of Arch Western or any Restricted Subsidiary (including any payment in connection with any merger or consolidation with or into Arch Western or any Restricted Subsidiary), except for any dividend or distribution that is made solely to Arch Western or a Restricted Subsidiary (and, if such Restricted Subsidiary is not a Wholly Owned Restricted Subsidiary, to the other shareholders or members of such Restricted Subsidiary on a *pro rata* basis or on a basis that results in the receipt by Arch Western or a Restricted Subsidiary of dividends or distributions of greater value than it would receive on a *pro rata* basis) or any dividend or distribution payable solely in shares of Capital Stock (other than Disqualified Stock) of Arch Western;

(b) the purchase, repurchase, redemption, acquisition or retirement for value of any Capital Stock of Arch Western or any Restricted Subsidiary (other than from Arch Western or a Restricted Subsidiary) or any securities exchangeable for or convertible into any such Capital Stock, including the exercise of any option to exchange any Capital Stock (other than for or into Capital Stock of Arch Western that is not Disqualified Stock);

(c) the purchase, repurchase, redemption, acquisition or retirement for value, prior to the date for any scheduled maturity, sinking fund or amortization or other installment payment, of any Subordinated Obligation (other than the purchase, repurchase or other acquisition of any Subordinated Obligation purchased in anticipation of satisfying a scheduled maturity, sinking fund or amortization or other installment obligation, in each case due within one year of the date of acquisition);

(d) any Investment (other than Permitted Investments) in any Person; or

(e) the issuance, sale or other disposition of Capital Stock of any Restricted Subsidiary to a Person other than Arch Western or another Restricted Subsidiary if the result thereof is that such Restricted Subsidiary shall cease to be a Restricted Subsidiary, in which event the amount of such "Restricted Payment" shall be the Fair Market Value of the remaining interest, if any, in such former Restricted Subsidiary held by Arch Western and the other Restricted Subsidiaries.

"Restricted Subsidiary" means any Subsidiary of Arch Western other than an Unrestricted Subsidiary.

"S&P" means Standard & Poor's Ratings Services or any successor to the rating agency business thereof.

"Sale and Leaseback Transaction" means any direct or indirect arrangement relating to Property now owned or hereafter acquired whereby Arch Western or a Restricted Subsidiary transfers such Property to another Person and Arch Western or a Restricted Subsidiary leases it from such Person.

"Securities Act" means the Securities Act of 1933, as amended.

"Security Documents" means Note Pledge Agreements, any Collateral Trust Agreement and any other documents or instruments pursuant to which a Lien on the Arch Coal Notes is granted.

"Significant Subsidiary" means any Subsidiary that would be a "significant subsidiary" of Arch Western within the meaning of Rule 1-02 under Regulation S-X promulgated by the Commission.

"Special Interest" means the additional interest, if any, to be paid on the Notes as described under "Exchange Offer; Registration Rights."

"Stated Maturity" means, with respect to any security, the date specified in such security as the fixed date on which the payment of principal of such security is due and payable, including pursuant to any mandatory redemption provision (but excluding any provision providing for the repurchase of such security at the option of the holder thereof upon the happening of any contingency beyond the control of the issuer unless such contingency has occurred).

"Subordinated Obligation" means any Debt of Arch Western or a Subsidiary Guarantor (whether outstanding on the Issue Date or thereafter Incurred) that is subordinate or junior in right of payment to the Notes Guarantees pursuant to a written agreement to that effect.

"Subsidiary" means, in respect of any Person, any corporation, company (including any limited liability company), association, partnership, joint venture or other business entity of which at least a majority of the total voting power of the Voting Stock is at the time owned or controlled, directly or indirectly, by:

(a) such Person;

(b) such Person and one or more Subsidiaries of such Person; or

(c) one or more Subsidiaries of such Person.

"Subsidiary Guarantee" means a Guarantee by a Subsidiary Guarantor of all of the Issuer's obligations with respect to the Notes.

"Subsidiary Guarantor" means any Subsidiary of Arch Western that executes a Guarantee of the Notes.

"Surviving Person" means the surviving Person formed by a merger, consolidation or amalgamation and, for purposes of the covenant described under "— Merger, Consolidation and Sale of Property," a Person to whom all or substantially all of the Property of Arch Western or a Subsidiary Guarantor is sold, transferred, assigned, leased, conveyed or otherwise disposed.

"Tax Amount" means the portion of the Hypothetical Income Tax Amount (as defined in the LLC Agreement as in effect on the Issue Date) allocated to the members of Arch Western, other than Arch Coal or any of its Affiliates.

"Tax Distribution" means a distribution in respect of taxes pursuant to clause (e) of the second paragraph of the covenant described above under the caption "Certain Covenants — Restricted Payments."

"Unrestricted Subsidiary" means:

(a) any Subsidiary of Arch Western that is designated after the Issue Date as an Unrestricted Subsidiary as permitted or required pursuant to the covenant described under "— Certain Covenants — Designation of Restricted and Unrestricted Subsidiaries" and is not thereafter redesignated as a Restricted Subsidiary as permitted pursuant thereto; and

(b) any Subsidiary of an Unrestricted Subsidiary.

After the date upon which Arch Western and its Restricted Subsidiaries cease to be subject to the Specified Covenants, all Unrestricted Subsidiaries shall be Restricted Subsidiaries.

"U.S. Government Obligations" means direct obligations (or certificates representing an ownership interest in such obligations) of the United States of America (including any agency or instrumentality

thereof) for the payment of which the full faith and credit of the United States of America is pledged and which are not callable or redeemable at the issuer's option.

"Voting Stock" of any Person means all classes of Capital Stock or other interests (including partnership interests) of such Person then outstanding and normally entitled (without regard to the occurrence of any contingency) to vote in the election of directors, managers or trustees thereof.

"Wholly Owned Restricted Subsidiary" of a Person means, at any time, a Restricted Subsidiary all the Voting Stock of which (except directors' qualifying shares) is at such time owned, directly or indirectly, by such Person and its other Wholly Owned Subsidiaries.

Book-Entry System

The Notes will be initially issued in the form of one or more Global Securities registered in the name of The Depository Trust Company ("DTC") or its nominee.

Upon the issuance of a Global Security, DTC or its nominee will credit the accounts of Persons holding through it with the respective principal amounts of the Notes represented by such Global Security purchased by such Persons in the offering. Such accounts shall be designated by the initial purchasers. Ownership of beneficial interests in a Global Security will be limited to Persons that have accounts with DTC ("participants") or Persons that may hold interests through participants. Any Person acquiring an interest in a Global Security through an offshore transaction in reliance on Regulation S of the Securities Act may hold such interest through Clearstream Banking, S.A. or Euroclear Bank S.A./ N.V., as operator of the Euroclear System. Ownership of beneficial interests in a Global Security will be shown on, and the transfer of that ownership interest will be effected only through, records maintained by DTC (with respect to participants' interests) and such participants (with respect to the owners of beneficial interests in such Global Security other than participants). The laws of some jurisdictions require that certain purchasers of securities take physical delivery of such securities in definitive form. Such limits and such laws may impair the ability to transfer beneficial interests in a Global Security.

Payment of principal of and interest on Notes represented by a Global Security will be made in immediately available funds to DTC or its nominee, as the case may be, as the sole registered owner and the sole holder of the Notes represented thereby for all purposes under the Indenture. Arch Western has been advised by DTC that upon receipt of any payment of principal of or interest on any Global Security, DTC will immediately credit, on its book-entry registration and transfer system, the accounts of participants with payments in amounts proportionate to their respective beneficial interests in the principal or face amount of such Global Security as shown on the records of DTC. Payments by participants to owners of beneficial interests in a Global Security held through such participants will be governed by standing instructions and customary practices as is now the case with securities held for customer accounts registered in "street name" and will be the sole responsibility of such participants.

A Global Security may not be transferred except as a whole by DTC or a nominee of DTC to a nominee of DTC or to DTC. A Global Security is exchangeable for certificated Notes only if:

(a) DTC notifies Arch Western that it is unwilling or unable to continue as a depositary for such Global Security or if at any time DTC ceases to be a clearing agency registered under the Exchange Act;

(b) Arch Western in its discretion at any time determines not to have all the Notes represented by such Global Security; or

(c) there shall have occurred and be continuing a Default or an Event of Default with respect to the Notes represented by such Global Security.

Any Global Security that is exchangeable for certificated Notes pursuant to the preceding sentence will be exchanged for certificated Notes in authorized denominations and registered in such names as DTC or any successor depositary holding such Global Security may direct. Subject to the foregoing, a Global Security is not exchangeable, except for a Global Security of like denomination to be registered in the

name of DTC or any successor depositary or its nominee. In the event that a Global Security becomes exchangeable for certificated Notes,

(1) certificated Notes will be issued only in fully registered form in denominations of $1,000 or integral multiples thereof;

(2) payment of principal of, and premium, if any, and interest on, the certificated Notes will be payable, and the transfer of the certificated Notes will be registrable, at the office or agency of Arch Western maintained for such purposes; and

(3) no service charge will be made for any registration of transfer or exchange of the certificated Notes, although Arch Western may require payment of a sum sufficient to cover any tax or governmental charge imposed in connection therewith.

So long as DTC or any successor depositary for a Global Security, or any nominee, is the registered owner of such Global Security, DTC or such successor depositary or nominee, as the case may be, will be considered the sole owner or holder of the Notes represented by such Global Security for all purposes under the Indenture and the Notes. Except as set forth above, owners of beneficial interests in a Global Security will not be entitled to have the Notes represented by such Global Security registered in their names, will not receive or be entitled to receive physical delivery of certificated Notes in definitive form and will not be considered to be the owners or holders of any Notes under such Global Security. Accordingly, each Person owning a beneficial interest in a Global Security must rely on the procedures of DTC or any successor depositary, and, if such Person is not a participant, on the procedures of the participant through which such Person owns its interest, to exercise any rights of a holder under the Indenture. Arch Western and the Issuer understand that under existing industry practices, in the event that requests any action of holders are requested or that an owner of a beneficial interest in a Global Security desires to give or take any action which a holder is entitled to give or take under the Indenture, DTC or any successor depositary would authorize the participants holding the relevant beneficial interest to give or take such action and such participants would authorize beneficial owners owning through such participants to give or take such action or would otherwise act upon the instructions of beneficial owners owning through them.

DTC has advised Arch Western and the Issuer that DTC is a limited-purpose trust company organized under the Banking Law of the State of New York, a member of the Federal Reserve System, a “clearing corporation” within the meaning of the New York Uniform Commercial Code and a “clearing agency” registered under the Exchange Act. DTC was created to hold the securities of its participants and to facilitate the clearance and settlement of securities transactions among its participants in such securities through electronic book-entry changes in accounts of the participants, thereby eliminating the need for physical movement of securities certificates. DTC’s participants include securities brokers and dealers (which may include the initial purchasers), banks, trust companies, clearing corporations and certain other organizations some of whom (or their representatives) own DTC. Access to DTC’s book-entry system is also available to others, such as banks, brokers, dealers and trust companies, that clear through or maintain a custodial relationship with a participant, either directly or indirectly.

Although DTC has agreed to the foregoing procedures in order to facilitate transfers of interests in Global Securities among participants of DTC, it is under no obligation to perform or continue to perform such procedures, and such procedures may be discontinued at any time. None of Arch Western, the Issuer or the Trustee will have any responsibility for the performance by DTC or its participants or indirect participants of their respective obligations under the rules and procedures governing their operations.

EXCHANGE OFFER; REGISTRATION RIGHTS

The Issuer, Arch Western, Arch Coal and the subsidiary guarantors have agreed pursuant to a registration rights agreement (the "Registration Rights Agreement") with the initial purchasers of the old notes, for the benefit of the holders of the old notes, that the Issuer, Arch Western, Arch Coal and the subsidiary guarantors will, at their cost, use their reasonable best efforts to cause the registration statement of which this prospectus is part to be declared effective under the Securities Act not later than 180 days after the date of original issuance of the old notes. Upon the effectiveness of the registration statement of which this prospectus is part, the Issuer will offer the registered notes in exchange for surrender of the old notes (the "Registered Exchange Offer"). The Issuer will keep the Registered Exchange Offer open for not less than 30 days and not more than 45 days after the date notice of the Registered Exchange Offer is mailed to the holders of the old notes (or in each case, longer if required by applicable law). For each old note surrendered to the Issuer pursuant to the Registered Exchange Offer, the holder of such old note will receive an registered note having a principal amount equal to that of the surrendered old note. Interest on each registered note will accrue from the last interest payment date on which interest was paid on the old note surrendered in exchange thereof or, if no interest has been paid on such old note, from the date of the original issue of the surrendered old note. Under existing SEC interpretations, the registered notes would be freely transferable by holders of the old notes other than affiliates of the Issuer after the Registered Exchange Offer without further registration under the Securities Act if the holder of the registered notes represents that it is acquiring the registered notes in the ordinary course of its business, that it is not engaging in and does not intend to engage in a distribution of the registered note, that it has no arrangement or understanding with any person to participate in the distribution of the registered notes and that it is not an affiliate of the Issuer, as such terms are interpreted by the SEC, *provided* that broker-dealers ("Participating Broker-Dealers") receiving registered notes in the Registered Exchange Offer will have a prospectus delivery requirement with respect to resales of such registered notes. The SEC has taken the position that Participating Broker-Dealers may fulfill their prospectus delivery requirements with respect to registered notes (other than a resale of an unsold allotment from the original sale of the old notes) with the prospectus contained in the registration statement of which this prospectus is part. Under the Registration Rights Agreement, the Issuer, Arch Western, Arch Coal and the subsidiary guarantors will be required to allow Participating Broker-Dealers and other persons, if any, with similar prospectus delivery requirements to use this prospectus in connection with the resale of such registered notes for 180 days following the effective date of the registration statement of which this prospectus is part (or such shorter period during which Participating Broker-Dealers are required by law to deliver this prospectus).

A holder of old notes (other than certain specified holders) who wishes to exchange such old notes for registered notes in the Registered Exchange Offer will be required to represent that any registered notes to be received by it will be acquired in the ordinary course of its business and that at the time of the commencement of the Registered Exchange Offer it has no arrangement or understanding with any person to participate in the distribution (within the meaning of the Securities Act) of the registered notes and that it is not an "affiliate" of the Issuer, as defined in Rule 405 of the Securities Act, or if it is an affiliate, that it will comply with the registration and prospectus delivery requirements of the Securities Act to the extent applicable.

In the event that (i) due to any change in law or applicable interpretations of the SEC's staff, we determine upon advise of our outside counsel that we are not permitted to effect the Registered Exchange Offer; (ii) for any other reason the Registered Exchange Offer is not consummated within 225 days after the date of the original issuance of the old notes; (iii) any initial purchaser so requests with respect to old notes not eligible to be exchanged for registered notes in the Registered Exchange Offer that are held by that initial purchaser following consummation of the Registered Exchange Offer; (iv) any holder of old notes (other than an initial purchaser) is not eligible to participate in the Registered Exchange Offer; or (v) any initial purchaser of old notes that participates in the Registered Exchange Offer does not receive freely tradeable registered notes in the exchange offer in exchange for old notes constituting any portion of an unsold allotment (it being understood that (x) the requirement that an initial purchaser of old notes deliver this prospectus in connection with sales of registered notes acquired in exchange for old notes shall

result in such registered notes being not "freely tradeable" and (y) the requirement that a Participating Broker-Dealer deliver this prospectus in connection with sales of registered notes acquired in the Registered Exchange Offer shall not result in such registered notes being not "freely tradeable"), the Issuer, Arch Western, Arch Coal and the subsidiary guarantors will, at their cost, (a) as promptly as practicable, but in no event later than 60 days after such filing obligation arises, file a shelf registration statement (the "Shelf Registration Statement") covering resales of the old notes or the registered notes, as the case may be; (b) use their reasonable best efforts to cause the Shelf Registration Statement to be declared effective under the Securities Act; and (c) use their reasonable best efforts to keep the Shelf Registration Statement continuously effective, supplemented and amended as required by the Securities Act, in order to permit the prospectus forming part of the Shelf Registration Statement to be usable for a period of two years from the date the Shelf Registration Statement is declared effective by the SEC or such shorter period that will terminate when all securities covered by the Shelf Registration Statement have been sold pursuant to the Shelf Registration Statement. The Issuer will, in the event a Shelf Registration Statement is filed, among other things, provide to each holder for whom such Shelf Registration Statement was filed copies of the prospectus which is a part of the Shelf Registration Statement, notify each such holder when the Shelf Registration Statement has become effective and take certain other actions as are required to permit unrestricted resales of the old notes or the registered notes, as the case may be. A holder selling such old notes or registered notes pursuant to the Shelf Registration Statement generally would be required to be named as a selling security holder in the related prospectus and to deliver a prospectus to purchasers, will be subject to certain of the civil liability provisions under the Securities Act in connection with such sales and will be bound by the provisions of the Registration Rights Agreement which are applicable to such holder (including certain indemnification obligations).

If (a) on or prior to the 180th day following the date of original issuance of the old notes, the registration statement of which this prospectus is part has not been declared effective by the SEC; (b) on or prior to the 225th day following the date of original issuance of the old notes the Registered Exchange Offer has not been consummated; (c) on or prior to the 60th day following the date the obligation to file the Shelf Registration Statement arises, the Shelf Registration Statement has not been filed with the SEC; (d) on or prior to 180th day following the date the obligation to file arises, the Shelf Registration has not been declared effective; or (e) after either the registration statement of which this prospectus is part or the Shelf Registration Statement has been declared effective, such Registration Statement thereafter ceases to be effective or usable (subject to certain exceptions) in connection with resales of old notes or registered notes in accordance with and during the periods specified in the Registration Rights Agreement (each such event referred to in clauses (a) through (d), a "Registration Default"), interest ("Special Interest") will accrue on the principal amount of the old notes and the registered notes (in addition to the stated interest on the old notes and the registered notes) from and including the date on which any such Registration Default shall occur to but excluding the date on which all Registration Defaults have been cured. Special Interest will accrue at a rate of 0.25% per annum during the 90-day period immediately following the occurrence of such Registration Default and shall increase by 0.25% per annum at the end of each subsequent 90-day period, but in no event shall such rate exceed 1.00% per annum.

The summary herein of certain registration provisions does not purport to be complete and is subject to, and is qualified in its entirety by reference to, all the provisions of the registration rights agreement and the indenture, copies of which have been filed as exhibits to the registration statement of which this prospectus is part.

IMPORTANT FEDERAL INCOME TAX CONSIDERATIONS

The following is a summary of the important U.S. federal income tax considerations relating to the exchange of old notes for registered notes in the exchange offer. It does not contain a complete analysis of all potential tax considerations relating to the exchange. This summary is limited to holders of old notes who hold the old notes as "capital assets" (in general, assets held for investment). Special situations, such as the following, are not addressed:

- tax consequences to holders who may be subject to special tax treatment, such as tax-exempt entities, dealers in securities or currencies, banks, other financial institutions, insurance companies, regulated investment companies, traders in securities that elect to use a mark-to-market method of accounting for their securities holdings or corporations that accumulate earnings to avoid U.S. federal income tax;
- tax consequences to persons holding old notes as part of a hedging, integrated, constructive sale or conversion transaction or a straddle or other risk reduction transaction;
- tax consequences to holders whose "functional currency" is not the U.S. dollar;
- tax consequences to persons who hold old notes through a partnership or similar pass-through entity;
- U.S. federal gift tax, estate tax (except as to non-United States holders) or alternative minimum tax consequences, if any; or
- any state, local or foreign tax consequences.

The discussion below is based upon the provisions of the Internal Revenue Code of 1986, as amended, existing and proposed Treasury regulations promulgated thereunder, and rulings, judicial decisions and administrative interpretations thereunder, as of the date hereof. Those authorities may be changed, perhaps retroactively, so as to result in U.S. federal income tax consequences different from those discussed below.

Consequences of Tendering Old Notes

The exchange of your old notes for registered notes in the exchange offer should not constitute an exchange for federal income tax purposes. Accordingly, the exchange offer should have no federal income tax consequences to you if you exchange your old notes for registered notes. For example, there should be no change in your tax basis, and your holding period should carry over to the registered notes. In addition, the federal income tax consequences of holding and disposing of your registered notes should be the same as those applicable to your old notes.

The preceding discussion of certain U.S. federal income tax considerations of the exchange offer is for general information only and is not tax advice. Accordingly, each investor should consult its own tax advisor as to particular tax consequences to it of exchanging old notes for registered notes in the exchange offer, including the applicability and effect of any state, local or foreign tax laws, and of any proposed changes in applicable laws.

PLAN OF DISTRIBUTION

Each broker-dealer that receives registered notes in the exchange offer for its own account must acknowledge that it will deliver a prospectus meeting the requirements of the Securities Act in connection with any resales of such notes. We reserve the right in our sole discretion to purchase or make offers for, or to offer registered notes for, any old notes that remain outstanding subsequent to the expiration of the exchange offer pursuant to this prospectus or otherwise and, to the extent permitted by applicable law, purchase old notes in the open market, in privately negotiated transactions or otherwise. This prospectus, as it may be amended or supplemented from time to time, may be used by all persons subject to the prospectus delivery requirements of the Securities Act, including broker-dealers in connection with resales of registered notes received in the exchange offer, where such registered notes were acquired as a result of market-making activities or other trading activities and may be used by us to purchase any old notes outstanding after expiration of the exchange offer. We have agreed that, for a period of 180 days after the expiration of the exchange offer, we will make this prospectus, as amended or supplemented, available to any broker-dealer for use in connection with any such resale.

We will not receive any proceeds from any sale of registered notes by broker-dealers. Registered notes received by broker-dealers in the exchange offer for their own account may be sold from time to time in one or more transactions in the over-the counter market, in negotiated transactions, through the writing of options on the registered notes or a combination of such methods of resale, at market prices prevailing at the time of resale, at prices related to such prevailing market prices or negotiated prices. Any such resale may be made directly to purchasers or to or through brokers or dealers who may receive compensation in the form of commissions or concessions from any such broker-dealer and/or the purchasers of any such registered notes. Any broker-dealer that resells registered notes that were received by it in the exchange offer for its own account and any broker or dealer that participates in a distribution of such notes may be deemed to be an “underwriter” within the meaning of the Securities Act and any profit on any such resale of such notes and any commissions or concessions received by any such persons may be deemed to be underwriting compensation under the Securities Act. The letter or transmittal states that, by acknowledging that it will deliver and by delivering a prospectus meeting the requirements of the Securities Act, a broker-dealer will not be deemed to admit that it is an “underwriter” within the meaning of the Securities Act.

For a period of 180 days after the expiration of the exchange offer, we will promptly send additional copies of this prospectus and any amendment or supplement to this prospectus to any broker-dealer that requests such documents in the letter of transmittal. We and Arch Coal have agreed to pay all expenses incurred by us and Arch Coal in connection with the performance of our and Arch Coal’s obligations incident to the exchange offer, including, in the event of any shelf registration statement, the reasonable fees and disbursements of one firm or counsel acting as counsel for the holders of old notes in connection with the shelf registration statement and will indemnify holders of the notes, including any broker-dealers, against certain liabilities, including liabilities under the Securities Act.

LEGAL MATTERS

Certain legal matters with respect to the exchange offer will be passed upon by Robert G. Jones, Vice President-Law and General Counsel of Arch Coal. Mr Jones beneficially owns 2,140 shares of Arch Coal's common stock.

EXPERTS

The consolidated financial statements of Arch Western Resources, LLC as of December 31, 2002 and 2001 and for each of the three years in the period ended December 31, 2002 included elsewhere in this prospectus have been audited by Ernst & Young LLP, independent auditors, as stated in their report, which is included elsewhere in this prospectus. Such consolidated financial statements are included herein 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. as of December 31, 2002 and 2001 and for each of the three years in the period ended December 31, 2002 incorporated by reference into this prospectus have been audited by Ernst & Young LLP, independent auditors, as stated in their report, which is incorporated by reference into this prospectus. 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 financial statements of Canyon Fuel Company, LLC as of December 31, 2002 and 2001 and for each of the three years in the period ended December 31, 2002 incorporated by reference into this prospectus have been audited by Ernst & Young, LLP, independent auditors, as stated in their report, which is incorporated by reference in this prospectus. 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.

WHERE YOU CAN FIND MORE INFORMATION

Available Information

We have filed with the SEC a registration statement on Form S-4 (together with all amendments, exhibits, schedules and supplements thereto, the "registration statement") under the Securities Act of 1933, as amended (the "Securities Act"). This prospectus, which forms part of the registration statement, does not contain all of the information set forth in the registration statement. Statements contained in this prospectus as to the contents of any contract, agreement or other document are not necessarily complete. For a more complete understanding and description of each contract, agreement or other document filed as an exhibit to the registration statement, we encourage you to read the documents contained in the exhibits.

Arch Coal files reports, proxy statements and other information with the SEC. These reports, proxy statements and other information can be read and copied at the SEC's Public Reference Room at Room 024, Judiciary Plaza, 450 Fifth Street, N.W., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the Public Reference Room. The SEC maintains an Internet site that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC, including Arch Coal. The SEC's Internet address is http://www.sec.gov. In addition, Arch Coal's common and preferred shares are listed on the New York Stock Exchange, and its reports and other information can be inspected at the offices of the NYSE, 20 Broad Street, New York, New York 10005. Arch Coal's Internet address is http://www.archcoal.com. The information on Arch Coal's internet site is not a part of this prospectus.

Incorporation by Reference

The SEC allows us to "incorporate by reference" the documents that we or Arch Coal file with the SEC. This means that we can disclose information to you by referring you to those documents. Any information we incorporate in this manner is considered part of this prospectus except to the extent updated and superseded by information contained in this prospectus. Some information we or Arch Coal file with the SEC after the date of this prospectus and until this exchange offer is completed will automatically update and supersede the information contained in this prospectus.

We incorporate by reference the following documents that Arch Coal has filed with the SEC and any filings that we or Arch Coal will make with the SEC in the future under Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 until the exchange offer is completed:

Arch Coal's SEC Filings (File No. 1-13105)	Period for or Date of Filing
Annual Report on Form 10-K	Year Ended December 31, 2002
Quarterly Report on Form 10-Q	Quarter ended March 31, 2003
Reports on Forms 8-K	April 8, April 22, May 29, June 3 and July 21, 2003

Statements contained in this prospectus as to the contents of any contract or other document referred to in this prospectus do not purport to be complete, and where reference is made to the particular provisions of such contract or other document, such provisions are qualified in all respects by reference to all of the provisions of such contract or other document. Any statement contained in a document incorporated by reference, or deemed to be incorporated by reference, in this prospectus shall be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained herein or in any other subsequently filed document which also is incorporated by reference in this prospectus modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

We will provide without charge, upon written or oral request, a copy of any or all of the documents that are incorporated by reference into this prospectus and a copy of any or all other contracts or documents which are referred to in this prospectus. Requests should be directed to: Arch Coal, Inc.,

Attention: Investor Relations, One CityPlace Drive, Suite 300, St. Louis, Missouri 63141, telephone number: (314) 994-2700.

You should rely only on the information contained in or incorporated by reference into this prospectus. We have not authorized any other person to provide you with different information. We are not making an offer to sell securities in any jurisdiction where the offer or sale is not prohibited. You should assume that the information appearing in this prospectus is accurate as of the date hereof only. Our business, financial condition, results of operations and prospects may change after that date.

GLOSSARY OF SELECTED MINING TERMS

Assigned Reserves. Recoverable coal reserves that have been designated for mining by a specific operation.

Btu — British Thermal Unit. A measure of the energy required to raise the temperature of one pound of water one degree Fahrenheit.

Clean Air Act. Federal legislation enacted to regulate air emissions, as amended to date.

Coal Seam. A bed or stratum of coal.

Compliance Coal. Coal which, when burned, emits 1.2 pounds or less of sulfur dioxide per million Btus.

Deep mine. An underground coal mine.

Dragline. A large machine used in the surface mining process to remove the overburden, or layers of earth and rock, covering a coal seam. The dragline has a large bucket suspended from the end of a long boom. The bucket, which is suspended by cables, is able to scoop up great amounts of overburden as it is dragged across the excavation area.

Longwall Mining. One of two major underground coal mining methods currently in use. This method employs a rotating drum, which is pulled mechanically back and forth across a face of coal that is usually several hundred feet long. The loosened coal falls onto a conveyor for removal from the mine. Longwall operations include a hydraulic roof support system that advances as mining proceeds, allowing the roof to fall in a controlled manner in areas already mined.

Low Sulfur Coal. Coal which, when burned, emits 1.6 pounds or less of sulfur dioxide per million Btus.

Metallurgical Coal. The various grades of coal suitable for distillation into carbon in connection with the manufacture of steel. Also known as “met” coal.

Overburden. Layers of earth and rock covering a coal seam. In surface mining operations, overburden is removed prior to coal extraction.

Pit. The area of the mine where the coal is actually extracted from the ground.

Preparation Plant. A preparation plant is a facility for crushing, sizing and washing coal to prepare it for use by a particular customer. The washing process has the added benefit of removing some of the coal’s sulfur content.

Probable Reserves. Reserves for which quantity and grade and/or quality are computed from information similar to that used for proven (measured) reserves, but the sites for inspection, sampling and measurement are farther apart or are otherwise less adequately spaced. The degree of assurance, although lower than that for proven (measured) reserves, is high enough to assume continuity between points of observation.

Proven Reserves. Reserves for which (a) quantity is computed from dimensions revealed in outcrops, trenches, workings or drill holes; grade and/or quality are computed from the results of detailed sampling and (b) the sites for inspection, sampling and measurement are spaced so closely and the geologic character is so well defined that size, shape, depth and mineral content of reserves are well established.

Reclamation. The restoration of land and environmental values to a mining site after the coal is extracted. Reclamation operations are usually underway where the coal has already been taken from a mine, even as mining operations are taking place elsewhere at the site. The process commonly includes “recontouring” or reshaping the land to its approximate original appearance, restoring topsoil and planting native grass and ground covers.

Recoverable Reserves. The amount of proven and probable reserves that can actually be recovered from the reserve base taking into account all mining and preparation losses involved in producing a saleable product using existing methods and under current law.

Scrubber. Any of several forms of chemical/ physical devices which operate to neutralize sulfur compounds formed during coal combustion. These devices combine the sulfur in gaseous emissions with other chemicals to form inert compounds, such as gypsum, which must then be removed for disposal.

Spot Market. Sales of coal under an agreement for shipments over a period of one year or less.

Steam Coal. Coal used in steam boilers to produce electricity.

Sulfur. One of the elements present in varying quantities in coal that contributes to environmental degradation when coal is burned. Sulfur dioxide is produced as a gaseous by-product of coal combustion.

Sulfur Content. Coal is commonly described by its sulfur content due to the importance of sulfur in environmental regulations. Nearly all of our coal is of low sulfur grades.

Super-Compliance Coal. Compliance coal which, when burned, emits a particularly low amount of sulfur dioxide per million Btus is commonly referred to in the coal industry as "super-compliance" coal.

Surface Mine. A mine in which the coal lies near the surface and can be extracted by removing overburden.

Tons. A unit of measure equal to 2,000 pounds. Also know as a "short ton" or "net ton."

Unassigned Reserves. Recoverable reserves that have not yet been designated for mining by a specific operation.

Underground Mine. Also known as a "deep" mine. Usually located several hundred feet below the earth's surface, an underground mine's coal is removed mechanically and transferred by shuttle car or conveyor to the surface.

INDEX TO FINANCIAL STATEMENTS

REPORT OF INDEPENDENT AUDITORS

The Members

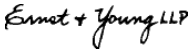
Arch Western Resources, LLC

We have audited the accompanying consolidated balance sheets of Arch Western Resources, LLC (the Company) as of December 31, 2002 and 2001, and the related consolidated statements of operations, members' equity and cash flows for each of the three years in the period ended December 31, 2002. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Arch Western Resources, LLC at December 31, 2002 and 2001, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2002, in conformity with accounting principles generally accepted in the United States.

As discussed in Note 2 to the consolidated financial statements, the Company changed its method of accounting for derivatives and hedging activities effective January 1, 2001.



St. Louis, Missouri

January 22, 2003
except for Notes 13 and 16, as to which the date is
May 23, 2003

ARCH WESTERN RESOURCES, LLC

CONSOLIDATED STATEMENTS OF OPERATIONS

	Year Ended December 31,		
	2002	2001	2000
	(In thousands of dollars)		
Revenues			
Coal sales	$492,191	$468,137	$393,619
Income from equity investment	7,774	26,250	12,837
Other revenues	14,215	21,326	10,130
	514,180	515,713	416,586
Costs and Expenses			
Cost of coal sales	450,144	440,363	383,608
Selling, general and administrative expenses	13,011	13,004	10,991
Amortization of coal supply agreements	1,201	1,976	9,536
	464,356	455,343	404,135
Income from operations	49,824	60,370	12,451
Interest expense, net:			
Interest expense	(43,604)	(44,637)	(46,957)
Interest income primarily from Arch Coal, Inc.	13,689	15,609	13,757
	(29,915)	(29,028)	(33,200)
Net income (loss)	$ 19,909	$ 31,342	$ (20,749)

The accompanying notes are an integral part of the consolidated financial statements.

ARCH WESTERN RESOURCES, LLC

CONSOLIDATED BALANCE SHEETS

	December 31,	
	2002	2001
	(In thousands of dollars)	
ASSETS		
Current assets		
Cash and cash equivalents	$ 249	$ 461
Trade accounts receivable	56,258	64,087
Other receivables	5,465	2,149
Inventories	35,727	31,468
Prepaid royalties	—	1,344
Other	5,024	5,834
Total current assets	102,723	105,343
Property, plant and equipment		
Coal lands and mineral rights	577,756	577,756
Plant and equipment	395,485	369,380
Deferred mine development	79,774	57,654
	1,053,015	1,004,790
Less accumulated depreciation, depletion and amortization	(287,595)	(219,258)
Property, plant and equipment, net	765,420	785,532
Other assets		
Investment in Canyon Fuel Company, LLC	160,787	170,686
Coal supply agreements	5,223	6,424
Receivable from Arch Coal, Inc.	333,825	259,822
Other	5,083	1,881
Total other assets	504,918	438,813
Total assets	$1,373,061	$1,329,688
LIABILITIES AND MEMBERS' EQUITY		
Current liabilities		
Accounts payable	$ 31,170	$ 26,039
Accrued expenses	59,243	53,730
Total current liabilities	90,413	79,769
Long-term debt	675,000	675,000
Accrued postretirement benefits other than pension	14,659	15,296
Accrued reclamation and mine closure	67,372	61,704
Accrued workers' compensation	6,956	7,024
Accrued pension cost	—	3,387
Other noncurrent liabilities	44,687	27,099
Total liabilities	899,087	869,279
Members' equity	473,974	460,409
Total liabilities and members' equity	$1,373,061	$1,329,688

The accompanying notes are an integral part of the consolidated financial statements.

ARCH WESTERN RESOURCES, LLC

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended December 31,		
	2002	2001	2000
	(In thousands of dollars)		
Operating Activities			
Net income (loss)	$ 19,909	$ 31,342	$(20,749)
Adjustments to reconcile to cash provided by operating activities:			
Depreciation, depletion and amortization	69,388	66,493	72,094
Prepaid royalties expensed	14,094	3,950	1,956
Net loss (gain) on disposition of assets	9	(5,101)	—
Income from equity investment	(7,774)	(26,250)	(12,837)
Net distributions from equity investment	17,121	42,219	23,897
Allocation of expenses paid by Arch Coal, Inc.	10,701	10,777	9,041
Changes in operating assets and liabilities	(54,886)	(87,143)	(52,121)
Other	(482)	(6,529)	998
Cash provided by operating activities	68,080	29,758	22,279
Investing Activities			
Additions to property, plant and equipment	(51,360)	(32,142)	(28,535)
Proceeds from coal supply agreements	—	—	8,512
Additions to prepaid royalties	(12,750)	(4,750)	(2,500)
Proceeds from disposition of property, plant and equipment	11	7,501	134
Cash used in investing activities	(64,099)	(29,391)	(22,389)
Financing Activities			
Debt financing costs	(4,193)	—	—
Cash used in financing activities	(4,193)	—	—
(Decrease) Increase in cash and cash equivalents	(212)	367	(110)
Cash and cash equivalents, beginning of year	461	94	204
Cash and cash equivalents, end of year	$ 249	$ 461	$ 94
Supplemental Cash Flow Information:			
Cash paid during the year for interest	$ 44,323	$ 48,593	$ 44,413

The accompanying notes are an integral part of the consolidated financial statements.

ARCH WESTERN RESOURCES, LLC

CONSOLIDATED STATEMENTS OF MEMBERS' EQUITY
Three years ended December 31, 2002

	Arch Coal, Inc. Common Membership Interest	BP p.l.c. Common Membership Interest	BP p.l.c. Preferred Membership Interest	Total
		(In thousands of dollars)		
Balance at January 1, 2000	$452,867	$2,254	$2,399	$457,520
Net loss	(20,690)	(59)	—	(20,749)
Allocation of expenses paid by Arch Coal, Inc. (Note 13)	9,041	—	—	9,041
Dividends on preferred membership interest	(96)	—	—	(96)
Balance at December 31, 2000	441,122	2,195	2,399	445,716
Comprehensive income				
Net income	31,131	211	—	31,342
Other comprehensive loss	(27,193)	(137)	—	(27,330)
Total comprehensive income	3,938	74	—	4,012
Allocation of expenses paid by Arch Coal, Inc. (Note 13)	10,777	—	—	10,777
Dividends on preferred membership interest	(95)	(1)	—	(96)
Balance at December 31, 2001	455,742	2,268	2,399	460,409
Comprehensive income				
Net income	19,756	153	—	19,909
Other comprehensive loss	(16,863)	(86)	—	(16,949)
Total comprehensive income	2,893	67	—	2,960
Allocation of expenses paid by Arch Coal, Inc. (Note 13)	10,701	—	—	10,701
Dividends on preferred membership interest	(95)	(1)	—	(96)
Balance at December 31, 2002	$469,241	$2,334	$2,399	$473,974

The accompanying notes are an integral part of the consolidated financial statements.

ARCH WESTERN RESOURCES, LLC

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In thousands of dollars)

1. Formation of the Company

On June 1, 1998, Arch Coal, Inc. (Arch Coal) acquired the Colorado and Utah coal operations of Atlantic Richfield Company (ARCO) and simultaneously combined the acquired ARCO operations and Arch Coal's Wyoming operation with ARCO's Wyoming operations in a new joint venture named Arch Western Resources, LLC (the Company). ARCO was acquired by BP p.l.c. (formerly BP Amoco) in 2000. Arch Coal has a 99% common membership interest in the Company, while BP p.l.c. has a 0.5% common membership interest and a 0.5% preferred membership interest in the Company. Net profits and losses are allocated only to the common membership interests on the basis of 99.5% to Arch Coal and 0.5% to BP p.l.c. In accordance with the membership agreement of the Company, no profit or loss is allocated to the preferred membership interest of BP p.l.c. Except for a Preferred Return, distributions to members are allocated on the basis of 99.5% to Arch Coal and 0.5% to BP p.l.c. The Preferred Return entitles BP p.l.c. to receive an annual distribution from the common membership interests equal to 4% of the preferred capital account balance at the end of the year. The Preferred Return is payable at the Company's discretion.

Under the terms of the agreement, BP p.l.c. has a put right which allows BP p.l.c., at any time after the seventh year of the agreement, to cause Arch Coal to purchase its members' interest. In addition, Arch Coal has a call right which allows Arch Coal to purchase BP p.l.c.'s members' interest as long as it pays damages as set forth in the agreement between the members. It is the members' intention at this point to continue the joint venture.

In connection with the formation of the Company, Arch Coal agreed to indemnify BP p.l.c. against certain tax liabilities in the event that such liabilities arise as a result of certain actions taken by Arch Coal or the Company prior to June 1, 2013. The provisions of the indemnification agreement may restrict the Company's ability to sell or dispose of certain properties, repurchase certain of its equity interests, or reduce its indebtedness.

The Company mines and markets steam coal from surface and deep mines for sale to utility and industrial customers in the United States and certain export markets. The Company's principal subsidiaries are Thunder Basin Coal Company, L.L.C., which operates a surface coal mine and owns one idle mine in the Powder River Basin in Wyoming; Mountain Coal Company L.L.C., which operates one underground coal mine in Colorado; and Arch of Wyoming LLC, which operates two surface coal mines in the Hanna Basin in Wyoming. In addition to these wholly owned operating units, the Company has a 65% interest in Canyon Fuel Company. Canyon Fuel operates three underground coal mines in Utah.

2. Accounting Policies

Principles of Consolidation

The consolidated financial statements include the accounts of the Arch Western Resources and its subsidiaries. All subsidiaries except Canyon Fuel are wholly owned. Significant intercompany transactions and accounts have been eliminated in consolidation.

The membership interests in Canyon Fuel are owned 65% by the Company 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, significant participation rights require either the unanimous approval of the members or the approval of representatives of members holding more than 70% of the

ARCH WESTERN RESOURCES, LLC

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(In thousands of dollars) — (Continued)

membership interests. Those matters which are considered significant participation rights include the following:

- approval of the annual business plan;
- approval of significant capital expenditures;
- approval of significant coal sales contracts;
- approval of the institution of, or the settlement of litigation;
- approval of incurrence of indebtedness;
- approval of significant mineral reserve leases;
- selection and removal of the CEO, CFO, or General Counsel;
- approval of any material change in the business of Canyon Fuel;
- approval of any disposition whether by sale, exchange, merger, consolidation, license or otherwise, and whether directly or indirectly, of all or any portion of the assets of Canyon Fuel other than in the ordinary course of business; and
- approval of request that a member provide additional services to Canyon Fuel.

The Canyon Fuel agreement also contains various restrictions on the transfer of membership interests in Canyon Fuel. As a result of these super-majority voting rights, the Company's 65% ownership of Canyon Fuel is accounted for on the equity method in the consolidated financial statements. Income from Canyon Fuel is reflected in the Consolidated Statements of Operations as income from equity investments. (See additional discussion in "Investment in Canyon Fuel" in Note 4.)

Accounting Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Cash and Cash Equivalents

Cash and cash equivalents are stated at cost. Cash equivalents consist of highly liquid investments with an original maturity of three months or less when purchased.

Inventories

Inventories consist of the following:

	December 31,	
	2002	2001
Coal	$15,475	$12,466
Supplies, net of allowance	20,252	19,002
	$35,727	$31,468

ARCH WESTERN RESOURCES, LLC

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(In thousands of dollars) — (Continued)

Coal and supplies inventories are valued at the lower of average cost or market. Coal inventory costs include labor, supplies, equipment costs and operating overhead. The Company has recorded a valuation allowance for slow-moving and obsolete supplies inventories of $8.3 million and $8.1 million at December 31, 2002 and 2001, respectively.

Coal Acquisition Costs and Prepaid Royalties

Coal lease rights obtained through acquisitions are capitalized and amortized primarily by the units-of-production method over the estimated recoverable reserves. Amortization occurs either as the Company mines on the property or as others mine on the property through subleasing transactions.

Rights to leased coal lands are often acquired through royalty payments. Where royalty payments represent prepayments recoupable against production, they are capitalized, and amounts expected to be recouped within one year are classified as a current asset. As mining occurs on these leases, the prepayment is charged to cost of coal sales.

Coal Supply Agreements

Acquisition costs allocated to coal supply agreements (sales contracts) are capitalized and amortized on the basis of coal to be shipped over the term of the contract. Value is allocated to coal supply agreements based on discounted cash flows attributable to the difference between the above-market contract price and the then-prevailing market price. Accumulated amortization for sales contracts was $28.9 million and $28.0 million at December 31, 2002 and 2001, respectively.

Exploration Costs

Costs related to locating coal deposits and determining the economic mineability of such deposits are expensed as incurred.

Property, Plant and Equipment

Property, plant and equipment are recorded at cost. Interest costs applicable to major asset additions are capitalized during the construction period. The Company capitalized $711,000 of interest in the year ended December 31, 2002 and did not capitalize interest in the years ended December 31, 2001 and 2000.

Expenditures which extend the useful lives of existing plant and equipment or increase the productivity of the asset are capitalized. Costs of purchasing rights to coal reserves and developing new mines, or significantly expanding the capacity of existing mines, are capitalized and amortized using the units-of-production method over the estimated recoverable reserves that are associated with the property being benefited. At December 31, 2002, all mineral reserves of the Company that are capitalized are being amortized on the units-of-production method through Company operations. Except for preparation plants and loadouts, plant and equipment are depreciated principally on the straight-line method over the estimated useful lives of the assets, which range from three to 28 years. Preparation plants and loadouts are depreciated using the units-of-production method over the estimated recoverable reserves, subject to a minimum level of depreciation.

Asset Impairment

If facts and circumstances suggest that a long-lived asset may be impaired, the carrying value is reviewed. If this review indicates that the value of the asset will not be recoverable, as determined based on projected undiscounted cash flows related to the asset over its remaining life, then the carrying value of the asset is reduced to its estimated fair value.

ARCH WESTERN RESOURCES, LLC

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(In thousands of dollars) — (Continued)

Revenue Recognition

Coal sales revenues include sales to customers of coal produced at Company operations and coal purchased from other companies. The Company recognizes revenue from coal sales at the time title passes to the customer. Transportation costs that are billed by the Company and reimbursed to the transportation provider are included in coal sales and cost of coal sales. Revenues from sources other than coal sales, including gains and losses from dispositions of long-term assets, are included in other revenues and are recognized as services are performed or otherwise earned.

Derivative Financial Instruments

The Company utilizes derivative financial instruments in the management of its interest rate and diesel fuel exposures. The Company does not use derivative financial instruments for trading or speculative purposes. The Company adopted Statement of Financial Accounting Standards No. 133, *Accounting for Derivative Instruments and Hedging Activities* ("FAS 133"), on January 1, 2001. FAS 133 requires all derivative financial instruments to be reported on the balance sheet at fair value. Changes in fair value are recognized either in earnings or equity, depending on the nature of the underlying exposure being hedged and how effective the derivatives are at offsetting price movements in the underlying exposure. All of the Company's existing derivative positions, which consist of interest rate swaps and heating oil swaps, qualified for cash flow hedge accounting under FAS 133 and are deemed to be effective for the variable-rate debt and diesel fuel purchases being hedged. Prior to the adoption of FAS 133, the fair values of the swap agreements were not recognized in the financial statements. Gains and losses on terminations of swap agreements that qualify as cash flow hedges are deferred on the balance sheets (in other long-term liabilities) and amortized as an adjustment to expense over the remaining original term of the terminated swap agreement.

The Company evaluates all derivative instruments each quarter to determine that they are highly effective. Any ineffectiveness is recorded in the Consolidated Statements of Operations. Ineffectiveness for the year ended December 31, 2002 was $0.4 million and was recorded as a reduction of other expenses in the Consolidated Statements of Operations.

The Company enters into interest-rate swap agreements to modify the interest characteristics of outstanding Company debt. The swap agreements essentially convert variable-rate debt to fixed-rate debt. These agreements require the exchange of amounts based on variable interest rates for amounts based on fixed interest rates over the life of the agreement. The Company accrues amounts to be paid or received under interest-rate swap agreements over the lives of the agreements. Such amounts are recognized as adjustments to interest expense over the lives of agreements, thereby adjusting the effective interest rate on the Company's debt.

The Company enters into heating oil swaps to eliminate volatility in the price to purchase diesel fuel for its operations. The swap agreements essentially fix the price paid for diesel fuel by requiring the Company to pay a fixed heating oil price and receive a floating heating oil price. The changes in the floating heating oil price highly correlate to changes in diesel fuel costs. The heating oil swaps hedge anticipated diesel fuel purchases over the next year.

The Company recorded the fair value of the derivative financial instruments on the balance sheet as an "other non-current liability" and recorded the unrealized loss, net of tax, in "accumulated other comprehensive loss." The adoption of FAS 133 had no impact on the Company's results of operations or cash flows.

ARCH WESTERN RESOURCES, LLC

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(In thousands of dollars) — (Continued)

Accounting Development

Effective January 1, 2003, the Company adopted Statement of Financial Accounting Standards No. 143, *Accounting for Asset Retirement Obligations ("FAS 143")*. The Statement requires legal obligations associated with the retirement of long-lived assets to be recognized at fair value at the time the obligations are incurred. Upon initial recognition of a liability, that cost should be capitalized as part of the related long-lived asset and allocated to expense over the useful life of the asset.

In November 2002, the Financial Accounting Standards Board issued FASB Interpretation No. 45, *Guarantors' Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others*. The disclosure requirements of this standard were effective for the year ended December 31, 2002. The other provisions are effective prospectively for guarantees issued or modified after January 1, 2003. The Company does not expect the adoption of this interpretation to have a material impact on its financial statements.

In January 2003, the Financial Accounting Standards Board issued FASB Interpretation No. 46, *Consolidation of Variable Interest Entities*. The interpretation clarifies the application of Accounting Research Bulletin No. 51, Consolidated Financial Statements, to certain types of entities. The Company does not expect the adoption of this interpretation to have a material impact on its financial statements. The interpretation applies for the first interim period beginning after June 15, 2003.

Reclassifications

Certain amounts in the financial states have been reclassified to conform with changes to the presentation of selling, general and administrative expenses, with no resulting effect on previously reported net income or members' equity.

3. Nonrecurring Revenues and Expenses

During the year ended December 31, 2002, the Company was notified by the Bureau of Land Management (BLM) that it would receive a royalty rate reduction for certain tons mined at its West Elk location. The rate reduction applies to a specified number of tons beginning October 1, 2001 and ending no later than October 1, 2005. The retroactive portion of the refund totaled $3.3 million and has been recognized in 2002 as a reduction of cost of coal sales. Additionally, Canyon Fuel was notified by the BLM that it would receive a royalty rate reduction for certain tons mined at its Skyline mine. The rate reduction applies to certain tons mined from September 1, 2001 through September 1, 2006. The Company's share of the retroactive refund was $1.1 million and is reflected in 2002 as income from equity investments in the consolidated statement of operations.

The Company's operating results for the years ended December 31, 2001 and 2000 reflect insurance settlements of $9.4 million and $31.0 million, respectively, as part of the Company's coverage under its property and business interruption policy. The insurance payments represent settlement for losses incurred at the West Elk mine in Gunnison County, Colorado, which was idled from January 28, 2000 to July 12, 2000, following the detection of combustion-related gases.

During 2001, Canyon Fuel recognized recoveries of previously paid property taxes. The Company's share of these recoveries was $2.6 million and is reflected in income from equity investment on the consolidated statement of operations for the year ended December 31, 2001. During 2001, the Company also recorded a $5.1 million gain as a result of selling land.

ARCH WESTERN RESOURCES, LLC

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(In thousands of dollars) — (Continued)

In 2000, as a result of adjustments to employee postretirement medical benefits, the Company recognized $2.6 million of curtailment gains resulting from previously unrecognized postretirement benefit changes that occurred from plan amendments in previous years.

4. Investment in Canyon Fuel

The following tables present unaudited, summarized financial information for Canyon Fuel, which is accounted for on the equity method.

Condensed Income Statement Information

	Year Ended December 31,		
	2002	2001	2000
Revenues	$250,325	$301,909	$259,101
Total costs and expenses	249,325	275,883	243,226
Net income	$ 1,000	$ 26,026	$ 15,875
65% of Canyon Fuel net income	$ 650	$ 16,917	$ 10,319
Effect of purchase adjustments	7,124	9,333	2,518
Arch Western's income from its equity investment in Canyon Fuel	$ 7,774	$ 26,250	$ 12,837

Condensed Balance Sheet Information

	December 31, 2002			
	Canyon Fuel Basis	Arch Western Ownership of Canyon Fuel Basis	Arch Western Purchase Adjustments	Arch Western Basis
Current assets	$ 64,365	$ 41,837	$ (2,493)	$ 39,344
Noncurrent assets	346,530	225,245	(68,357)	156,888
Current liabilities	30,221	19,644	—	19,644
Noncurrent liabilities	25,135	16,338	(537)	15,801
Members' equity	$355,539	$231,100	$(70,313)	$160,787

	December 31, 2001			
	Canyon Fuel Basis	Arch Western Ownership of Canyon Fuel Basis	Arch Western Purchase Adjustments	Arch Western Basis
Current assets	$ 73,184	$ 47,570	$ (2,493)	$ 45,077
Noncurrent assets	362,124	235,381	(76,018)	159,363
Current liabilities	29,530	19,195	—	19,195
Noncurrent liabilities	24,051	15,632	(1,073)	14,559
Members' equity	$381,727	$248,124	$(77,438)	$170,686

The Company's income from its equity investment in Canyon Fuel represents 65% of Canyon Fuel's net income after adjusting for the effect of purchase adjustments related to its investment in Canyon Fuel.

ARCH WESTERN RESOURCES, LLC

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(In thousands of dollars) — (Continued)

The Company's investment in Canyon Fuel reflects purchase adjustments primarily related to the reduction in amounts assigned to sales contracts, mineral reserves and other property, plant and equipment. The purchase adjustments are amortized consistent with the underlying assets of the joint venture. During 2001, in accordance with FAS 121, *Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of,* Canyon Fuel wrote off its investment in LAXT, a coal terminal located in Los Angeles, resulting in a charge of $10.1 million. The Company did not value LAXT in its Canyon Fuel purchase allocation and, therefore, there was no impact of the charge on the Company's financial position.

5. Other Comprehensive Income

Other comprehensive income items under FAS 130, *Reporting Comprehensive Income,* are transactions recorded in members' equity during the year, excluding net income and transactions with members. Following are the items included in other comprehensive income (loss) and the related tax effects:

	Financial Derivatives	Minimum Pension Liability Adjustments	Accumulated Other Comprehensive Loss
Adoption (January 1, 2001)	$ (7,694)	$ —	$ (7,694)
2001 activity	(17,585)	(2,051)	(19,636)
Balance December 31, 2001	(25,279)	(2,051)	(27,330)
2002 activity	(9,450)	(7,499)	(16,949)
Balance December 31, 2002	$(34,729)	$(9,550)	$(44,279)

The minimum pension liability adjustments include the Company's share of Canyon Fuel's minimum pension liability adjustment, which is $0.6 million in 2002 and $2.0 million in 2001.

6. Accrued Expenses

Accrued expenses included in current liabilities consist of the following:

	December 31,	
	2002	2001
Payroll and related benefits	$10,471	$ 5,000
Taxes other than income taxes	35,245	34,568
Interest	4,526	4,143
Postretirement benefits other than pension	1,228	881
Workers' compensation	528	713
Reclamation and mine closure	1,697	1,215
Other accrued expenses	5,548	7,210
	$59,243	$53,730

7. Debt and Financing Arrangements

On April 18, 2002, the Company completed a refinancing of its existing $675.0 million term loan. The new credit facility consisted of five- and six-year non-amortizing term loans totaling $675.0 million. The five-year non-amortizing term loan was for $150.0 million, and the six-year non-amortizing term loan was for $525.0 million. These were secured by the Company's membership interests in its subsidiaries and the

Company's receivable balance from Arch Coal. The rate of interest under both loans was a rate based on LIBOR (weighted average rate at December 31, 2002 of 4.5%; weighted average rate of 3.25% for $675 million term loan at December 31, 2001). The Company repaid and retired the outstanding indebtedness under both loans in June 2003.

The Company's term loans contain financial and other covenants that limit the ability of the Company to, among other things, effect acquisitions or dispositions and borrow additional funds and that require the Company to, among other things, maintain various financial ratios and comply with various other financial covenants. Failure by the Company to comply with such covenants could result in an event of default which, if not cured or waived, could have a material adverse effect on the Company. The Company was in compliance with these covenants at December 31, 2002.

The Company enters into interest rate swap agreements to modify the interest characteristics of outstanding debt. At December 31, 2002, the Company had interest rate swap agreements having a total notional value of $500 million including $250 million for which the fixed rate becomes effective as of October 2003. These swap agreements are used to convert variable rate debt to fixed rate debt. Under these swap agreements, the Company pays a weighted average fixed rate of 4.79% (before the credit spread over LIBOR) and is receiving a weighted average variable rate based upon 30-day and 90-day LIBOR. At December 31, 2002, the remaining terms of the swap agreements ranged from 32 to 57 months.

8. Fair Values of Financial Instruments

The following methods and assumptions were used by the Company in estimating its fair value disclosures for financial instruments:

Cash and cash equivalents: The carrying amounts approximate fair value.

Debt: The carrying amounts of the Company's borrowings under its revolving credit agreement, lines of credit, variable-rate term loans and other long-term debt approximate their fair value.

Interest rate swaps: The fair values of interest rate swaps are based on quoted prices, which reflect the present value of the difference between estimated future amounts to be paid and received. At December 31, 2002 and 2001 the fair value of these swaps are liabilities of $34.1 million and $22.5 million, respectively.

Heating oil swaps: The fair values of heating oil swaps are based on quoted prices. The fair value of these swaps are an asset of $0.3 million at December 31, 2002 and a liability of $.7 million at December 31, 2001.

9. Accrued Workers' Compensation

The Company is liable under the federal Mine Safety and Health Act of 1977, as amended, to provide for pneumoconiosis (black lung) benefits to eligible employees, former employees, and dependents with respect to claims filed by such persons on or after July 1, 1973. The Company is also liable under various states' statutes for black lung benefits. The Company currently provides for federal and state claims principally through a self-insurance program. Charges are being made to operations as determined by independent actuaries, at the present value of the actuarially computed present and future liabilities for such benefits over the employees' applicable years of service. In addition, the Company is liable for

workers' compensation benefits for traumatic injuries which are accrued as injuries are incurred. Workers' compensation costs (credits) include the following components:

	2002	2001	2000
Self-insured black lung benefits:			
Service cost	$ 72	$ 96	$ 64
Interest cost	187	181	205
Net amortization and deferral	(713)	(883)	(1,197)
	(454)	(606)	(928)
Other workers' compensation benefits	1,194	1,067	766
	$ 740	$ 461	$ (162)

The actuarial assumptions used in the determination of black lung benefits included a discount rate of 7.00% as of December 31, 2002 (7.50% and 7.75% as of December 31, 2001 and 2000, respectively) and a black lung benefit cost escalation rate of 4% in each year.

Summarized below is information about the amounts recognized in the consolidated balance sheets for workers' compensation benefits:

	December 31,	
	2002	2001
Actuarial present value for self-insured black lung:		
Accumulated black lung benefit obligation	$2,948	$3,093
Unrecognized net gain	2,650	2,975
	5,598	6,068
Traumatic and other workers' compensation	1,886	1,669
Accrued workers' compensation	7,484	7,737
Less amount included in accrued expenses	528	713
	$6,956	$7,024

Actuarial gains and losses are amortized over five years.

10. Employee Benefit Plans

Defined Benefit Pension and Other Postretirement Benefit Plans

The Company has non-contributory defined benefit pension plans covering certain of its salaried and non-union hourly employees. Benefits are generally based on the employee's years of service and compensation. The Company funds the plans in an amount not less than the minimum statutory funding requirements nor more than the maximum amount that can be deducted for federal income tax purposes.

The Company also currently provides certain postretirement medical/life insurance coverage for eligible employees. Generally, covered employees who terminate employment after meeting eligibility requirements are eligible for postretirement coverage for themselves and their dependents. The salaried employee postretirement medical/life plans are contributory, with retiree contributions adjusted periodically, and contain other cost-sharing features such as deductibles and coinsurance. The postretirement medical plan for retirees who were members of the United Mine Workers of America ("UMWA") is not contributory. The Company's current funding policy is to fund the cost of all postretirement medical/ life

ARCH WESTERN RESOURCES, LLC

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(In thousands of dollars) — (Continued)

insurance benefits as they are paid. Summaries of the changes in the benefit obligations, plan assets (primarily listed stocks and debt securities) and funded status of the plans are as follows:

	Pension Benefits		Other Postretirement Benefits	
	2002	2001	2002	2001
Change in Benefit Obligations				
Benefit obligations at January 1	$ 55,725	$48,407	$12,570	$12,344
Service cost	3,071	2,976	586	417
Interest cost	3,886	3,668	935	968
Benefits paid	(3,457)	(2,941)	(1,247)	(921)
Other-primarily actuarial (gain) Loss	(1,734)	3,615	1,784	(238)
Benefit obligations at December 31	$ 57,491	$55,725	$14,628	$12,570
Change in Plan Assets				
Value of plan assets at January 1	$ 49,609	$51,943	$ —	$ —
Actual return on plan assets	(5,245)	607	—	—
Employer contributions	—	—	1,247	921
Benefits paid	(3,457)	(2,941)	(1,247)	(921)
Value of plan assets at December 31	$ 40,907	$49,609	$ —	$ —
Funded Status of the Plans				
Accumulated obligations less plan assets	$ 16,584	$ 6,116	$14,628	$12,570
Unrecognized actuarial gain (loss)	(11,843)	(3,408)	(891)	1,081
Unrecognized net transition asset	37	117	—	—
Unrecognized prior service cost	422	562	2,150	2,526
Net liability recognized	$ 5,200	$ 3,387	$15,887	$16,177
Balance Sheet Amounts				
Minimum pension liability adjustment (other noncurrent liabilities)	$ (7,279)	$ (8)	$ —	$ —
Accrued benefit liabilities	12,479	3,395	15,887	16,177
Net liability recognized	5,200	3,387	15,887	16,177
Less current portion	5,200	—	1,228	881
Long term liability	$ —	$ 3,387	$14,659	$15,296

The following table provides the assumptions used to develop net periodic benefit cost and the actuarial present value of projected benefit obligations.

	Pension Benefits		Other Postretirement Benefits	
December 31,	2002	2001	2002	2001
Weighted Average Assumptions Discount rate	7.00%	7.50%	7.00%	7.50%
Rate of compensation increase	4.25%	4.50%	N/A	N/A
Expected return on plan assets	9.00%	9.00%	N/A	N/A

ARCH WESTERN RESOURCES, LLC

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(In thousands of dollars) — (Continued)

In determining the other postretirement benefit obligation at December 31, 2002, a 7.50% annual rate of increase in the cost of health care benefits is assumed for 2003. This rate gradually decreases to 5.00% in 2008 and remains at that level thereafter. The health care cost trend rate assumption can have a significant effect on the amounts reported. However, as the employer contribution cap was reached in 2002, the impact of health care cost trend rate changes is not material.

The following table details the components of pension and other postretirement benefit costs.

	Pension Benefits			Other Postretirement Benefits		
Year Ended December 31,	2002	2001	2000	2002	2001	2000
Service cost	$ 3,071	$ 2,976	$ 2,628	$ 586	$ 417	$ 485
Interest cost	3,886	3,668	3,143	935	968	1,179
Expected return on plan assets*	(4,825)	(4,306)	(4,099)	—	—	—
Other amortization and deferral	(319)	(1,063)	(1,242)	(564)	(404)	(298)
Curtailments	—	—	—	—	—	(2,646)
	$ 1,813	$ 1,275	$ 430	$ 957	$ 981	$(1,280)

* The Company does not fund its other postretirement liabilities.

In 2000, the Company amended its postretirement medical/life insurance plan to change eligibility requirements to 10 years of service after reaching age 45 for salaried and non-union hourly participants. This change triggered a curtailment that resulted in the recognition of $2.6 million in previously unrecognized prior service gains.

Other Plans

The Company sponsors savings plans which were established to assist eligible employees in providing for their future retirement needs. The Company's contributions to the plans were $2.8 million in 2002 and 2001, and $2.7 million in 2000.

11. Accrued Reclamation and Mine Closing Costs

The federal Surface Mining Control and Reclamation Act of 1977 and similar state statutes require that mine property be restored in accordance with specified standards and an approved reclamation plan. The Company accrues for the costs of final mine closure reclamation over the estimated useful mining life of the property. These costs relate to reclaiming the pit and support acreage at surface mines and sealing portals at deep mines. Other costs of final mine closure common to both types of mining are related to reclaiming refuse and slurry ponds. The Company also accrues for significant reclamation that is completed during the mining process prior to final mine closure. The establishment of the final mine closure reclamation liability and the other ongoing reclamation liability is based upon permit requirements and requires various estimates and assumptions, principally associated with costs and productivities. The Company accrued $7.4 million, $6.3 million and $5.7 million in 2002, 2001 and 2000, respectively, for current and final mine closure reclamation. Cash payments for final mine closure reclamation and current disturbances approximated $1.3 million, $3.1 million and $3.2 million for 2002, 2001 and 2000, respectively. Periodically, the Company reviews its entire environmental liability and makes necessary adjustments for permit changes as granted by state authorities, additional costs resulting from accelerated mine closures, and revisions to costs and productivities, to reflect current experience. These recosting adjustments are recorded in cost of coal sales. No adjustments were deemed necessary during 2002, 2001

and 2000. The Company's management believes it is making adequate provisions for all expected reclamation and other costs associated with mine closures.

As discussed in Note 1, beginning January 1, 2003, the Company will begin accounting for its final mine closure reclamation liabilities in accordance with FAS 143.

12. Concentration of Credit Risk and Major Customers

The Company places its cash equivalents in investment-grade short-term investments and limits the amount of credit exposure to any one commercial issuer.

The Company markets its coal principally to electric utilities in the United States. As of December 31, 2002 and 2001, accounts receivable from electric utilities located in the United States totaled $53.4 million and $57.1 million, respectively. Generally, credit is extended based on an evaluation of the customer's financial condition, and collateral is not generally required. Credit losses are provided for in the financial statements and historically have been minimal.

The Company is committed under long-term contracts to supply coal that meets certain quality requirements at specified prices. These prices are generally adjusted based on indices. Quantities sold under some of these contracts may vary from year to year within certain limits at the option of the customer. Sales (including spot sales) to major customers were as follows:

	2002	2001	2000
Southern Company	$53,693	$34,871	$16,691
Tennessee Valley Authority	$49,178	$38,940	$29,758

13. Related Party Transactions

The Company leases certain assets at its Thunder Basin operation from Little Thunder Leasing Company, a subsidiary of BP p.l.c. Lease expense for Little Thunder Leasing Company for the years ended December 31, 2002, 2001 and 2000 totaled $3.4 million, $7.6 and $7.5 million, respectively.

During 2000, the Company began mining on portions of a federal lease known as the Thundercloud tract. The Thundercloud tract contains approximately 353 million tons of demonstrated coal reserves and is contiguous to Company operations. Rights to the tract are owned by Arch Coal. Prior to mining, the Company entered into a sublease transaction with Arch Coal, which requires annual advance royalty payments which are fully recoupable against production on the Thundercloud tract. During 2002, 2001, and 2000, the Company made $12.7 million, $4.75 million, and $2.0 million, respectively, of advance royalty payments associated with this lease. The remaining payments are reflected in Note 14 under the caption "Royalties." In addition, the Company also pays a production royalty of 5.5% of realization and a $0.01 per ton override royalty for every ton mined from the Thundercloud tract, resulting in production royalties paid to Arch Coal of $7.3 million, $4.9 million, and $2.4 million during 2002, 2001 and 2000, respectively.

The Company's cash transactions are managed by Arch Coal. Cash paid to or from the Company that is not considered a distribution or a contribution is maintained in an Arch Coal receivable account. At December 31, 2002 and 2001, the receivable from Arch Coal was $333.8 million and $259.8 million, respectively. This amount earns interest from Arch Coal at the prime interest rate. Interest earned for the years ended December 31, 2002, 2001 and 2000 was $13.6 million, $15.5 million and $13.7 million, respectively. The receivable is payable on demand by the Company; however, it is currently management's intention to not demand payment of the receivable within the next year. Therefore, the receivable is classified on the consolidated balance sheets as long-term.

ARCH WESTERN RESOURCES, LLC

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(In thousands of dollars) — (Continued)

The Company has historically paid selling, general and administrative services fees to Arch Coal. These fees were not intended to represent the fair value of the services performed, nor did they approximate amounts that would be expected to be incurred if the Company were a stand-alone entity. In connection with the Company's registration of debt securities with the Securities and Exchange Commission, management of Arch Coal allocated additional expenses to the Company in the amount of $10.7 million, $10.8 million and $9.0 million for the years ended December 31, 2002, 2001 and 2000, respectively. Expenses were allocated based on Arch Coal's best estimates of proportional or incremental costs, whichever is more representative of costs incurred by Arch Coal on behalf of the Company. Allocated expenses are not necessarily representative of costs that would be incurred if the company operated on a stand-alone basis. The following additional costs have been included in selling, general and administrative expenses in the accompanying condensed consolidated statements of operations. Arch Coal contributed these additional expenses to the Company. These additional expenses are not subject to repayment by the Company and are reflected as a capital contribution to the Company from Arch Coal.

	December 31,		
	2002	2001	2000
Net income (loss) as previously reported	$ 30,610	$ 42,119	$(11,708)
Adjustments for expenses not previously allocated	(10,701)	(10,777)	(9,041)
Net income (loss) after allocated expenses	$ 19,909	$ 31,342	$(20,749)

As described in Note 1, the Company has a 65% ownership interest in Canyon Fuel which is accounted for on the equity method. The Company receives administration and production fees from Canyon Fuel for managing the Canyon Fuel operations. The fee arrangement is calculated annually and is approved by the Canyon Fuel Management Board. The production fee is calculated on a per-ton basis while the administration fee represents the costs incurred by the Company's employees related to Canyon Fuel administrative matters. The fees recognized as other income by the Company and as expense by Canyon Fuel were $9.5 million, $8.1 million and $7.4 million for the years ended December 31, 2002, 2001 and 2000, respectively. Amounts receivable from Canyon Fuel were $6.3 million and $2.7 million as of December 31, 2002 and 2001, respectively. Such amounts are classified as other receivables in the Consolidated Balance Sheets.

14. Commitments and Contingencies

The Company leases equipment, land and various other properties under noncancelable long-term leases, expiring at various dates. Rental expense related to these operating leases amounted to $5.1 million in 2002, $9.1 million in 2001 and $9.6 million in 2000. The Company has also entered into various non-cancelable royalty lease agreements and federal lease bonus payments under which future minimum payments are due.

ARCH WESTERN RESOURCES, LLC

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(In thousands of dollars) — (Continued)

Minimum payments due in future years under these agreements in effect at December 31, 2002 are as follows (in thousands):

	Operating Leases	Royalties
2003	$ 4,281	$ 10,630
2004	1,669	10,629
2005	1,669	10,572
2006	2,245	10,546
2007	608	10,489
Thereafter	866	64,164
	$11,338	$117,030

The Company is a party to numerous claims and lawsuits with respect to various matters. The Company provides for costs related to contingencies when a loss is probable and the amount is reasonably determinable. After conferring with counsel, it is the opinion of management that the ultimate resolution of pending claims given existing legal accruals, will not have a material adverse effect on the consolidated financial condition, results of operations or liquidity of the Company.

15. Cash Flow

The changes in operating assets and liabilities as shown in the consolidated statements of cash flows are comprised of the following:

	2002	2001	2000
Decrease (increase) in operating assets:			
Trade and other receivables	$ 4,513	$ (7,403)	$ (3,057)
Receivable from Arch Coal, Inc.	(70,747)	(70,736)	(55,710)
Inventories	(4,259)	(3,285)	2,939
Increase (decrease) in operating liabilities:			
Accounts payable and accrued expenses	10,644	(11,739)	3,476
Accrued postretirement benefits other than pension	(637)	48	(2,473)
Accrued reclamation and mine closure	5,668	6,374	4,429
Accrued workers' compensation	(68)	(402)	(1,725)
Changes in operating assets and liabilities	$(54,886)	$(87,143)	$(52,121)

16. Supplemental Condensed Consolidating Financial Information

The Company anticipates filing a registration statement with the Securities and Exchange Commission for the registration of 6 3/4% Senior Notes due 2013. Certain subsidiaries of the Company have fully and unconditionally guaranteed the Notes. The guarantees are joint and several.

The following tables present the condensed consolidating financial information for (i) the Company, (ii) the issuer of the Notes being registered (Arch Western Finance, LLC, a wholly-owned subsidiary of the Company) (iii) its wholly-owned subsidiaries (Thunder Basin Coal Company, L.L.C., Mountain Coal Company, L.L.C., and Arch of Wyoming, LLC), on a combined basis, which are guarantors under the Notes, and (iv) its majority owned subsidiary (Canyon Fuel Company, LLC) which is not a guarantor under the Notes. Separate financial statements of Canyon Fuel Company, LLC will be included in the registration statement. Amounts included in the following consolidating condensed financial statements for Canyon Fuel represent amounts recorded by the Company under the equity method of accounting.

ARCH WESTERN RESOURCES, LLC

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(In thousands of dollars) — (Continued)

STATEMENTS OF OPERATIONS
Year ended December 31, 2002

	Parent Company	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Consolidated
Coal sales	$ —	$492,191	$ —	$ —	$492,191
Income from equity investment	52,724	—	7,774	(52,724)	7,774
Other revenues	11,051	3,164	—	—	14,215
	63,775	495,355	7,774	(52,724)	514,180
Cost of coal sales	891	449,253	—	—	450,144
Selling, general and administrative	13,011	—	—	—	13,011
Sales contract amortization	—	1,201	—	—	1,201
	13,902	450,454	—	—	464,356
Income from operations	49,873	44,901	7,774	(52,724)	49,824
Interest expense	(43,566)	(38)	—	—	(43,604)
Interest income primarily from Arch Coal, Inc.	13,602	87	—	—	13,689
	(29,964)	49	—	—	(29,915)
Net income (loss)	$ 19,909	$ 44,950	$7,774	$(52,724)	$ 19,909

ARCH WESTERN RESOURCES, LLC

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(In thousands of dollars) — (Continued)

BALANCE SHEET
December 31, 2002

	Parent Company	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Consolidated
Cash and cash equivalents	$ 194	$ 55	$ —	$ —	$ 249
Trade accounts receivable	56,258	—	—	—	56,258
Other receivables	1,287	4,178	—	—	5,465
Inventories	—	35,727	—	—	35,727
Other current assets	2,720	2,304	—	—	5,024
Total current assets	60,459	42,264	—	—	102,723
Property, plant and equipment, net	—	765,420	—	—	765,420
Investment in subsidiaries	1,122,649	—	160,787	(1,122,649)	160,787
Coal supply agreements	—	5,223	—	—	5,223
Receivable from Arch Coal, Inc.	333,825	—	—	—	333,825
Intercompanies	(288,844)	288,844	—	—	—
Other	5,083	—	—	—	5,083
Total other assets	1,172,713	294,067	160,787	(1,122,649)	504,918
Total assets	$1,233,172	$1,101,751	$160,787	$(1,122,649)	$1,373,061
Accounts payable	$ 6,784	$ 24,386	$ —	$ —	$ 31,170
Accrued expenses	15,408	43,835	—	—	59,243
Total current liabilities	22,192	68,221	—	—	90,413
Long term debt	675,000	—	—	—	675,000
Accrued postretirement benefits other than pension	14,659	—	—	—	14,659
Accrued reclamation and mine closure	—	67,372	—	—	67,372
Accrued workers' compensation	5,580	1,376	—	—	6,956
Other noncurrent liabilities	41,767	2,920	—	—	44,687
Total liabilities	759,198	139,889	—	—	899,087
Members' equity	473,974	961,862	160,787	(1,122,649)	473,974
Total liabilities & members' equity	$1,233,172	$1,101,751	$160,787	$(1,122,649)	$1,373,061

ARCH WESTERN RESOURCES, LLC

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(In thousands of dollars) — (Continued)

STATEMENT OF CASH FLOWS
Year ended December 2002

	Parent Company	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Consolidated
Operating Activities				
Cash provided by (used in) operating activities	$(12,808)	$ 63,767	$ 17,121	$ 68,080
Investing Activities				
Additions to property, plant, and equipment	—	(51,360)	—	(51,360)
Proceeds from dispositions of PP & E	—	11	—	11
Additions to prepaid royalties	—	(12,750)	—	(12,750)
Cash used in investing activities	—	(64,099)	—	(64,099)
Financing Activities				
Debt financing costs	(4,193)	—	—	(4,193)
Transactions with affiliates	17,121	—	(17,121)	—
Cash provided by (used in) financing activities	12,928	—	(17,121)	(4,193)
Increase (Decrease) in cash and cash equivalents	120	(332)	—	(212)
Cash and cash equivalents, beginning of period	74	387	—	461
Cash and cash equivalents, end of period	$ 194	$ 55	$ —	$ 249

ARCH WESTERN RESOURCES, LLC

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(In thousands of dollars) — (Continued)

STATEMENTS OF OPERATIONS
Year ended December 31, 2001

	Parent Company	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Consolidated
Coal sales	$ —	$468,137	$ —	$ —	$468,137
Income from equity investment	59,615	—	26,250	(59,615)	26,250
Other revenues	12,969	8,357	—	—	21,326
	72,584	476,494	26,250	(59,615)	515,713
Cost of coal sales	(892)	441,255	—	—	440,363
Selling, general and administrative	13,004	—	—	—	13,004
Sales contract amortization	—	1,976	—	—	1,976
	12,112	443,231	—	—	455,343
Income from operations	60,472	33,263	26,250	(59,615)	60,370
Interest expense	(44,604)	(33)	—	—	(44,637)
Interest income primarily from Arch Coal, Inc.	15,474	135	—	—	15,609
	(29,130)	102	—	—	(29,028)
Net income (loss)	$ 31,342	$ 33,365	$26,250	$(59,615)	$ 31,342

ARCH WESTERN RESOURCES, LLC

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(In thousands of dollars) — (Continued)

BALANCE SHEET
December 31, 2001

	Parent Company	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Consolidated
Cash and cash equivalents	$ 74	$ 387	$ —	$ —	$ 461
Trade accounts receivable	64,087	—	—	—	64,087
Other receivables	941	1,208	—	—	2,149
Inventories	—	31,468	—	—	31,468
Prepaid royalties	—	1,344	—	—	1,344
Other current assets	2,397	3,437	—	—	5,834
Total current assets	67,499	37,844	—	—	105,343
Property, plant and equipment, net	—	785,532	—	—	785,532
Investment in subsidiaries	1,089,516	—	170,686	(1,089,516)	170,686
Coal supply agreements	—	6,424	—	—	6,424
Receivable from Arch Coal, Inc.	259,822	—	—	—	259,822
Intercompanies	(217,358)	217,358	—	—	—
Other	1,881	—	—	—	1,881
Total other assets	1,133,861	223,782	170,686	(1,089,516)	438,813
Total assets	$1,201,360	$1,047,158	$170,686	$(1,089,516)	$1,329,688
Accounts payable	$ 4,266	$ 21,773	$ —	$ —	$ 26,039
Accrued expenses	11,331	42,399	—	—	53,730
Total current liabilities	15,597	64,172	—	—	79,769
Long term debt	675,000	—	—	—	675,000
Accrued postretirement benefits other than pension	15,296	—	—	—	15,296
Accrued reclamation and mine closure	—	61,704	—	—	61,704
Accrued workers' compensation	6,044	980	—	—	7,024
Accrued pension cost	3,387	—	—	—	3,387
Other noncurrent liabilities	25,627	1,472	—	—	27,099
Total liabilities	740,951	128,328	—	—	869,279
Members' equity	460,409	918,830	170,686	(1,089,516)	460,409
Total liabilities & members' equity	$1,201,360	$1,047,158	$170,686	$(1,089,516)	$1,329,688

ARCH WESTERN RESOURCES, LLC

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(In thousands of dollars) — (Continued)

STATEMENT OF CASH FLOWS
Year ended December 2001

	Parent Company	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Consolidated
Operating Activities				
Cash provided by (used in) operating activities	$(42,219)	$ 29,758	$ 42,219	$ 29,758
Investing Activities				
Additions to property, plant, and equipment	—	(32,142)	—	(32,142)
Proceeds from dispositions of PP & E	—	7,501	—	7,501
Additions to prepaid royalties	—	(4,750)	—	(4,750)
Cash used in investing activities	—	(29,391)	—	(29,391)
Financing Activities				
Transactions with affiliates	42,219	—	(42,219)	—
Cash provided by (used in) financing activities	42,219	—	(42,219)	—
Increase in cash and cash equivalents	—	367	—	367
Cash and cash equivalents, beginning of period	74	20	—	94
Cash and cash equivalents, end of period	$ 74	$ 387	$ —	$ 461

ARCH WESTERN RESOURCES, LLC

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(In thousands of dollars) — (Continued)

STATEMENTS OF OPERATIONS
Year ended December 31, 2000

	Parent Company	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Consolidated
Coal sales	$ —	$393,619	$ —	$ —	$393,619
Income from equity investment	10,561	—	12,837	(10,561)	12,837
Other revenues	7,358	2,772	—	—	10,130
	17,919	396,391	12,837	(10,561)	416,586
Cost of coal sales	(5,658)	389,266	—	—	383,608
Selling, general, and administrative	10,991	—	—	—	10,991
Sales contract amortization	—	9,536	—	—	9,536
	5,333	398,802	—	—	404,135
Income from operations	12,586	(2,411)	12,837	(10,561)	12,451
Interest expense	(47,060)	103	—	—	(46,957)
Interest income primarily from Arch Coal, Inc.	13,725	32	—	—	13,757
	(33,335)	135	—	—	(33,200)
Net income (loss)	$(20,749)	$ (2,276)	$12,837	$(10,561)	$ (20,749)

ARCH WESTERN RESOURCES, LLC

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(In thousands of dollars) — (Continued)

STATEMENT OF CASH FLOWS
Year ended December 2000

	Parent Company	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Consolidated
Operating Activities				
Cash provided by (used in) operating activities	$(24,867)	$ 23,249	$ 23,897	$ 22,279
Investing Activities				
Additions to property, plant, and equipment	—	(28,535)	—	(28,535)
Proceeds from coal supply agreements	—	8,512	—	8,512
Additions to prepaid royalties	—	(2,500)	—	(2,500)
Proceeds from dispositions of PP & E	—	134	—	134
Cash used in investing activities	—	(22,389)	—	(22,389)
Financing Activities				
Transactions with affiliates	23,897	—	(23,897)	—
Cash provided by (used in) financing activities	—	—	—	—
Increase (Decrease) in cash and cash equivalents	(970)	860	—	(110)
Cash and cash equivalents, beginning of period	1,044	(840)	—	204
Cash and cash equivalents, end of period	$ 74	$ 20	$ —	94

ARCH WESTERN RESOURCES, LLC

CONDENSED CONSOLIDATED BALANCE SHEETS

(IN THOUSANDS)

	March 31, 2003	December 31, 2002
	(Unaudited)	
Assets		
Current assets		
Cash and cash equivalents	$ 1,706	$ 249
Trade receivables	40,483	56,258
Other receivables	5,208	5,465
Inventories	36,657	35,727
Other	4,623	5,024
Total current assets	88,677	102,723
Property, plant and equipment, net	784,332	765,420
Other assets		
Investment in Canyon Fuel	161,476	160,787
Coal supply agreements	5,128	5,223
Receivable from Arch Coal, Inc.	361,102	333,825
Other	4,856	5,083
	532,562	504,918
Total assets	$1,405,571	$1,373,061
Liabilities and members' equity		
Current liabilities		
Accounts payable	$ 23,865	$ 31,170
Accrued expenses	75,849	59,243
Total current liabilities	99,714	90,413
Long-term debt	675,000	675,000
Accrued postretirement benefits other than pension	13,746	14,659
Asset retirement obligations	97,765	67,372
Accrued workers' compensation	6,917	6,956
Other noncurrent liabilities	47,006	44,687
Total liabilities	940,148	899,087
Members' equity	465,423	473,974
Total liabilities and members' equity	$1,405,571	$1,373,061

See notes to condensed consolidated financial statements.

ARCH WESTERN RESOURCES, LLC

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(IN THOUSANDS)
(UNAUDITED)

	Three Months Ended March 31,	
	2003	**2002**
Revenues		
Coal sales	$113,288	$110,060
Income from equity investment	8,151	1,268
Other revenues	3,138	2,509
	124,577	113,837
Costs and expenses		
Cost of coal sales	106,004	105,841
Selling, general and administrative expenses	3,789	3,180
Amortization of coal supply agreements	95	164
	109,888	109,185
Income from operations	14,689	4,652
Interest expense, net:		
Interest expense	(10,125)	(9,609)
Interest income primarily from Arch Coal, Inc.	3,547	3,121
	(6,578)	(6,488)
Income (loss) before cumulative effect of accounting change	8,111	(1,836)
Cumulative effect of accounting change	(18,278)	—
Net loss	$ (10,167)	$ (1,836)

See notes to condensed consolidated financial statements.

ARCH WESTERN RESOURCES, LLC

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(IN THOUSANDS)
(UNAUDITED)

	Three Months Ended March 31,	
	2003	**2002**
Operating activities		
Net loss	$(10,167)	$ (1,836)
Adjustments to reconcile to cash provided by operating activities:		
Depreciation, depletion and amortization	14,865	16,646
Prepaid royalties expensed	—	926
Accretion on asset retirement obligations	2,573	—
Net gain on disposition of assets	—	(30)
Income from equity investment	(8,151)	(1,268)
Net distributions from equity investment	6,325	15,346
Cumulative effect of accounting change	18,278	—
Allocation of expenses paid by Arch Coal, Inc.	3,294	2,665
Changes in:		
Receivables	16,032	15,676
Inventories	(930)	(4,349)
Accounts payable and accrued expenses	(3,877)	877
Note receivable/payable to Arch Coal	(27,301)	(23,661)
Accrued postretirement benefits other than pension	(913)	(76)
Asset retirement obligations	(3,617)	1,546
Accrued workers' compensation benefits	(39)	194
Other	1,506	2,217
Cash provided by operating activities	7,878	24,873
Investing activities		
Additions to property, plant and equipment	(6,391)	(21,907)
Proceeds from dispositions of property, plant and equipment	—	30
Additions to prepaid royalties	—	(2,750)
Cash used in investing activities	(6,391)	(24,627)
Financing activities		
Deferred financing costs	(30)	—
Cash provided by financing activities	(30)	—
Increase in cash and cash equivalents	1,457	246
Cash and cash equivalents, beginning of period	249	461
Cash and cash equivalents, end of period	$ 1,706	$ 707

See notes to condensed consolidated financial statements.

ARCH WESTERN RESOURCES, LLC

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(In thousands of dollars)
MARCH 31, 2003
(UNAUDITED)

Note A — General

The accompanying unaudited Condensed Consolidated Financial Statements have been prepared in accordance with generally accepted accounting principles for interim financial reporting and Securities and Exchange Commission regulations, but are subject to any year-end adjustments that may be necessary. In the opinion of management, all adjustments (consisting of normal recurring accruals) considered necessary for a fair presentation have been included. Results of operations for the period ended March 31, 2003 are not necessarily indicative of results to be expected for the year ending December 31, 2003.

Arch Western Resources, LLC (the "Company") was formed as a joint venture on June 1, 1998 when Arch Coal, Inc. ("Arch Coal") acquired the United States coal operations of Atlantic Richfield Company and combined these operations with Arch Coal's western operations. Arch Western's membership interests are owned 99% by Arch Coal and 1% by an affiliate of BP p.l.c. ("BP"), the successor to Atlantic Richfield Company. Arch Coal's ownership is comprised entirely of common membership interests, while BP's ownership is comprised of a 0.5% common membership interest and a 0.5% preferred membership interest.

Under the terms of the Company's membership agreement, net profits and losses are allocated only to the common membership interests on the basis of 99.5% to Arch Coal and 0.5% to BP. No profit or loss is allocated to the preferred membership interest of BP. Except for a Preferred Return, distributions to members are allocated on the basis of 99.5% to Arch Coal and 0.5% to BP. The Preferred Return entitles BP to receive an annual distribution from the common membership interests equal to 4% of the preferred capital account balance at the end of the year. The Preferred Return is payable at the Company's discretion.

The Company mines and markets steam coal from surface and deep mines for sale to utility and industrial customers in the United States and certain export markets. The Company's principal subsidiaries are Thunder Basin Coal Company, L.L.C., which operates a surface coal mine and owns one idle mine in the Powder River Basin in Wyoming; Mountain Coal Company, L.L.C., which operates one underground coal mine in Colorado; and Arch of Wyoming, which operates two surface coal mines in the Hanna Basin in Wyoming. In addition to these wholly owned operating units, the Company has a 65% interest in Canyon Fuel Company, LLC ("Canyon Fuel"). Canyon Fuel operates three underground coal mines in Utah. This interest is accounted for on the equity method in the financial statements as a result of certain super-majority voting rights in the Canyon Fuel joint venture agreement. Income from Canyon Fuel is reflected in the consolidated statements of operations as income from equity investment.

Note B — Adoption of FAS 143

On January 1, 2003, the Company adopted Statement of Financial Accounting Standards No. 143, *Accounting for Asset Retirement Obligations* (FAS 143). FAS 143 requires legal obligations associated with the retirement of long-lived assets to be recognized at fair value at the time the obligations are incurred. Upon initial recognition of a liability, that cost should be capitalized as part of the related long-lived asset and allocated to expense over the useful life of the asset. Previously, the Company accrued for the expected costs of these obligations over the estimated useful mining life of the property.

The cumulative effect of the change on prior years resulted in a charge to income of $18.3 million, which is included in income for the quarter ended March 31, 2003. In addition, the net income of the Company, excluding the cumulative effect of accounting change, for the quarter ended March 31, 2003 is $1.2 million less than it would have been if the Company had continued to account for these obligations

under its old method. The unaudited proforma amounts below reflect the retroactive application of FAS 143 and the corresponding elimination of the cumulative accounting change:

	Three Months Ended March 31,	
	2003	2002
Net (loss)	$(10,167)	$(1,836)
Proforma net income	8,111	(3,111)

If the Company had accounted for its asset retirement obligations in accordance with FAS 143 for all periods presented, the asset retirement obligation liability (including amounts classified as current) would have been $104.2 million, $106.6 million, and $113.7 million at January 1, 2002, March 31, 2002, and December 31, 2002, respectively.

Note C — Investment in Canyon Fuel

The following table presents unaudited summarized financial information for Canyon Fuel, which is accounted for on the equity method.

	Three Months Ended March 31,	
Condensed Income Statement Information	2003	2002
Revenues	$59,015	$77,648
Total costs and expenses	49,896	77,155
Net income before cumulative effect of accounting change	$ 9,119	$ 493
65% of Canyon Fuel net income before cumulative effect of accounting change	$ 5,927	$ 320
Effect of purchase adjustments	2,224	948
Arch Western's income from its equity investment in Canyon Fuel	$ 8,151	$ 1,268

The Company's income from its equity investment in Canyon Fuel represents 65% of Canyon Fuel's net income after adjusting for the effect of purchase adjustments primarily related to its investment in Canyon Fuel. The Company's investment in Canyon Fuel reflects purchase adjustments primarily related to the reduction in amounts assigned to sales contracts, mineral reserves and other property, plant and equipment. The purchase adjustments are amortized consistent with the underlying assets of the joint venture.

Effective January 1, 2003, Canyon Fuel adopted FAS 143 and recorded a cumulative expense loss of $2.4 million. The Company's 65% share of this amount was offset by purchase adjustments of $0.5 million. These amounts are included in the cumulative effect of accounting change reported in the Company's condensed consolidated statements of operations.

ARCH WESTERN RESOURCES, LLC

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

(In thousands of dollars)

Note D — Other Comprehensive Income

Other comprehensive income items under FAS 130, *Reporting Comprehensive Income,* are transactions recorded in members' equity during the year from non-owner sources. Following are the items included in accumulated other comprehensive income (loss):

	Financial Derivatives	Minimum Pension Liability Adjustments	Accumulated Other Comprehensive Loss
Balance, January 1, 2002	$(25,279)	$(2,051)	$(27,330)
Three months ended March 31, 2002	$ 6,699	$ —	$ 6,699
Balance, March 31, 2002	$(18,580)	$(2,051)	$(20,631)

	Financial Derivatives	Minimum Pension Liability Adjustments	Accumulated Other Comprehensive Loss
Balance, January 1, 2003	$(34,729)	$(9,550)	$(44,279)
Three months ended March 31, 2003	$ (1,654)	$ —	$ (1,654)
Balance, March 31, 2003	$(36,383)	$(9,550)	$(45,933)

Note E — Inventories

Inventories consists of the following:

	March 31, 2003	December 31, 2002
Coal	$16,638	$15,475
Repair parts and supplies	20,019	20,252
	$36,657	$35,727

Note F — Debt

The Company's credit facility consisted of five- and six-year non-amortizing term loans totaling $675.0 million. The five-year non-amortizing term loan was for $150.0 million, and the six-year non-amortizing term loan was for $525.0 million. These were secured by the Company's membership interests in its subsidiaries and the Company's receivable balance from Arch Coal. The rate of interest under both loans was a variable rate based on LIBOR. The Company repaid and retired the outstanding indebtedness under both loans in June 2003.

Note G — Contingencies

The Company is a party to numerous claims and lawsuits with respect to various matters. The Company provides for costs related to contingencies when a loss is probable and the amount is reasonably determinable. After conferring with counsel, it is the opinion of management that the ultimate resolution of these claims, to the extent not previously provided for, will not have a material adverse effect on the consolidated financial position, results of operations or liquidity of the Company.

ARCH WESTERN RESOURCES, LLC

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

(In thousands of dollars)

Note H — Related Party Transactions

The Company has historically paid selling, general and administrative services fees to Arch Coal. These fees were not intended to represent the fair value of the services performed, nor did they approximate amounts that would be expected to be incurred if the Company were a stand-alone entity. In connection with the Company's registration of debt securities with the Securities and Exchange Commission, management of Arch Coal allocated additional expenses to the Company in the amount of $3.3 million in the first quarter of 2003 and $2.7 million in the first quarter of 2002. Expenses were allocated based on Arch Coal's best estimates of proportional or incremental costs, whichever is more representative of costs incurred by Arch Coal on behalf of the Company. The following additional costs have been included in selling, general and administrative expenses in the accompanying condensed consolidated statements of operations.

	March 31, 2003	March 31, 2002
Net income (loss) as previously reported	$ (6,873)	$ 829
Adjustments for expenses not previously allocated	(3,294)	(2,665)
Net loss after allocated expenses	$(10,167)	$(1,836)

Note I — Reclassifications

Certain amounts in the 2002 financial statements have been reclassified to conform with the classifications in the 2003 financial statements with no effect on previously reported net income (loss) or members' equity.

Note J — Supplemental Condensed Consolidating Financial Information

The Company anticipates issuing 6 3/4% Senior Notes due 2013 pursuant to this prospectus. Certain subsidiaries of the Company have fully and unconditionally guaranteed the Notes. The guarantees are joint and several.

The following tables present the condensed consolidating financial information for (i) the Company, (ii) the issuer of the Notes being registered (Arch Western Finance, LLC, a wholly-owned subsidiary of the Company) (iii) its wholly-owned subsidiaries (Thunder Basin Coal Company, L.L.C., Mountain Coal Company, L.L.C., and Arch of Wyoming, LLC), on a combined basis, which are guarantors under the Notes, and (iv) its majority owned subsidiary (Canyon Fuel Company, LLC) which is not a guarantor under the Notes. Separate financial statements of Canyon Fuel Company, LLC are incorporated by reference in this prospectus. Amounts included in the following consolidating condensed financial statements for Canyon Fuel represent amounts recorded by the Company under the equity method of accounting.

ARCH WESTERN RESOURCES, LLC

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

(In thousands of dollars)

STATEMENTS OF OPERATIONS
Three Months ended March 31, 2003

	Parent Company	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Consolidated
Coal sales	$ —	$113,288	$ —	$ —	$113,288
Income from equity investment	16,056	—	8,151	(16,056)	8,151
Other revenues	3,033	105	—	—	3,138
	19,089	113,393	8,151	(16,056)	124,577
Cost of coal sales	613	105,391	—	—	106,004
Selling, general and administrative	3,789	—	—	—	3,789
Sales contract amortization	—	95	—	—	95
	4,402	105,486	—	—	109,888
Income from operations	14,687	7,907	8,151	(16,056)	14,689
Interest expense	(10,122)	(3)	—	—	(10,125)
Interest income primarily from Arch Coal, Inc.	3,546	1	—	—	3,547
	(6,576)	(2)	—	—	(6,578)
Income before cumulative effect	8,111	7,905	8,151	(16,056)	8,111
Cumulative effect of accounting change	(18,278)	—	—	—	(18,278)
Net income (loss)	$(10,167)	$ 7,905	$8,151	$(16,056)	$ (10,167)

ARCH WESTERN RESOURCES, LLC

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

(In thousands of dollars)

BALANCE SHEET
March 31, 2003

	Parent Company	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Consolidated
Cash and cash equivalents	$ 1,630	$ 76	$ —	$ —	$ 1,706
Trade accounts receivable	40,483	—	—	—	40,483
Other receivables	1,179	4,029	—	—	5,208
Inventories	—	36,657	—	—	36,657
Other current assets	1,763	2,860	—	—	4,623
Total current assets	45,055	43,622	—	—	88,677
Property, plant and equipment, net	—	784,332	—	—	784,332
Investment in subsidiaries	1,131,328	—	161,476	(1,131,328)	161,476
Coal supply agreements	—	5,128	—	—	5,128
Receivable from Arch Coal, Inc.	361,102	—	—	—	361,102
Intercompanies	(319,751)	319,751	—	—	—
Other	4,856	—	—	—	4,856
Total other assets	1,177,535	324,879	161,476	(1,131,328)	532,562
Total assets	$1,222,590	$1,152,833	$161,476	$(1,131,328)	$1,405,571
Accounts payable	$ 3,157	$ 20,708	$ —	$ —	$ 23,865
Accrued expenses	15,951	59,898	—	—	75,849
Total current liabilities	19,108	80,606	—	—	99,714
Long term debt	675,000	—	—	—	675,000
Accrued postretirement benefits other than pension	13,746	—	—	—	13,746
Accrued reclamation and mine closure	—	97,765	—	—	97,765
Accrued workers' compensation	5,641	1,276	—	—	6,917
Other noncurrent liabilities	43,672	3,334	—	—	47,006
Total liabilities	757,167	182,981	—	—	940,148
Members' equity	465,423	969,852	161,476	(1,131,328)	465,423
Total liabilities & members' equity	$1,222,590	$1,152,833	$161,476	$(1,131,328)	$1,405,571

ARCH WESTERN RESOURCES, LLC

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

(In thousands of dollars)

STATEMENT OF CASH FLOWS
Three Months ended March 31, 2003

	Parent Company	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Consolidated
Operating Activities				
Cash provided by (used in) operating activities	$(4,859)	$ 6,412	$ 6,325	$ 7,878
Investing Activities				
Additions to property, plant, and equipment	—	(6,391)	—	(6,391)
Cash used in investing activities	—	(6,391)	—	(6,391)
Financing Activities				
Debt financing costs	(30)	—	—	(30)
Transactions with affiliates	6,325	—	(6,325)	—
Cash provided by (used in) financing activities	6,295	—	(6,325)	(30)
Increase in cash and cash equivalents	1,436	21	—	1,457
Cash and cash equivalents, beginning of period	194	55	—	249
Cash and cash equivalents, end of period	$ 1,630	$ 76	$ —	$ 1,706

ARCH WESTERN RESOURCES, LLC

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

(In thousands of dollars)

STATEMENTS OF OPERATIONS
Three Months ended March 31, 2002

	Parent Company	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Consolidated
Coal sales	$ —	$110,060	$ —	$ —	$110,060
Income from equity investment	5,925	—	1,268	(5,925)	1,268
Other revenues	2,386	123	—	—	2,509
	8,311	110,183	1,268	(5,925)	113,837
Cost of coal sales	474	105,367	—	—	105,841
Selling, general and administrative	3,180	—	—	—	3,180
Sales contract amortization	—	164	—	—	164
	3,654	105,531	—	—	109,185
Income from operations	4,657	4,652	1,268	(5,925)	4,652
Interest expense	(9,609)	—	—	—	(9,609)
Interest income primarily from Arch Coal, Inc.	3,116	5	—	—	3,121
	(6,493)	5	—	—	(6,488)
Net income (loss)	$(1,836)	$ 4,657	$1,268	$(5,925)	$ (1,836)

ARCH WESTERN RESOURCES, LLC

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

(In thousands of dollars)

STATEMENT OF CASH FLOWS
Three Months ended March 31, 2002

	Parent Company	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Consolidated
Operating Activities				
Cash provided by (used in) operating activities	$(14,733)	$ 24,260	$ 15,346	$ 24,873
Investing Activities				
Additions to property, plant, and equipment	—	(21,907)	—	(21,907)
Proceeds from dispositions of PP & E	—	30	—	30
Additions to prepaid royalties	—	(2,750)	—	(2,750)
Cash used in investing activities	—	(24,627)	—	(24,627)
Financing Activities				
Transactions with affiliates	15,346	—	(15,346)	—
Cash provided by (used in) financing activities	15,346	—	(15,346)	—
Increase (Decrease) in cash and cash equivalents	613	(367)	—	246
Cash and cash equivalents, beginning of period	74	387	—	461
Cash and cash equivalents, end of period	$ 687	$ 20	$ —	$ 707

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 20. ***Indemnification of Directors and Officers***

The Issuer and each subsidiary guarantor are limited liability companies organized under the laws of the State of Delaware. Section 18-108 of the Delaware Limited Liability Company Act, or the Delaware LLC Act, provides that a limited liability company may, and shall have the power to, indemnify and hold harmless any member or manager or other person from and against any and all claims and demands whatsoever, subject to such standards and restrictions, if any, as are set forth in its limited liability company agreement.

The Limited Liability Company Agreements of Arch of Wyoming, LLC and Arch Western Finance, LLC each provide that no member, director or officer of either company will be liable to the company, or any other person or entity who has an interest in the company, for any loss, damage or claim incurred by reason of any act or omission performed or omitted by such member, director or officer in good faith on behalf of the company and in a manner reasonably believed to be within the scope of the authority conferred on such member, director or officer by the company's limited liability company agreement, unless such act or omission constituted bad faith, gross negligence, fraud or willful misconduct. To the fullest extent permitted by applicable law, indemnified parties will be entitled to indemnification from the company for any loss, damage or claim incurred by an indemnified party by reason of any act or omission performed or omitted by an indemnified party in good faith on behalf of the company and in a manner reasonably believed to be within the scope of the authority conferred on the indemnified party by the company's limited liability company agreement, unless such act or omission constituted bad faith, gross negligence, fraud or willful misconduct; *provided, however,* that any indemnity will be provided out of and to the extent of the company's assets only, and no member will have personal liability on account of any indemnification obligation.

The Limited Liability Company Agreement of Arch Western Resources, LLC provides that no member or officer will be liable in damages for any act or failure to act in such person's capacity as a member or officer on behalf of Arch Western Resources unless such act or omission constituted bad faith, gross negligence, fraud or willful misconduct of such person or a violation by such person of the Limited Liability Company Agreement of Arch Western Resources. Subject to the Limited Liability Company Agreement of Arch Western Resources, each member and officer will be indemnified and held harmless by Arch Western Resources, its receiver or trustee from and against any liability for damages and expenses, including reasonable attorneys' fees and disbursements and amounts paid in settlement, resulting from any threatened, pending or completed action, suit or proceeding relating to or arising out of such person's acts or omissions in such person's capacity as a member or an officer on behalf of Arch Western Resources, except to the extent that such damages or expenses result from the bad faith, gross negligence, fraud or willful misconduct of such person or a violation by such person of the Limited Liability Company Agreement of Arch Western Resources. Any indemnity by Arch Western Resources, its receiver or trustee will be provided out of and to the extent of the property of Arch Western Resources only.

The Bylaws of Mountain Coal Company, L.L.C. and Thunder Basin Coal Company, L.L.C. both provide that no director or officer of the company will have any liability to the company or its members for any losses sustained or liabilities incurred as a result of any act or omission of such director or officer if (i) the director or officer acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the interests of the company and (ii) the conduct of the director or officer did not constitute actual fraud, gross negligence, or willful misconduct. The company will indemnify and hold harmless its directors and officers from and against any and all losses, claims, demands, costs, damages, liabilities, expenses of any nature (including reasonable attorneys' fees and disbursements), judgments, fines, settlements, and other amounts arising from any and all claims, demands, actions, suits, or proceedings, civil, criminal, administrative, or investigative, in which an indemnitee may be involved, or threatened to be involved, as a party or otherwise, arising out of or incidental to the business of the

company, regardless of whether an indemnitee continues to be a director or officer at the time any such liability or expense is paid or incurred, if (i) the indemnitee acted in good faith and in a manner it or he or she reasonably believed to be in, or not opposed to, the interests of the company, and, with respect to any criminal proceeding, had no reason to believe his or her conduct was unlawful and (ii) the indemnitee's conduct did not constitute actual fraud, gross negligence or willful misconduct.

Item 21. ***Exhibits and Financial Statement Schedules***

(a) *The following exhibits are filed herewith or incorporated by reference as part of this Registration Statement.*

Exhibit Number	Description
1.1	Purchase Agreement, dated June 19, 2003, by and among Arch Western Finance, LLC, Arch Coal, Inc., Arch Western Resources, LLC, Arch of Wyoming, LLC, Mountain Coal Company, L.L.C., Thunder Basin Coal Company, L.L.C. and Citigroup Global Markets Inc., J.P. Morgan Securities Inc. and Morgan Stanley & Co. Incorporated, as representatives of the initial purchasers (filed herewith).
3.1	Certificate of Formation of Arch Western Finance, LLC (filed herewith).
3.2	Limited Liability Company Agreement of Arch Western Finance, LLC (filed herewith).
3.3	Certificate of Formation of Arch Western Resources, LLC (filed herewith).
3.4	Limited Liability Company Agreement of Arch Western Resources, LLC (filed herewith).
3.5	Certificate of Formation of Arch of Wyoming, LLC (filed herewith).
3.6	Limited Liability Company Agreement of Arch of Wyoming, LLC (filed herewith).
3.7	Certificate of Formation of Mountain Coal Company, LLC (filed herewith).
3.8	Limited Liability Company Agreement of Mountain Coal Company, L.L.C. (filed herewith).
3.9	First Amendment to Limited Liability Company Agreement of Mountain Coal Company, L.L.C. (filed herewith).
3.10	Bylaws of Mountain Coal Company, L.L.C. (filed herewith).
3.11	Certificate of Formation of Thunder Basin Coal Company, L.L.C. (filed herewith).
3.12	Limited Liability Company Agreement of Thunder Basin Coal Company, L.L.C. (filed herewith).
3.13	First Amendment to Limited Liability Company Agreement of Thunder Basin Coal Company, L.L.C. (filed herewith).
3.14	Bylaws of Thunder Basin Coal Company, L.L.C. (filed herewith).
4.1	Indenture, dated June 25, 2003, by and among Arch Western Finance, LLC, Arch Western Resources, LLC, Arch of Wyoming, LLC, Mountain Coal Company, L.L.C., Thunder Basin Coal Company, L.L.C. and The Bank of New York, as trustee (filed herewith).
4.2	Form of 6 3/4% Senior Notes due 2013 (included in Exhibit 4.1).
4.3	Form of Guarantee (included in Exhibit 4.1).
4.4	Registration Rights Agreement, dated June 25, 2003, by and among Arch Western Finance, LLC, Arch Coal, Inc., Arch Western Resources, LLC, Arch of Wyoming, LLC, Mountain Coal Company, L.L.C., Thunder Basin Coal Company, L.L.C. and Citigroup Global Markets Inc., J.P. Morgan Securities Inc. and Morgan Stanley & Co. Incorporated, as representatives of the initial purchasers (filed herewith).
5.1	Opinion of Robert G. Jones regarding the validity of the exchange notes (filed herewith).
12.1	Statement re computation of ratios (filed herewith).
23.1	Consent of Ernst & Young LLP (filed herewith).
24.1	Power of Attorney with respect to Arch Western Finance, LLC (included on signature page).
24.2	Power of Attorney with respect to Arch Western Resources, LLC (included on signature page).
24.3	Power of Attorney with respect to Arch of Wyoming, LLC included on signature page).

Exhibit Number	Description
24.4	Power of Attorney with respect to Mountain Coal Company, L.L.C. (included on signature page).
24.5	Power of Attorney with respect to Thunder Basin Coal Company, L.L.C. (included on signature page).
25.1	Statement of Eligibility and Qualification on Form T-1 of The Bank of New York, as Trustee (filed herewith).
99.1	Letter of Transmittal (to be filed by amendment).
99.2	Notice of Guaranteed Delivery (to be filed by amendment).
99.3	Form of Exchange Agent Agreement (to be filed by amendment).

Item 22. ***Undertakings.***

(a) The undersigned registrant hereby undertakes that for purposes of determining any liability under the Securities Act of 1933, as amended (the "Securities Act"), each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), (and where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) 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 thereof.

The undersigned registrants hereby undertake:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent nor more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement.

(iii) 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.

(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.

Insofar as indemnification for liabilities arising under the Securities Act 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 Securities 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 Securities Act, and will be governed by the final adjudication of such issue.

(b) The undersigned registrants hereby undertake to respond to requests for information that is incorporated by reference into the prospectus pursuant to Item 4, 10(b), 11, or 13 of this form, within one business day of receipt of such request, and to send the incorporated documents by first class mail or other equally prompt means. This includes information contained in documents filed subsequent to the effective date of the registration statement through the date of responding to the request.

(c) The undersigned registrant hereby undertakes to supply by means of a post-effective amendment all information concerning a transaction, and the company being acquired involved therein, that was not the subject of and included in the registration statement when it became effective.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant 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 July 31, 2003.

ARCH WESTERN FINANCE, LLC

By: /s/ ROBERT J. MESSEY

Name: Robert J. Messey
Title: President

Each of the undersigned directors and officers of Arch Western Finance, LLC, a Delaware limited liability company, do hereby constitute and appoint Robert G. Jones and Janet L. Horgan, or either one of them, the undersigned's true and lawful attorneys and agents, with full power of substitution and resubstitution in each, to do any and all acts and things in our name and on our behalf in our capacities as directors and officers and to execute any and all instruments for us and in our names in the capacities indicated below, which said attorneys and agents, or either one of them, may deem necessary or advisable to enable said corporation to comply with the Securities Act of 1933, as amended, and any rules, regulations and requirements of the Securities and Exchange Commission, in connection with this registration statement, including specifically, but without limitation, power and authority to sign for us or any of us in our names in the capacities indicated below, any and all amendments (including post-effective amendments) hereto and each of the undersigned does hereby ratify and confirm all that said attorneys and agents, or either one of them or any substitute, shall do or cause to be done by virtue hereof. This Power of Attorney may be executed in any number of counterparts.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Capacity	Date
/s/ ROBERT J. MESSEY Robert J. Messey	Director and President (Principal Executive, Financial and Accounting Officer)	July 31, 2003
/s/ ROBERT G. JONES Robert G. Jones	Director and Vice President	July 31, 2003

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant 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 July 31, 2003.

ARCH WESTERN RESOURCES, LLC

By: /s/ ROBERT J. MESSEY

Name: Robert J. Messey
Title: Vice President

Each of the undersigned members and officers of Arch Western Resources, LLC, a Delaware limited liability company, do hereby constitute and appoint Robert G. Jones and Janet L. Horgan, or either one of them, the undersigned's true and lawful attorneys and agents, with full power of substitution and resubstitution in each, to do any and all acts and things in our name and on our behalf in our capacities as members and officers and to execute any and all instruments for us and in our names in the capacities indicated below, which said attorneys and agents, or either one of them, may deem necessary or advisable to enable said corporation to comply with the Securities Act of 1933, as amended, and any rules, regulations and requirements of the Securities and Exchange Commission, in connection with this registration statement, including specifically, but without limitation, power and authority to sign for us or any of us in our names in the capacities indicated below, any and all amendments (including post-effective amendments) hereto and each of the undersigned does hereby ratify and confirm all that said attorneys and agents, or either one of them or any substitute, shall do or cause to be done by virtue hereof. This Power of Attorney may be executed in any number of counterparts.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Capacity	Date
/s/ ROBERT W. SHANKS Robert W. Shanks	President (Principal Executive Officer)	July 31, 2003
/s/ ROBERT J. MESSEY Robert J. Messey	Vice President (Principal Financial and Accounting Officer)	July 31, 2003
Arch Western Acquisition Corporation By: /s/ ROBERT J. MESSEY Its: Vice President	Sole Managing Member	July 31, 2003

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant 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 July 31, 2003.

ARCH OF WYOMING, LLC

By: /s/ JAMES E. FLORCZAK

Name: James E. Florczak
Title: Vice President & Treasurer

POWER OF ATTORNEY

Each of the undersigned directors and officers of Arch of Wyoming, LLC Delaware limited liability company, do hereby constitute and appoint Robert G. Jones and Janet L. Horgan, or either one of them, the undersigned's true and lawful attorneys and agents, with full power of substitution and resubstitution in each, to do any and all acts and things in our name and on our behalf in our capacities as directors and officers and to execute any and all instruments for us and in our names in the capacities indicated below, which said attorneys and agents, or either one of them, may deem necessary or advisable to enable said corporation to comply with the Securities Act of 1933, as amended, and any rules, regulations and requirements of the Securities and Exchange Commission, in connection with this registration statement, including specifically, but without limitation, power and authority to sign for us or any of us in our names in the capacities indicated below, any and all amendments (including post-effective amendments) hereto and each of the undersigned does hereby ratify and confirm all that said attorneys and agents, or either one of them or any substitute, shall do or cause to be done by virtue hereof. This Power of Attorney may be executed in any number of counterparts.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Capacity	Date
/s/ PAUL A. LANG Paul A. Lang	Director, President and General Manager (Principal Executive Officer)	July 31, 2003
/s/ ROBERT J. MESSEY Robert J. Messey	Principal Financial Officer	July 31, 2003
/s/ ROBERT W. SHANKS Robert W. Shanks	Director	July 31, 2003
/s/ KENNETH G. WOODRING Kenneth G. Woodring	Director	July 31, 2003

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant 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 July 31, 2003.

MOUNTAIN COAL COMPANY, L.L.C.

BY: /s/ JAMES E. FLORCZAK

Name: James E. Florczak
Title: Vice President & Treasurer

POWER OF ATTORNEY

Each of the undersigned directors and officers of Mountain Coal Company, a Delaware limited liability company, do hereby constitute and appoint Robert G. Jones and Janet L. Horgan, or either one of them, the undersigned's true and lawful attorneys and agents, with full power of substitution and resubstitution in each, to do any and all acts and things in our name and on our behalf in our capacities as directors and officers and to execute any and all instruments for us and in our names in the capacities indicated below, which said attorneys and agents, or either one of them, may deem necessary or advisable to enable said corporation to comply with the Securities Act of 1933, as amended, and any rules, regulations and requirements of the Securities and Exchange Commission, in connection with this registration statement, including specifically, but without limitation, power and authority to sign for us or any of us in our names in the capacities indicated below, any and all amendments (including post-effective amendments) hereto and each of the undersigned does hereby ratify and confirm all that said attorneys and agents, or either one of them or any substitute, shall do or cause to be done by virtue hereof. This Power of Attorney may be executed in any number of counterparts.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Capacity	Date
/s/ EUGENE E. DICLAUDIO Eugene E. DiClaudio	Director, President and General Manager (Principal Executive Officer	July 31, 2003
/s/ ROBERT J. MESSEY Robert J. Messey	Principal Financial and Accounting Officer	July 31, 2003
/s/ ROBERT W. SHANKS Robert W. Shanks	Director	July 31, 2003
/s/ KENNETH G. WOODRING Kenneth G. Woodring	Director	July 31, 2003

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant 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 July 31, 2003.

THUNDER BASIN COAL COMPANY, L.L.C.

By: /s/ ROBERT J. MESSEY

Name: Robert J. Messey
Title: Vice President

POWER OF ATTORNEY

Each of the undersigned directors and officers of Thunder Basin Coal Company, L.L.C., a Delaware limited liability company, do hereby constitute and appoint Robert G. Jones and Janet L. Horgan, or either one of them, the undersigned's true and lawful attorneys and agents, with full power of substitution and resubstitution in each, to do any and all acts and things in our name and on our behalf in our capacities as directors and officers and to execute any and all instruments for us and in our names in the capacities indicated below, which said attorneys and agents, or either one of them, may deem necessary or advisable to enable said corporation to comply with the Securities Act of 1933, as amended, and any rules, regulations and requirements of the Securities and Exchange Commission, in connection with this registration statement, including specifically, but without limitation, power and authority to sign for us or any of us in our names in the capacities indicated below, any and all amendments (including post-effective amendments) hereto and each of the undersigned does hereby ratify and confirm all that said attorneys and agents, or either one of them or any substitute, shall do or cause to be done by virtue hereof. This Power of Attorney may be executed in any number of counterparts.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Capacity	Date
/s/ PAUL A. LANG Paul A. Lang	Director, President and General Manager (Principal Executive Officer)	July 31, 2003
/s/ ROBERT J. MESSEY Robert J. Messey	Vice President (Principal Financial and Accounting Officer)	July 31, 2003
/s/ C. HENRY BESTEN, JR. C. Henry Besten, Jr.	Director	July 31, 2003
/s/ ROBERT W. SHANKS Robert W. Shanks	Director	July 31, 2003
/s/ KENNETH G. WOODRING Kenneth G. Woodring	Director	July 31, 2003

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EXHIBIT INDEX

Exhibit Number	Description
1.1	Purchase Agreement, dated June 19, 2003, by and among Arch Western Finance, LLC, Arch Coal, Inc., Arch Western Resources, LLC, Arch of Wyoming, LLC, Mountain Coal Company, L.L.C., Thunder Basin Coal Company, L.L.C. and Citigroup Global Markets Inc., J.P. Morgan Securities Inc. and Morgan Stanley & Co. Incorporated, as representatives of the initial purchasers (filed herewith).
3.1	Certificate of Formation of Arch Western Finance, LLC (filed herewith).
3.2	Limited Liability Company Agreement of Arch Western Finance, LLC (filed herewith).
3.3	Certificate of Formation of Arch Western Resources, LLC (filed herewith).
3.4	Limited Liability Company Agreement of Arch Western Resources, LLC (filed herewith).
3.5	Certificate of Formation of Arch of Wyoming, LLC (filed herewith).
3.6	Limited Liability Company Agreement of Arch of Wyoming, LLC (filed herewith).
3.7	Certificate of Formation of Mountain Coal Company, L.L.C. (filed herewith).
3.8	Limited Liability Company Agreement of Mountain Coal Company, L.L.C. (filed herewith).
3.9	First Amendment to Limited Liability Company Agreement of Mountain Coal Company, L.L.C. (filed herewith).
3.10	Bylaws of Mountain Coal Company, L.L.C. (filed herewith).
3.11	Certificate of Formation of Thunder Basin Coal Company, L.L.C. (filed herewith).
3.12	Limited Liability Company Agreement of Thunder Basin Coal Company, L.L.C. (filed herewith).
3.13	First Amendment to Limited Liability Company Agreement of Thunder Basin Coal Company, L.L.C. (filed herewith).
3.14	Bylaws of Thunder Basin Coal Company, L.L.C. (filed herewith).
4.1	Indenture, dated June 25, 2003, by and among Arch Western Finance, LLC, Arch Western Resources, LLC, Arch of Wyoming, LLC, Mountain Coal Company, L.L.C., Thunder Basin Coal Company, L.L.C. and The Bank of New York, as trustee (filed herewith).
4.2	Form of 6 3/4% Senior Notes due 2013 (included in Exhibit 4.1).
4.3	Form of Guarantee (included in Exhibit 4.1).
4.4	Registration Rights Agreement, dated June 25, 2003, by and among Arch Western Finance, LLC, Arch Coal, Inc., Arch Western Resources, LLC, Arch of Wyoming, LLC, Mountain Coal Company, L.L.C., Thunder Basin Coal Company, L.L.C. and Citigroup Global Markets Inc., J.P. Morgan Securities Inc. and Morgan Stanley & Co. Incorporated, as representatives of the initial purchasers (filed herewith).
5.1	Opinion of Robert G. Jones regarding the validity of the exchange notes (filed herewith).
12.1	Statement re computation of ratios (filed herewith).
23.1	Consent of Ernst & Young LLP (filed herewith).
24.1	Power of Attorney with respect to Arch Western Finance, LLC (included on signature page).
24.2	Power of Attorney with respect to Arch Western Resources, LLC (included on signature page).
24.3	Power of Attorney with respect to Arch of Wyoming, LLC included on signature page).
24.4	Power of Attorney with respect to Mountain Coal Company, L.L.C. (included on signature page).
24.5	Power of Attorney with respect to Thunder Basin Coal Company, L.L.C. (included on signature page).
25.1	Statement of Eligibility and Qualification on Form T-1 of The Bank of New York, as Trustee (filed herewith).
99.1	Letter of Transmittal (to be filed by amendment).
99.2	Notice of Guaranteed Delivery (to be filed by amendment).
99.3	Form of Exchange Agent Agreement (to be filed by amendment).

EXHIBIT 1.1

ARCH WESTERN FINANCE, LLC

$700,000,000
6.75 % Senior Notes Due July 1, 2013

Purchase Agreement

New York, New York
June 19, 2003

Citigroup Global Markets Inc.
J.P. Morgan Securities Inc.
Morgan Stanley & Co. Incorporated
As Representatives of the Initial Purchasers
c/o Citigroup Global Markets Inc.
388 Greenwich Street
New York, New York 10013

Ladies and Gentlemen:

Arch Western Finance, LLC, a limited liability company organized under the laws of Delaware (the "Issuer"), proposes to issue and sell to the several parties named in Schedule I hereto (the "Initial Purchasers"), for whom you (the "Representatives") are acting as representatives, $700,000,000 principal amount of its 6.75% Senior Notes Due July 1, 2013 (the "Notes"). The Notes will be fully and unconditionally guaranteed as to the payment of principal, premium, if any, and interest (the "Guarantees" and together with the Notes, hereinafter referred to as the "Securities") by Arch Western Resources, LLC, a limited liability company organized under the laws of Delaware ("Arch Western"), and each of Arch Western's wholly owned subsidiaries listed in Schedule II hereto (each a "Subsidiary Guarantor" and collectively the "Subsidiary Guarantors" and together with Arch Western, hereinafter referred to as the "Guarantors"). The Securities are to be issued under an indenture (the "Indenture"), dated as of June 25, 2003 among the Issuer, the Guarantors and the Bank of New York, as trustee (the "Trustee"). The Securities have the benefit of a registration rights agreement (the "Registration Rights Agreement"), dated as of June 25, 2003, among the Issuer, Arch Coal, Inc., a corporation organized under the laws of Delaware (the "Company"), the Guarantors and the Initial Purchasers, pursuant to which each of the Issuer and the Guarantors, jointly and severally, has agreed to register the Securities under the Act subject to the terms and conditions therein specified. Pursuant to a pledge agreement (the "Pledge Agreement"), dated as of June 25, 2003, 2003, between Arch Western and the Trustee, the obligations of each of the Issuer and the Guarantors shall be secured by demand promissory notes (the "Company Notes"), issued by the Company to Arch Western and pledged by Arch Western to the Trustee as security for the payment of the Notes. To the extent there are no additional parties listed on Schedule I other than you, the term Representatives as used herein shall mean you as the Initial Purchasers, and the terms Representatives and Initial Purchasers shall mean either the singular or plural as the context requires. The use of the neuter in this Agreement shall include the feminine and masculine wherever appropriate. Certain terms used herein are defined in Section 17 hereof.

The sale of the Securities to the Initial Purchasers will be made without registration of the Securities under the Act in reliance upon exemptions from the registration requirements of the Act.

In connection with the sale of the Securities, the Company and Arch Western have prepared a preliminary offering memorandum, dated June 12, 2003 (as amended or supplemented at the Execution Time, including any and all exhibits thereto and any information incorporated by reference therein, the "Preliminary Memorandum"), and a final offering memorandum, dated June 19, 2003 (as amended or supplemented at the Execution Time, including any and all exhibits thereto and any information incorporated by reference therein, the "Final Memorandum"). Each of the Preliminary Memorandum and the Final Memorandum sets forth certain information concerning the Issuer, the Company, the Guarantors and the Securities. Each of the Issuer, the Company and the Guarantors hereby confirms that it has authorized the use of the Preliminary Memorandum and the Final Memorandum, and any amendment or supplement thereto, in connection with the offer and sale of the Securities by the Initial Purchasers. Unless stated to the contrary, any reference herein to the terms "amend", "amendment" or "supplement" with respect to the Final Memorandum shall be deemed to refer to and include any information filed under the Exchange Act subsequent to the Execution Time which is incorporated by reference therein.

1. Representations and Warranties. Each of the Issuer, the Company and the Guarantors, jointly and severally, represents and warrants, as of the Execution Time and as of the Closing Date, to each Initial Purchaser as set forth below in this Section 1.

(a) The Preliminary Memorandum, at the date thereof, did not contain any untrue statement of a material fact or omit to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading. At the date of the Final Memorandum, on the Closing Date and on any settlement date, the Final Memorandum did not and will not (and any amendment or supplement thereto, at the date thereof, at the Closing Date and on any settlement date, will not), contain any untrue statement of a material fact or omit to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided, however, that the Issuer, the Company and the Guarantors make no representation or warranty as to the information contained in or omitted from the Preliminary Memorandum or the Final Memorandum, or any amendment or supplement thereto, in reliance upon and in conformity with information furnished in writing to the Issuer, Company or any Guarantor by or on behalf of the Initial Purchasers through the Representatives specifically for inclusion therein.

(b) The documents incorporated or deemed to be incorporated by reference in the Final Memorandum, at the time they were or hereafter are filed with the Commission, complied and will comply in all material respects with the requirements of the Exchange Act and, when read together with the other information in the Final Memorandum, at the date of the Final Memorandum, at the Closing Date and on any settlement date, did not, do not and will not include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading.

(c) Neither the Issuer, nor the Company, nor any Guarantor, nor any of its or their Affiliates, nor any person acting on its or their behalf has, directly or indirectly, made offers or sales of any security, or solicited offers to buy any security, under circumstances that would require the registration of the Securities under the Act.

(d) Neither the Issuer, nor the Company, nor any Guarantor, nor any of its or their Affiliates, nor any person acting on its or their behalf has engaged in any form of general solicitation or general advertising (within the meaning of Regulation D) in connection with any offer or sale of the Securities in the United States.

(e) The Securities satisfy the eligibility requirements of Rule 144A(d)(3) under the Act.

(f) Neither the Issuer, nor the Company, nor any Guarantor, nor any of its or their Affiliates, nor any person acting on its or their behalf has engaged in any directed selling efforts with respect to the Securities, and each of them has complied with the offering restrictions requirement of Regulation S. Terms used in this paragraph have the meanings given to them by Regulation S.

(g) The Issuer, the Company and the Guarantors have been advised by the NASD's PORTAL Market that the Securities have been designated PORTAL eligible securities in accordance with the rules and regulations of the NASD.

(h) Neither the Issuer, nor the Company nor any Guarantor has paid or agreed to pay to any person any compensation for soliciting another to purchase any securities of the Issuer, the Company or any Guarantor (except as contemplated by this Agreement).

(i) Neither the Issuer, nor the Company nor any Guarantor has taken, directly or indirectly, any action designed to cause or which has constituted or which might reasonably be expected to cause or result, under the Exchange Act or otherwise, in the stabilization or manipulation of the price of any security of the Issuer or any Guarantor to facilitate the sale or resale of the Securities.

(j) Neither the Issuer nor any Guarantor is, and upon the issuance and sale of the Securities as herein contemplated and the application of the net proceeds therefrom as described in the Final Memorandum will be, an "investment company" or an entity "controlled" by an "investment company", as such terms are defined in the Investment Company Act.

(k) The information provided by the Issuer, the Company and the Guarantors pursuant to Section 5(h) hereof will not, at the date thereof, contain any untrue statement of a material fact or omit to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading.

(l) All information related to the coal reserves of (i) the Company and its subsidiaries, (including Canyon Fuel Company, LLC) and (ii) Arch Western and its subsidiaries (including Canyon Fuel Company, LLC), (including, without limitation, each of the Company's and Arch Western's respective (x) estimated assigned and unassigned recoverable coal reserves and (y) proven, probable and total recoverable coal reserves, in the aggregate and by region and

mining complex location) included in the Final Memorandum as of the date of the Final Memorandum and at the Closing Time (the "Coal Reserve Information"), (A) was and is accurate in all material respects, (B) would, if the offer and sale of the Securities were registered under the Act, comply in all material respects with the requirements of the Act, and complied and will comply in all material respects with the requirements of the Exchange Act, as applicable, and (C) when read together with the other information in the Final Memorandum, did not and will not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading. The Coal Reserve Information has been calculated in accordance with standard mining engineering procedures used in the coal industry and applicable government reporting requirements and applicable law. All assumptions used in the calculation of the Coal Reserve Information were and are reasonable

(m) Since the date as of which information is given in the Final Memorandum, except as otherwise stated therein, (A) there has been no material adverse change in the condition, financial or otherwise, or in the earnings, properties, business or prospects of (i) the Company and its subsidiaries, taken as a whole, or (ii) Arch Western and its subsidiaries, taken as a whole, whether or not arising in the ordinary course of business (a "Material Adverse Effect"), (B) there have been no transactions entered into by the Company and its subsidiaries or Arch Western and its subsidiaries, other than those arising in the ordinary course of business, which are material with respect to the Company and its subsidiaries, taken as a whole, or Arch Western and its subsidiaries, taken as a whole, and (C) except for (i) regular quarterly dividends on the Company's common stock, in amounts per share that are consistent with past practice, (ii) the Preferred Return paid by Arch Western and (iii) preferred dividends paid with respect to the Company's 5% Perpetual Cumulative Convertible Preferred Stock, in accordance with the terms thereof, there has been no dividend or distribution of any kind declared, paid or made by the Company or Arch Western on any class of their respective capital stock.

(n) The Issuer has been duly organized and is validly existing as a limited liability company in good standing under the laws of the State of Delaware and has power and authority to own, lease and operate its properties and to conduct its business as described in the Final Memorandum and to enter into and perform its obligations under, or as contemplated under, this Agreement. The Issuer is duly qualified to transact business and is in good standing in each other jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except where the failure to so qualify or be in good standing would not result in a Material Adverse Effect. All of the issued and outstanding capital stock of the Issuer has been duly authorized and is validly issued, fully paid and non-assessable and is owned by Arch Western, directly or through subsidiaries, free and clear of any security interest, mortgage, pledge, lien, encumbrance, claim or equity. None of the outstanding shares of capital stock of the Issuer was issued in violation of preemptive or other similar rights of any securityholder of the Issuer.

(o) The Company has been duly organized and is validly existing as a corporation in good standing under the laws of the State of Delaware and has power and authority to own, lease and operate its properties and to conduct its business as described in the Final Memorandum and to enter into and perform its obligations under, or as contemplated under, this Agreement. The Company is duly qualified as a foreign corporation to transact

business and is in good standing in each other jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except where the failure to so qualify or be in good standing would not result in a Material Adverse Effect. All of the issued and outstanding capital stock of the Company has been duly authorized and validly issued by the Company, fully paid and non-assessable, and was not issued in violation of preemptive or other similar rights of any securityholder of the Company.

(p) Arch Western has been duly organized and is validly existing as a limited liability company in good standing under the laws of the State of Delaware and has the power and authority to own, lease and operate its properties and to conduct its business as described in the Final Memorandum and to enter into and perform its obligations under, or as contemplated under, this Agreement. Arch Western is duly qualified to transact business and is in good standing in each other jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except where the failure to so qualify or be in good standing would not result in a Material Adverse Effect. All of the issued and outstanding capital stock of Arch Western has been duly authorized and validly issued, fully paid and non-assessable and, except as otherwise stated in the Final Memorandum, is owned by the Company, directly or through subsidiaries, free and clear of any security interest, mortgage, pledge, lien, encumbrance, claim or equity. None of the outstanding shares of capital stock of Arch Western was issued in violation of preemptive or other similar rights of any securityholder of Arch Western.

(q) Each Subsidiary of the Company that is not a Guarantor has been duly organized and is validly existing as a corporation, limited liability company or partnership, as applicable, in good standing under the laws of the jurisdiction of its formation, has corporate power and authority to own, lease and operate its properties and to conduct its business as described in the Final Memorandum and is duly qualified to transact business and is in good standing in each jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except where the failure to so qualify or be in good standing would not result in a Material Adverse Effect. Except as otherwise stated in the Final Memorandum, all of the issued and outstanding capital stock of each Subsidiary of the Company that is not a Guarantor has been duly authorized and validly issued, fully paid and non-assessable and is owned by the Company, directly or through subsidiaries, free and clear of any security interest, mortgage, pledge, lien, encumbrance, claim or equity. None of the outstanding shares of capital stock of any Subsidiary of the Company that is not a Guarantor was issued in violation of preemptive or other similar rights of any securityholder of such Subsidiary of the Company.

(r) Each Subsidiary Guarantor and Canyon Fuel Company, LLC ("Canyon Fuel") has been duly organized and is validly existing as a limited liability company in good standing under the laws of Delaware, has power and authority to own, lease and operate its properties and to conduct its business as described in the Final Memorandum and is duly qualified to transact business and is in good standing in each jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except where the failure to so qualify or be in good standing would not result in a Material Adverse Effect. Except as otherwise stated in the Final Memorandum, all of the issued and outstanding capital stock of each Subsidiary Guarantor and Canyon Fuel has been

duly authorized and validly issued, fully paid and non-assessable and is owned by Arch Western, directly or through subsidiaries, free and clear of any security interest, mortgage, pledge, lien, encumbrance, claim or equity. None of the outstanding shares of capital stock of any Subsidiary Guarantor or Canyon Fuel was issued in violation of preemptive or other similar rights of any securityholder of such Subsidiary Guarantor or Canyon Fuel.

(s) The authorized, issued and outstanding capital stock of the Company and Arch Western is as set forth in the column entitled "Actual" under the caption "Capitalization" (except for subsequent issuances, if any, pursuant to reservations, agreements or employee benefit plans referred to or incorporated by reference in the Final Memorandum or pursuant to the exercise of convertible securities or options referred to or included in the Final Memorandum).

(t) The statements in the Final Memorandum under the headings "Governing Documents and Certain Other Agreements", "Certain Relationships and Related Party Transactions", "Description of the Notes", "Exchange Offer; Registration Rights", "Important Federal Income Tax Considerations" and "ERISA Considerations", fairly summarize the matters therein described.

(u) This Agreement has been duly authorized, executed and delivered by each of the Issuer, the Company and the Guarantors.

(v) The Indenture has been duly authorized and, assuming due authorization, execution and delivery thereof by the Trustee, when executed and delivered by each of the Issuer and the Guarantors, will constitute a valid and binding obligation of the Issuer and the Guarantors, enforceable against each of them in accordance with its terms (subject, as to the enforcement of remedies, to applicable bankruptcy, reorganization, insolvency, moratorium or other laws affecting creditors' rights generally from time to time in effect and to general principles of equity).

(w) The Notes have been duly authorized, and, when executed and authenticated in accordance with the provisions of the Indenture and delivered to and paid for by the Initial Purchasers as provided in the Final Memorandum, will have been duly executed and delivered by the Issuer and will constitute a valid and binding obligation of the Issuer, enforceable against the Issuer in accordance with its terms, and will be entitled to the benefits of the Indenture (subject, as to the enforcement of remedies, to applicable bankruptcy, reorganization, insolvency, moratorium or other laws affecting creditors' rights generally from time to time in effect and to general principles of equity).

(x) The Company Notes have been duly authorized, executed and delivered by the Company and constitute the legal, valid and binding obligations of the Company (subject, as to the enforcement of remedies, to applicable bankruptcy, reorganization, insolvency, moratorium or other laws affecting creditors' rights generally from time to time in effect and to general principles of equity).

(y) Each Guarantee has been duly authorized, and when executed and delivered in accordance with the provisions of the Indenture, will have been duly executed and

delivered by each of Arch Western and the Subsidiary Guarantors and will constitute a valid and binding obligation of Arch Western and each Subsidiary Guarantor, enforceable against each of them in accordance with its terms, and will be entitled to the benefits of the Indenture (subject, as to the enforcement of remedies, to applicable bankruptcy, reorganization, insolvency, moratorium or other laws affecting creditors' rights generally from time to time in effect and to general principles of equity).

(z) The Registration Rights Agreement has been duly authorized and, when executed and delivered by each of the Issuer, the Company and the Guarantors, will constitute a valid and binding obligation of the Issuer, the Company and each Guarantor, enforceable against each of them in accordance with its terms (subject, as to the enforcement of remedies, to applicable bankruptcy, reorganization, insolvency, moratorium or other laws affecting creditors' rights generally from time to time in effect and to general principles of equity and except as rights to indemnification or contribution thereunder may be limited by federal or state securities laws or the public policy underlying such laws).

(aa) The Pledge Agreement has been duly authorized, and assuming due authorization, execution and delivery thereof by the Trustee, when executed and delivered by Arch Western will constitute a valid and binding obligation of Arch Western, enforceable against Arch Western in accordance with its terms (subject, as to the enforcement of remedies, to applicable bankruptcy, reorganization, insolvency, moratorium or other laws affecting creditors' rights generally from time to time in effect and to general principles of equity) and at the time of the sale of the Securities, the Pledge Agreement will have created a valid, continuing and perfected first priority security interest in favor of the Trustee in the Company Notes, pledged thereunder as security for the payment of the Notes.

(bb) Neither the Company nor any of its subsidiaries is in violation of its charter or by-laws or in default in the performance or observance of any obligation, agreement, covenant or condition contained in any contract, indenture, mortgage, deed of trust, loan or credit agreement, note, lease or other agreement or instrument to which the Company or any of its subsidiaries is a party or by which it or any of them may be bound, or to which any of the assets, properties or operations of the Company or any of its subsidiaries is subject (collectively, "Agreements and Instruments"), except for such defaults that would not result in a Material Adverse Effect. The execution, delivery and performance of this Agreement, the Indenture, the Registration Rights Agreement, the Pledge Agreement and any other agreement or instrument entered into or issued or to be entered into or issued by each of the Issuer, the Company and the Guarantors in connection with the transactions contemplated hereby or thereby or in the Final Memorandum and the consummation of the transactions contemplated herein and in the Final Memorandum (including the issuance and sale of the Securities and the use of the proceeds from the sale of the Securities as described under the caption "Use of Proceeds" in the Final Memorandum) and compliance by each of the Issuer, the Company and the Guarantors with its obligations hereunder and thereunder have been duly authorized by all necessary corporate or other action and do not and will not, whether with or without the giving of notice or passage of time or both, conflict with or constitute a breach of, or default or Repayment Event (as defined below) under, or result in the creation or imposition of any lien, charge or encumbrance upon any assets, properties or operations of the Company or any of its subsidiaries pursuant to, any Agreements and Instruments (except for such conflicts, breaches or defaults or liens, charges or

encumbrances that would not result in a Material Adverse Effect), nor will such action result in any violation of the provisions of the charter or by-laws of the Company or any of its subsidiaries or any applicable law, statute, rule, regulation, judgment, order, writ or decree of any government, government instrumentality or court, domestic or foreign, having jurisdiction over the Company or any of its subsidiaries or any of their assets, properties or operations.

(cc) No labor dispute with the employees of the Company or any of its subsidiaries exists or, to the knowledge of the Company, is imminent, and the Company is not aware of any existing or imminent labor disturbance by the employees of any of its or any subsidiary's principal suppliers, manufacturers, customers or contractors, which, in either case, may reasonably be expected to result in a Material Adverse Effect.

(dd) There is no action, suit, proceeding, inquiry or investigation before or brought by any court or governmental agency or body, domestic or foreign, now pending, or, to the knowledge of each of the Issuer, the Company and the Guarantors, threatened, against or affecting the Company or any of its subsidiaries which would be required to be disclosed in a Registration Statement if the offer and sale of the Securities were to be registered under the Act (other than as stated in the Final Memorandum), or which might reasonably be expected to result in a Material Adverse Effect, or which might reasonably be expected to materially and adversely affect the assets, properties or operations thereof or the consummation of the transactions contemplated under the Final Memorandum, this Agreement, the Indenture, the Registration Rights Agreement, the Pledge Agreement or the performance by each of the Issuer, the Company and the Guarantors of its obligations hereunder and thereunder. The aggregate of all pending legal or governmental proceedings to which the Company or any of its subsidiaries is a party or of which any of their respective assets, properties or operations is subject which are not described in the Final Memorandum, including ordinary routine litigation incidental to the business, could not reasonably be expected to result in a Material Adverse Effect.

(ee) There are no contracts or documents required to be described in the documents incorporated by reference in the Final Memorandum or to be filed as exhibits thereto, which have not been so described and filed as required.

(ff) No filing with, or authorization, approval, consent, license, order, registration, qualification or decree of, any court or governmental authority or agency, domestic or foreign, is necessary or required for the due authorization, execution and delivery by each of the Issuer, the Company and the Guarantors of this Agreement in connection with the issuance of the Securities or for the performance by each of the Issuer, the Company and the Guarantors of the transactions contemplated under the Final Memorandum, this Agreement, the Indenture, the Registration Rights Agreement or the Pledge Agreement, except such as have been already made, obtained or rendered, and such as will be obtained under the Act and the Trust Indenture Act and such as may be required under blue sky laws of any jurisdiction in connection with the purchase and sale by the Initial Purchasers in the manner contemplated herein and in the Final Memorandum and the Registration Rights Agreement, as applicable, as of the Closing Date.

(gg) The Company and its subsidiaries own or possess, or can acquire on reasonable terms, adequate patents, patent rights, licenses, inventions, copyrights, know-how (including trade secrets and other unpatented and/or unpatentable proprietary or confidential

information, systems or procedures), trademarks, service marks, trade names or other intellectual property (collectively, "Intellectual Property") necessary to carry on the business now operated by them, and neither the Company nor any of its subsidiaries has received any notice or is otherwise aware of any infringement of or conflict with asserted rights of others with respect to any Intellectual Property or of any facts or circumstances which would render any Intellectual Property invalid or inadequate to protect the interest of the Company or any of its subsidiaries therein, and which infringement or conflict (if the subject of any unfavorable decision, ruling or finding) or invalidity or inadequacy, singly or in the aggregate, would result in a Material Adverse Effect.

(hh) The Company and its subsidiaries possess such permits, licenses, approvals, consents and other authorizations (collectively, "Governmental Licenses") issued by the appropriate federal, state, local or foreign regulatory agencies or bodies necessary to conduct the business now operated by them. The Company and its subsidiaries are in compliance with the terms and conditions of all such Governmental Licenses, except where the failure so to comply would not, singly or in the aggregate, result in a Material Adverse Effect. All of the Governmental Licenses are valid and in full force and effect, except where the invalidity of such Governmental Licenses or the failure of such Governmental Licenses to be in full force and effect would not result in a Material Adverse Effect. Neither the Company nor any of its subsidiaries has received any notice of proceedings relating to the revocation or modification of any such Governmental Licenses which, singly or in the aggregate, if the subject of an unfavorable decision, ruling or finding, would result in a Material Adverse Effect.

(ii) The Company and its subsidiaries have good and marketable title to all real property owned by the Company and its subsidiaries and good title to all other properties owned by them, in each case, free and clear of all mortgages, pledges, liens, security interests, claims, restrictions or encumbrances of any kind, except (i) as otherwise stated in the Final Memorandum or (ii) those which do not, singly or in the aggregate, materially affect the value of such property and do not interfere with the use made and proposed to be made of such property by the Company or any of its subsidiaries. All of the leases and subleases material to the business of (1) the Company and its subsidiaries, taken as a whole, and (2) Arch Western and its subsidiaries, taken as a whole, and under which the Company or any of its subsidiaries holds properties described in the Final Memorandum, are in full force and effect, and neither the Company nor any of its subsidiaries has received any notice of any material claim of any sort that has been asserted by anyone adverse to the rights of the Company or any of its subsidiaries under any of the leases or subleases mentioned above, or affecting or questioning the rights of the Company or such subsidiary of the continued possession of the leased or subleased premises under any such lease or sublease.

(jj) Except as otherwise stated in the Final Memorandum and except as would not, singly or in the aggregate, result in a Material Adverse Effect, (i) neither the Company nor any of its subsidiaries is in violation of any federal, state, local or foreign statute, law, rule, regulation, ordinance, code, policy or rule of common law or any judicial or administrative interpretation thereof including any judicial or administrative order, consent, decree or judgment, relating to pollution or protection of human health, the environment (including, without limitation, ambient air, surface water, groundwater, land surface or subsurface strata) or wildlife, including, without limitation, laws and regulations relating to the release or threatened release of

chemicals, pollutants, contaminants, wastes, toxic substances, hazardous substances, petroleum or petroleum products (collectively, "Hazardous Materials") or to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials (collectively, "Environmental Laws"), (ii) neither the Company nor any of its subsidiaries fails to possess any permit, authorization or approval required under any applicable Environmental Laws or to be in compliance with their requirements, (iii) there are no pending or threatened administrative, regulatory or judicial actions, suits, demands, demand letters, claims, liens, notices of noncompliance or violation, investigation or proceedings relating to any Environmental Law against the Company or any of its subsidiaries and (iv) there are no events or circumstances that might reasonably be expected to form the basis of an order for clean-up or remediation, or an action, suit or proceeding by any private party or governmental body or agency, against or affecting the Company or any of its subsidiaries relating to Hazardous Materials or any Environmental Laws.

(kk) The consolidated historical financial statements and schedules of (i) the Company and its consolidated subsidiaries, (ii) Arch Western and its consolidated subsidiaries, (iii) Canyon Fuel and (iv) Triton Coal Company, LLC ("Triton") and its consolidated subsidiaries included in the Final Memorandum present fairly in all material respects the financial condition, results of operations and cash flows of the Company, Arch Western, Canyon Fuel and Triton respectively, as of the dates and for the periods indicated, comply as to form with the applicable accounting requirements of the Act and have been prepared in conformity with generally accepted accounting principles applied on a consistent basis throughout the periods involved (except as otherwise noted therein); the selected financial data set forth under the captions "Arch Western Selected Consolidated Financial and Operating Data" and "Arch Coal Selected Consolidated Financial and Operating Data" in the Final Memorandum fairly present, on the basis stated in the Final Memorandum, the information included therein; the pro forma financial statements included in the Final Memorandum include assumptions that provide a reasonable basis for presenting the significant effects directly attributable to the transactions and events described therein, the related pro forma adjustments give appropriate effect to those assumptions, and the pro forma adjustments reflect the proper application of those adjustments to the historical financial statement amounts in the pro forma financial statements included in the Final Memorandum; the pro forma financial statements included in the Final Memorandum comply as to form in all material respects with the applicable accounting requirements of Regulation S-X under the Act; and the pro forma adjustments have been properly applied to the historical amounts in the compilation of those statements.

(ll) (i) Ernst & Young LLP, who have certified certain audited financial statements of (1) the Company and its consolidated subsidiaries, (2) Arch Western and its consolidated subsidiaries and (3) Canyon Fuel and delivered their reports with respect to the audited consolidated financial statements and schedules of the Company, Arch Western and Canyon Fuel, respectively, included in the Final Memorandum, are independent public accountants with respect to the Company, Arch Western, and Canyon Fuel within the meaning of the Act and (ii) PricewaterhouseCoopers LLP, who have certified certain audited financial statements of Triton and its consolidated subsidiaries and delivered their report with respect to the audited consolidated financial statements and schedules of Triton included in the Final Memorandum, are independent public accountants with respect to Triton under Rule 101 of ICPA's Code of Professional Conduct.

(mm) There are no stamp or other issuance or transfer taxes or duties or other similar fees or charges under federal law or the laws of any state, or any political subdivision thereof, required to be paid in connection with the execution and delivery of this Agreement or the issuance or sale by the Issuer and the Guarantors of the Securities.

(nn) Each of the Company and its subsidiaries has filed all foreign, federal, state and local tax returns that are required to be filed or has requested extensions thereof except in any case in which the failure so to file would not have a Material Adverse Effect and except as set forth in or contemplated in the Final Memorandum (exclusive of any amendment or supplement thereto) and has paid all taxes required to be paid by it and any other assessment, fine or penalty levied against it, to the extent that any of the foregoing is due and payable, except for any such assessment, fine or penalty that is currently being contested in good faith or as would not have a Material Adverse Effect and except as set forth in or contemplated in the Final Memorandum (exclusive of any amendment or supplement thereto).

(oo) The Company and each of its subsidiaries are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as are prudent and customary in the businesses in which they are engaged; all policies of insurance and fidelity or surety bonds insuring the Company, or any of its subsidiaries or their respective businesses, assets, employees, officers and directors are in full force and effect; the Company and its subsidiaries are in compliance with the terms of such policies and instruments in all material respects; and there are no claims by the Company or any of its subsidiaries under any such policy or instrument as to which any insurance company is denying liability or defending under a reservation of rights clause; neither the Company nor any such subsidiary has been refused any insurance coverage sought or applied for; and neither the Company nor any such subsidiary has any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not have a Material Adverse Effect, except as set forth in or contemplated in the Final Memorandum (exclusive of any amendment or supplement thereto).

(pp) No subsidiary of the Company and no subsidiary of Arch Western is currently prohibited, directly or indirectly, from paying any dividends to the Company or Arch Western, as the case may be, from making any other distribution on such subsidiary's capital stock, from repaying to the Company or Arch Western, as the case may be, any loans or advances to such subsidiary from the Company or Arch Western, as the case may be, or from transferring any of such subsidiary's property or assets to the Company or Arch Western, as the case may be, or any other subsidiary of the Company or Arch Western, as the case may be, except as described in or contemplated by the Final Memorandum (exclusive of any amendment or supplement thereto).

(qq) The Company, Arch Western, and each of their respective subsidiaries, and Canyon Fuel Company, LLC, maintain a system of internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management's general or specific authorizations; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain asset accountability; (iii) access to assets is permitted only in accordance with

management's general or specific authorization; and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

(rr) Each of the Company and its subsidiaries has fulfilled its obligations, if any, under the minimum funding standards of Section 302 of the United States Employee Retirement Income Security Act of 1974, as amended ("ERISA"), and the regulations and published interpretations thereunder with respect to each "plan" (as defined in Section 3(3) of ERISA and such regulations and published interpretations) in which employees of the Company and its subsidiaries are eligible to participate and each such plan is in compliance in all material respects with the presently applicable provisions of ERISA and such regulations and published interpretations; the Company and its subsidiaries have not incurred any unpaid liability to the Pension Benefit Guaranty Corporation (other than for the payment of premiums in the ordinary course) or to any such plan under Title IV of ERISA.

Any certificate signed by any officer of the Issuer or any Guarantor and delivered to the Representatives or counsel for the Initial Purchasers in connection with the offering of the Securities shall be deemed a representation and warranty by the Issuer or such Guarantor, as to matters covered thereby, to each Initial Purchaser.

2. Purchase and Sale. Subject to the terms and conditions and in reliance upon the representations and warranties herein set forth, the Issuer agrees to sell to each Initial Purchaser, and each Initial Purchaser agrees, severally and not jointly, to purchase from the Issuer, at a purchase price of 98.25% of the principal amount thereof, plus accrued interest, if any, from June 25, 2003 to the Closing Date, the principal amount of Securities set forth opposite such Initial Purchaser's name in Schedule I hereto.

3. Delivery and Payment. Delivery of and payment for the Securities shall be made at 10:00 A.M., New York City time, on June 25, 2003, or at such time on such later date (not later than July 2, 2003) as the Representatives shall designate, which date and time may be postponed by agreement between the Representatives and the Company or as provided in Section 9 hereof (such date and time of delivery and payment for the Securities being herein called the "Closing Date"). Delivery of the Securities shall be made to the Representatives for the respective accounts of the several Initial Purchasers against payment by the several Initial Purchasers through the Representatives of the purchase price thereof to or upon the order of Arch Western by wire transfer payable in same-day funds to the account specified by Arch Western. Delivery of the Securities shall be made through the facilities of The Depository Trust Company unless the Representatives shall otherwise instruct.

4. Offering by Initial Purchasers. Each Initial Purchaser, severally and not jointly, represents and warrants to and agrees with each of the Issuer and the Guarantors that:

(a) It has not offered or sold, and will not offer or sell, any Securities except (i) to those it reasonably believes to be qualified institutional buyers (as defined in Rule 144A under the Act) and that, in connection with each such sale, it has taken or will take reasonable steps to ensure that the purchaser of such Securities is aware that such sale is being made in reliance on Rule 144A or (ii) in accordance with the restrictions set forth in Exhibit A hereto.

(b) Neither it nor any person acting on its behalf has made or will make offers or sales of the Securities in the United States by means of any form of general solicitation or general advertising (within the meaning of Regulation D) in the United States.

5. Agreements. Each of the Issuer, the Company and the Guarantors, jointly and severally, agrees with each Initial Purchaser that:

(a) The Issuer, the Company and the Guarantors will furnish to each Initial Purchaser and to counsel for the Initial Purchasers, without charge, during the period referred to in paragraph (c) below, as many copies of the Final Memorandum and any amendments and supplements thereto as they may reasonably request.

(b) The Issuer, the Company and the Guarantors will not amend or supplement the Final Memorandum without the prior written consent of the Representatives.

(c) If at any time prior to the completion of the sale of the Securities by the Initial Purchasers (as determined by the Representatives), any event occurs as a result of which the Final Memorandum, as then amended or supplemented, would include any untrue statement of a material fact or omit to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, or if it should be necessary to amend or supplement the Final Memorandum to comply with applicable law, the Company promptly (i) will notify the Representatives of any such event; (ii) subject to the requirements of paragraph (b) of this Section 5, will prepare an amendment or supplement that will correct such statement or omission or effect such compliance; and (iii) will supply any supplemented or amended Final Memorandum to the several Initial Purchasers and counsel for the Initial Purchaser without charge in such quantities as they may reasonably request.

(d) The Issuer, the Company and the Guarantors will arrange, if necessary, for the qualification of the Securities for sale by the Initial Purchasers under the laws of such jurisdictions as the Initial Purchasers may designate and will maintain such qualifications in effect so long as required for the sale of the Securities; provided that in no event shall the Issuer, the Company and the Guarantors be obligated to qualify to do business in any jurisdiction where it is not now so qualified or to take any action that would subject it to service of process in suits, other than those arising out of the offering or sale of the Securities, in any jurisdiction where it is not now so subject. The Company will promptly advise the Representatives of the receipt by the Issuer, the Company or any Guarantor of any notification with respect to the suspension of the qualification of the Securities for sale in any jurisdiction or the initiation or threatening of any proceeding for such purpose.

(e) The Issuer, the Company and the Guarantors will not, and will not permit any of their respective Affiliates to, resell any Securities that have been acquired by any of them.

(f) Neither the Issuer, nor the Company, nor any Guarantor, nor any of their respective Affiliates, nor any person acting on their behalf will, directly or indirectly, make offers or sales of any security, or solicit offers to buy any security, under circumstances that would require the registration of the Securities under the Act.

(g) Neither the Issuer, nor the Company, nor any Guarantor, nor any of their respective Affiliates, nor any person acting on its or their behalf will engage in any form of general solicitation or general advertising (within the meaning of Regulation D) in connection with any offer or sale of the Securities in the United States.

(h) So long as any of the Securities are "restricted securities" within the meaning of Rule 144(a)(3) under the Act, each of the Company and Arch Western will, unless it becomes subject to and complies with Section 13 or 15(d) of the Exchange Act, provide to each holder of such restricted securities and to each prospective purchaser (as designated by such holder) of such restricted securities, upon the request of such holder or prospective purchaser, any information required to be provided by Rule 144A(d)(4) under the Act. This covenant is intended to be for the benefit of the holders, and the prospective purchasers designated by such holders, from time to time of such restricted securities.

(i) Neither the Issuer, nor the Company, nor any Guarantor, nor any of their respective Affiliates, nor any person acting on their behalf will engage in any directed selling efforts with respect to the Securities, and each of them will comply with the offering restrictions requirement of Regulation S. Terms used in this paragraph have the meanings given to them by Regulation S.

(j) Each of the Issuer and the Guarantors will cooperate with the Representatives and use its best efforts to permit the Securities to be eligible for clearance and settlement through The Depository Trust Company.

(k) The Company and Arch Western will not for a period of 60 days following the Execution Time, without the prior written consent of Citigroup Global Markets Inc., offer, sell, or otherwise dispose of (or enter into any transaction which is designed to, or might reasonably be expected to, result in the disposition (whether by actual disposition or effective economic disposition due to cash settlement or otherwise) by the Company or Arch Western or any Affiliate of the Company or Arch Western; or any person in privity with the Company or Arch Western or any Affiliate of the Company or Arch Western), directly or indirectly, or announce the offering of, any debt securities issued or guaranteed by the Company or Arch Western or its subsidiaries (other than the Securities).

(l) Each of the Issuer, the Company and the Guarantors will not take, directly or indirectly, any action designed to or which has constituted or which might reasonably be expected to cause or result, under the Exchange Act or otherwise, in stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Securities.

(m) Each of the Issuer, the Company and the Guarantors, jointly and severally, agrees to pay the costs and expenses relating to the following matters: (i) the preparation of the Indenture, the Registration Rights Agreement and the Pledge Agreement, the issuance of the Securities and the fees of the Trustee; (ii) the preparation, printing or reproduction of the Preliminary Memorandum and Final Memorandum and each amendment or supplement to either of them; (iii) the printing (or reproduction) and delivery (including postage, air freight charges and charges for counting and packaging) of such copies of the Preliminary Memorandum and Final Memorandum, and all amendments or supplements to either of them, as may, in each case,

be reasonably requested for use in connection with the offering and sale of the Securities; (iv) the preparation, printing, authentication, issuance and delivery of certificates for the Securities, including any stamp or transfer taxes in connection with the original issuance and sale of the Securities; (v) the printing (or reproduction) and delivery of this Agreement, any blue sky memorandum and all other agreements or documents printed (or reproduced) and delivered in connection with the offering of the Securities; (vi) any registration or qualification of the Securities for offer and sale under the securities or blue sky laws of the several states (including filing fees and the reasonable fees and expenses of counsel for the Initial Purchasers relating to such registration and qualification and preparation of a blue sky memorandum); (vii) admitting the Securities for trading in the PORTAL Market; (viii) the transportation and other expenses incurred by or on behalf of the Company's and Arch Western's representatives in connection with presentations to prospective purchasers of the Securities; (ix) the fees and expenses of the Issuer's, Company's and Guarantors' accountants and the fees and expenses of counsel (including local and special counsel) for the Issuer, the Company and the Guarantors and (x) all other costs and expenses incident to the performance by the Issuer and the Guarantors of their obligations hereunder.

6. Conditions to the Obligations of the Initial Purchasers. The obligations of the Initial Purchasers to purchase the Securities shall be subject to the accuracy of the representations and warranties on the part of the Issuer, the Company and the Guarantors contained herein at the Execution Time, the Closing Date and any settlement date pursuant to Section 3 hereof, to the accuracy of the statements of the Issuer, the Company and the Guarantors made in any certificates pursuant to the provisions hereof, to the performance by the Issuer, the Company and the Guarantors of their obligations hereunder and to the following additional conditions:

(a) The Company shall have requested and caused Robert G. Jones, Vice President - Law and General Counsel of the Company, to furnish to the Representatives his opinion dated the Closing Date and addressed to the Representatives, to the effect that:

(i) the Company is duly qualified as a foreign corporation to transact business and is in good standing in each jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except where the failure to so qualify or be in good standing would not result in a Material Adverse Effect;

(ii) the shares of issued and outstanding capital stock of the Company have been duly authorized and validly issued by the Company and are fully paid and non-assessable, and none of such shares of capital stock was issued in violation of preemptive or other similar rights of any securityholder of the Company.

(iii) each of Arch Western, the Subsidiary Guarantors, the Subsidiaries of the Company (other than Arch Western) and the Canyon Fuel has been duly incorporated or organized, as applicable, and is validly existing as a corporation or limited liability company, as applicable, in good standing under the laws of the jurisdiction in which it was organized, with full corporate or other power and authority to own, lease and operate its properties and to conduct its business as described in the Final Memorandum and is

duly qualified to transact business and is in good standing in each jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except where the failure to so qualify or be in good standing would not result in a Material Adverse Effect. Except as otherwise described in the Final Memorandum, all of the issued and outstanding capital stock or membership interests of each of Arch Western, the Subsidiary Guarantors, the Subsidiaries of the Company (other than Arch Western) and Canyon Fuel has been duly authorized and is validly issued, fully paid and non-assessable and, to the best of his knowledge and other than as set forth in the Offering Memorandum, is owned by the Company, directly or through subsidiaries, free and clear of any security interest, mortgage, pledge, lien, encumbrance, claim or equity. None of the outstanding shares of capital stock or membership interests, as applicable, of each of Arch Western, the Subsidiary Guarantors, the Subsidiaries of the Company (other than Arch Western) was issued in violation of preemptive or other similar rights of any securityholder of such Subsidiary.

(iv) the authorized, issued and outstanding shares of capital stock and members' equity, as applicable, of the Company and Arch Western, respectively, is as set forth in the column entitled "Actual" under the caption "Capitalization" in the Final Memorandum (except, with respect to the Company, for subsequent issuances thereof, if any, pursuant to reservations, agreements or employee benefit plans referred to in the Final Memorandum or pursuant to the exercise of convertible securities or options referred to in the Final Memorandum).

(v) neither the Company nor any of its subsidiaries is in violation of its charter or by-laws, and no default by the Company or any of its subsidiaries exists in the due performance or observance of any material obligation, agreement, covenant or condition contained in any contract, indenture, mortgage, loan agreement, note, lease or other agreement or instrument that is described or referred to in the Final Memorandum or filed or incorporated by reference as an exhibit to the Company's annual report on Form 10-K for the year ended December 31, 2002 as filed with the Commission on March 13, 2003. Except as set forth in the Final Memorandum, to the best of his knowledge, there are no options, warrants or other rights to purchase, agreements or other obligations to issue, or rights to convert any obligations into or exchange any securities for, shares of capital stock or ownership interests in the Company or any of its subsidiaries.

(vi) the execution, delivery and performance of this Agreement, the Indenture, the Registration Rights Agreement, the Pledge Agreement and any other agreement or instrument entered into or issued or to be entered into or issued by the Issuer, the Company or any Guarantor in connection with the transactions contemplated in this Agreement, the Indenture, the Registration Rights Agreement, the Pledge Agreement, the Notes, the Guarantees and the Final Memorandum and the consummation of the transactions contemplated hereunder and thereunder (including the issuance and sale of the Securities and the use of the proceeds from the sale of the Securities as described under the caption "Use of Proceeds") and compliance by each of the Issuer, the Company and the Guarantors with its obligations hereunder and thereunder does not and will not, whether with or without the giving of notice or passage of time or both, conflict with or constitute a breach of, or default or Repayment Event under or result in the creation or

imposition of any lien, charge or encumbrance upon any assets, properties or operations of the Company or any of its subsidiaries pursuant to any contract, indenture, mortgage, deed of trust, loan or credit agreement, note, lease or any other agreement or instrument to which the Company or any of its subsidiaries is a party or by which it or any of them may be bound, or to which any of the assets, properties or operations of the Company or any of its subsidiaries is subject (except for such conflicts, breaches or defaults or liens, charges or encumbrances that would not have a Material Adverse Effect), nor will such action result in any violation of the provisions of the charter or by-laws of the Company or any of its subsidiaries, or any applicable law, statute, rule, regulation, judgment, order, writ or decree, known to me, of any government, government instrumentality or court, domestic or foreign, having jurisdiction over the Company or any of its subsidiaries or any of their respective properties, assets or operations.

(vii) to the best of his knowledge, there is not pending or threatened any action, suit, proceeding, inquiry or investigation to which the Company or any of its subsidiaries is a party or to which the assets, properties or operations of the Company or any of its subsidiaries is subject, before or by any court or governmental agency or body, domestic or foreign, which might reasonably be expected to result in a Material Adverse Effect or which might reasonably be expected to materially and adversely affect the assets, properties or operations thereof or the consummation of the transactions contemplated under this Agreement, the Indenture, the Registration Rights Agreement, the Pledge Agreement, the Notes, the Guarantees and the Final Memorandum or the performance by the Company of its obligations thereunder.

(viii) The information in the Annual Report on Form 10-K of the Company for the year ended December 31, 2002 under "Business--Legal Proceedings" and incorporated by reference in the Final Memorandum, to the extent that it constitutes a summary of legal matters, legal proceedings, or legal conclusions, is correct in all material respects.

(ix) All descriptions in the Final Memorandum of contracts and other documents to which the Company or its subsidiaries are a party are accurate in all material respects.

Robert G. Jones shall also state that nothing has come to his attention that causes him to believe that the Final Memorandum, (except for financial statements and schedules and other financial data included or incorporated by reference therein or omitted therefrom, as to which he need make no statement), at the Execution Time and on the Closing Date, included or includes an untrue statement of a material fact or omitted or omits to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading.

(b) The Company shall have requested and caused Kirkpatrick & Lockhart, LLP, counsel for the Company, to furnish to the Representatives its opinion, dated the Closing Date and addressed to the Representatives, to the effect that:

(i) the Company, Arch Western, the Issuer and each Subsidiary Guarantor has been duly incorporated or organized, as applicable, and is validly existing as a corporation or limited liability company, as applicable, in good standing under the laws of the State of Delaware, with full corporate or limited liability company power and authority to own or lease, as the case may be, and to operate its properties and conduct its business as described in the Final Memorandum, to the extent so described therein.

(ii) the Purchase Agreement has been duly authorized, executed and delivered by the Issuer, the Company, Arch Western and each Subsidiary Guarantor.

(iii) the Indenture has been duly authorized, and assuming due authorization, execution and delivery thereof by the Trustee, when executed and delivered by each of the Issuer, Arch Western and each Subsidiary Guarantor, will constitute a valid and binding obligation of the Issuer, Arch Western and each Subsidiary Guarantor, enforceable against the Issuer, Arch Western and each Subsidiary Guarantor in accordance with its terms (subject to the effect of bankruptcy, insolvency, fraudulent transfer, reorganization, receivership, moratorium and other laws affecting the rights and remedies of creditors or secured parties generally, and to the exercise of judicial discretion in accordance with general principles of equity (whether applied by a court of law or equity)).

(iv) the Notes have been duly authorized, executed and delivered and, when authenticated in accordance with the provisions of the Indenture and delivered to and paid for by the Initial Purchasers under this Agreement, will constitute a valid and binding obligation of the Issuer, entitled to the benefits set forth in the Indenture (subject to the effect of bankruptcy, insolvency, fraudulent transfer, reorganization, receivership, moratorium and other laws affecting the rights and remedies of creditors or secured parties generally, and to the exercise of judicial discretion in accordance with general principles of equity (whether applied by a court of law or equity)).

(v) each Guarantee has been duly authorized, executed and delivered and constitutes a valid and binding obligation of Arch Western or the Subsidiary Guarantor party thereto, as applicable (subject to the effect of bankruptcy, insolvency, fraudulent transfer, reorganization, receivership, moratorium and other laws affecting the rights and remedies of creditors or secured parties generally, and to the exercise of judicial discretion in accordance with general principles of equity (whether applied by a court of law or equity)).

(vi) the Registration Rights Agreement has been duly authorized, executed and delivered and constitutes a valid and binding obligation of the Issuer, Arch Coal, Arch Western and each Subsidiary Guarantor (subject to the effect of bankruptcy, insolvency, fraudulent transfer, reorganization, receivership, moratorium and other laws affecting the rights and remedies of creditors or secured parties generally, and to the exercise of judicial discretion in accordance with general principles of equity (whether applied by a court of law or equity) and except as rights to indemnification or contribution thereunder may be limited by federal or state securities laws or the public policy underlying such laws).

(vii) the Pledge Agreement has been duly authorized and, when executed and delivered by Arch Western, will constitute a valid and binding obligation of Arch Western (subject to the effect of bankruptcy, insolvency, fraudulent transfer, reorganization, receivership, moratorium and other laws affecting the rights and remedies of creditors or secured parties generally, and to the exercise of judicial discretion in accordance with general principles of equity (whether applied by a court of law or equity)).

(viii) the Company Notes have been duly authorized, executed and delivered by the Company and constitute a valid and binding obligation of the Company (subject to the effect of bankruptcy, insolvency, fraudulent transfer, reorganization, receivership, moratorium and other laws affecting the rights and remedies of creditors or secured parties generally, and to the exercise of judicial discretion in accordance with general principles of equity (whether applied by a court of law or equity)

(ix) the security interest in the Company Notes granted to the Trustee pursuant to the Pledge Agreement, for the benefit the Holders, as defined in the Indenture, will be perfected upon (i) the execution and delivery of the Pledge Agreement by Arch Western and the Trustee and (ii) the Trustee taking possession of the Company Notes in New York. Assuming that the Trustee has taken and is retaining possession of the Company Notes and the Trustee has taken the Company Notes in good faith without notice (actual or constructive) of any adverse claim within the meaning of the UCC, there has been created under the Pledge Agreement, and there has been granted to the Trustee for the benefit of the Holders, a valid and perfected first priority security interest in the Company Notes to the extent a security interest may be obtained by possession under the UCC.

(x) the statements set forth under the headings "Description of the Notes" and "Exchange Offer; Registration Rights" in the Final Memorandum, insofar as such statements purport to summarize certain provisions of the Notes, the Indenture and the Registration Rights Agreement, provide a fair summary of such provisions.

(xi) the statements in the Final Memorandum under the headings "Governing Documents and Certain Other Agreements", "Important Federal Income Tax Considerations" and "ERISA Considerations" fairly summarize the matters therein described.

(xii) the execution and delivery by the Issuer, Arch Coal, Arch Western and each Subsidiary Guarantor of the Transaction Documents to which it is a party, and the performance by the Issuer, Arch Coal, Arch Western and each Subsidiary Guarantor of its respective obligations under the Transaction Documents to which it is a party, do not violate Arch Coal's Amended and Restated Certificate of Incorporation and Bylaws or the respective Certificates of Formation and Limited Liability Company Agreements of the Issuer, Arch Western or any Subsidiary Guarantor.

(xiii) the Issuer, Arch Coal, Arch Western and each Subsidiary Guarantor each (a) have the corporate or limited liability company power and authority to execute, deliver and perform its respective obligations under the Transaction Documents to which

it is a party, (b) has taken all corporate or other action necessary to authorize the execution and delivery of and performance of its obligations under the Transaction Documents to which it is a party and (c) has duly executed each Transaction Document to which it is a party.

(xiv) the execution and delivery by the Issuer, Arch Coal, Arch Western and each Subsidiary Guarantor of the Transaction Documents to which it is a party, and the performance by the Issuer, Arch Coal, Arch Western and each Subsidiary Guarantor of its obligations under the Transaction Documents to which it is a party, do not (a) breach or constitute a default or an event which, with the giving of notice or the passage of time or both, would constitute a default of the Issuer, Arch Coal, Arch Western or any Subsidiary Guarantor under the express terms of any contract, indenture, mortgage, deed of trust, loan or credit agreement, note, lease or any other agreement or instrument to which the Issuer, Arch Coal, Arch Western or any Subsidiary Guarantor is a party or by which any of them may be bound, or to which any of the assets, properties or operations of any of them is subject, that has been listed as an exhibit to the most recent Annual Report on Form 10-K of the Company or subsequent filings of the Company with the Commission under Section 13 of the Exchange Act (except for such conflicts, breaches or defaults or liens, charges or encumbrances that will not have a Material Adverse Effect) nor will such action result in any violation of the provisions of the Amended and Restated Certificate of Incorporation and Bylaws of Arch Coal or the respective Certificates of Formation and Limited Liability Company Agreements of the Issuer, Arch Western or any Subsidiary Guarantors or (assuming compliance with the securities or blue sky laws of the various states, and provided that we express no opinion with respect to the provisions of Section 8 of the Purchase Agreement) any applicable law, statue, rule, regulation, judgment, order, writ or decree, known to such counsel, of any government, government instrumentality or court, domestic or foreign, having jurisdiction over Arch Coal, the Issuer, Arch Western and the Subsidiary Guarantors or any of their assets.

(xv) the execution and delivery by the Issuer, Arch Coal, Arch Western and each Subsidiary Guarantor of the Transaction Documents to which it is a party, and the performance by the Issuer, Arch Coal, Arch Western and each Subsidiary Guarantor of its respective obligations under the Transaction Documents to which it is a party, do not require the Issuer, Arch Coal, Arch Western or any Subsidiary Guarantor to obtain any consent, approval, authorization, filing with or order of any court or governmental agency or body in connection with the transactions contemplated by the Transaction Documents, except such as will be obtained under the Act, the Trust Indenture Act, and as may be required under the blue sky or securities laws of any jurisdiction in connection with the purchase and sale of the Notes by the Initial Purchasers in the manner contemplated in the Purchase Agreement, the Final Memorandum and the Registration Rights Agreement and such other approvals and filings as have been previously obtained or made and in full force and effect.

(xvi) the documents of the Company incorporated by reference in the Final Memorandum, as described in the Final Memorandum under the heading "Where You Can Find More Information" (other than the financial statements and supporting schedules and other financial and statistical data included therein or omitted therefrom, as

to which we express no opinion), when they were filed with the Commission, complied as to form in all material respects with the requirements of the Exchange Act.

(xvii) neither the Issuer nor any Subsidiary Guarantor is, and upon the issuance and sale of the Securities as contemplated by the Transaction Documents and the application of the net proceeds therefrom as described in the Final Memorandum will be, an "investment company" or an entity "controlled" "by an investment company", as such terms are defined in the Investment Company Act.

(xviii) assuming the accuracy of the representations and warranties and compliance with the agreements contained herein, no registration of the Securities under the Act, and no qualification of an indenture under the Trust Indenture Act, are required for the offer and sale by the Initial Purchasers of the Securities in the manner contemplated by the Purchase Agreement.

Such counsel shall also state that while it is not opining as to factual matters and is not passing upon and does not assume any responsibility for the accuracy, completeness or fairness of the information included in the Final Memorandum and assumes the correctness and completeness of the information included in the Final Memorandum and has made no independent investigation or verification of such information, except as set forth in paragraphs (x) and (xi) above, that on the basis of its review of the Final Memorandum and its participation in its preparation, nothing has come to its attention that causes it to believe that the Final Memorandum (except for financial statements and supporting schedules and other financial and reserve data included therein or omitted therefrom, as to which it need not make any statement) at the Execution Time and the Closing Time included an untrue statement of a material fact or omitted to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading.

In rendering such opinion, such counsel may rely (A) as to matters involving the application of laws of any jurisdiction other than the State of Delaware, the State of New York or the Federal laws of the United States, to the extent they deem proper and specified in such opinion, upon the opinion of other counsel of good standing whom they believe to be reliable and who are satisfactory to counsel for the Initial Purchasers; and (B) as to matters of fact, to the extent they deem proper, on certificates of responsible officers of the Company and public officials. References to the Final Memorandum in Section 6(a) and Section (b) include any amendment or supplement thereto at the Closing Date.

(c) The Representatives shall have received from Shearman & Sterling LLP, counsel for the Initial Purchasers, such opinion or opinions, dated the Closing Date and addressed to the Representatives, with respect to the issuance and sale of the Securities, the Indenture, the Registration Rights Agreement, the Final Memorandum (as amended or supplemented at the Closing Date) and other related matters as the Representatives may reasonably require, and the Company shall have furnished to such counsel such documents as they request for the purpose of enabling them to pass upon such matters.

(d) The Company shall have furnished to the Representatives a certificate of the Company, signed by the Chief Executive Officer and the Chief Financial Officer of the

Company, dated the Closing Date, to the effect that the signers of such certificate have carefully examined the Final Memorandum, any amendment or supplement to the Final Memorandum and this Agreement and that:

(i) the representations and warranties of each of the Issuer and the Guarantors in this Agreement are true and correct in all material respects on and as of the Closing Date with the same effect as if made on the Closing Date, and the Company has complied with all the agreements and satisfied all the conditions on its part to be performed or satisfied hereunder at or prior to the Closing Date; and

(ii) since the date of the most recent financial statements included in the Final Memorandum (exclusive of any amendment or supplement thereto), there has been no material adverse change in the condition (financial or otherwise), prospects, earnings, business or properties of (A) the Company and its subsidiaries, taken as a whole, or (B) Arch Western and its subsidiaries, taken as a whole, whether or not arising from transactions in the ordinary course of business, except as set forth in or contemplated by the Final Memorandum (exclusive of any amendment or supplement thereto).

(e) At the Execution Time and at the Closing Date, the Company shall have requested and caused Ernst & Young LLP to furnish to the Representatives letters, dated respectively as of the Execution Time and as of the Closing Date, in form and substance satisfactory to the Representatives, confirming that they are independent accountants within the meaning of the Act and the Exchange Act, that they have performed a review of the unaudited interim consolidated financial information of the Company and Arch Western, respectively, for the three-month period ended March 31, 2003 and as at March 31, 2003, and stating in effect that:

(i) in their opinion the (A) audited financial statements and pro forma financial statements of the Company and (B) audited financial statements of Arch Western, included in the Final Memorandum and reported on by them, comply in form in all material respects with the applicable accounting requirements of the Exchange Act;

(ii) on the basis of a reading of the latest unaudited consolidated financial statements made available by the Company and Arch Western; their limited review in accordance with the standards established under Statement on Auditing Standards No. 100, of the unaudited interim financial information for the three-month period ended March 31, 2003 and as at March 31, 2003; carrying out certain specified procedures (but not an examination in accordance with generally accepted auditing standards) which would not necessarily reveal matters of significance with respect to the comments set forth in such letter; a reading of the minutes of the meetings of the stockholders, directors and members, as applicable, and of the Audit Committee, Finance Committee, Personnel and Compensation Committee and Directors Committee of the Company and its subsidiaries; and inquiries of certain officials of the Company and Arch Western who have responsibility for financial and accounting matters of the Company and its subsidiaries and Arch Western and its subsidiaries, as to transactions and events subsequent to December 31, 2002, nothing came to their attention which caused them to believe that:

(1) any unaudited financial statements included in the Final Memorandum do not comply in form in all material respects with applicable accounting requirements and with the published rules and regulations of the Commission with respect to financial statements included or incorporated in quarterly reports on Form 10-Q under the Exchange Act; and said unaudited financial statements are not in conformity with generally accepted accounting principles applied on a basis substantially consistent with that of the audited financial statements included in the Final Memorandum; or

(2) with respect to the period subsequent to March 31, 2003, there were any changes, at a specified date not more than five days prior to the date of the letter, (i) in the long-term debt of the Company and its subsidiaries or capital stock of the Company or decreases in the stockholders' equity of the Company or net current assets of the Company as compared with the amounts shown on the March 31, 2003 consolidated balance sheet included in the Final Memorandum, or for the period from April 1, 2003 to such specified date there were any decreases, as compared with the corresponding period in the preceding year in income from operations or in total or per share amounts of net income of the Company and its subsidiaries; or (ii) in the long-term debt of Arch Western and its subsidiaries or membership interests of Arch Western or net current assets of Arch Western as compared with amounts shown on the March 31, 2003 consolidated balance sheet included in the Final Memorandum, or for the period from April 1, 2003 to such specified date there were any decreases, as compared with the corresponding period in the proceeding year, in income from operations or in net income of Arch Western and its subsidiaries except in all instances for changes or decreases set forth in the Final Memorandum; or

(3) the information included under the headings "Arch Western Selected Consolidated Financial and Operating Data" and "Arch Coal Selected Consolidated Financial and Operating Data" is not in conformity with the disclosure requirements of Regulation S-K; or

(iii) they have performed certain other specified procedures as a result of which they determined that certain information of an accounting, financial or statistical nature (which is limited to accounting, financial or statistical information derived from the general accounting records of the Company and its subsidiaries) set forth in the Final Memorandum in the Final Memorandum, agrees with the accounting records of the Company and its subsidiaries, excluding any questions of legal interpretation.

References to the Final Memorandum in this Section 6(e) include any amendment or supplement thereto at the date of the applicable letter.

(f) At the Execution Time and at the Closing Date, the Company shall have requested and caused Ernst & Young LLP to furnish to the Representatives letters, dated respectively as of the Execution Time and as of the Closing Date, in form and substance satisfactory to the Representatives, confirming that they are independent accountants within the meaning of the Act and the Exchange Act, that they have performed a review of the unaudited

interim consolidated financial information of Canyon Fuel for the three-month period ended March 31, 2003 and as at March 31, 2003, and stating in effect that:

(i) in their opinion the audited financial statements of Canyon Fuel included in the Final Memorandum and reported on by them comply in form in all material respects with the applicable accounting requirements of the Exchange Act;

(ii) on the basis of a reading of the latest unaudited consolidated financial statements made available by Canyon Fuel their limited review in accordance with the standards established under Statement on Auditing Standards No. 100, of the unaudited interim financial information for the three-month period ended March 31, 2003 and as at March 31, 2003; carrying out certain specified procedures (but not an examination in accordance with generally accepted auditing standards) which would not necessarily reveal matters of significance with respect to the comments set forth in such letter; a reading of the minutes of the meetings of the directors; and inquiries of certain officials of Canyon Fuel who have responsibility for financial and accounting matters of Canyon Fuel and its subsidiaries, as to transactions and events subsequent to December 31, 2002, nothing came to their attention which caused them to believe that:

(1) any unaudited financial statements included in the Final Memorandum do not comply in form in all material respects with applicable accounting requirements and with the published rules and regulations of the Commission with respect to financial statements included or incorporated in quarterly reports on Form 10-Q under the Exchange Act; and said unaudited financial statements are not in conformity with generally accepted accounting principles applied on a basis substantially consistent with that of the audited financial statements included in the Final Memorandum; or

(2) with respect to the period subsequent to March 31, 2003, there were any changes, at a specified date not more than five days prior to the date of the letter, in the long-term debt of Canyon Fuel or decreases in the members' equity of the Canyon Fuel or net current assets of the Canyon Fuel as compared with the amounts shown on the March 31, 2003 consolidated balance sheet included in the Final Memorandum, or for the period from April 1, 2003 to such specified date there were any decreases, as compared with the corresponding period in the preceding year in net revenue, income before extraordinary items or in net income of Canyon Fuel and its subsidiaries; or

(iii) they have performed certain other specified procedures as a result of which they determined that certain information of an accounting, financial or statistical nature (which is limited to accounting, financial or statistical information derived from the general accounting records of the Canyon Fuel and its subsidiaries) set forth in the Final Memorandum in the Final Memorandum, agrees with the accounting records of the Canyon Fuel and its subsidiaries, excluding any questions of legal interpretation.

References to the Final Memorandum in this Section 6(f) include any amendment or supplement thereto at the date of the applicable letter.

(g) At the Execution Time and at the Closing Date, the Company shall have requested and caused PricewaterhouseCoopers LLP to furnish to the Representatives letters, dated respectively as of the Execution Time and as of the Closing Date, in form and substance satisfactory to the Representatives, confirming that they are independent accountants within the meaning of the Act and the Exchange Act, that they have performed a review of the unaudited interim consolidated financial information of Triton for the three-month period ended March 31, 2003 and as at March 31, 2003, and stating in effect that:

(i) in their opinion the audited financial statements of Triton included in the Final Memorandum and reported on by them comply in form in all material respects with the applicable accounting requirements of the Exchange Act;

(ii) on the basis of a reading of the latest unaudited consolidated financial statements made available by Triton; their limited review in accordance with the standards established under Statement on Auditing Standards No. 100, of the unaudited interim financial information for the three-month period ended March 31, 2003 and as at March 31, 2003; carrying out certain specified procedures (but not an examination in accordance with generally accepted auditing standards) which would not necessarily reveal matters of significance with respect to the comments set forth in such letter; a reading of the minutes of the meetings of the stockholders and directors; and inquiries of certain officials of Triton who have responsibility for financial and accounting matters of Triton and its subsidiaries, as to transactions and events subsequent to December 31, 2002, nothing came to their attention which caused them to believe that:

(1) any unaudited financial statements included in the Final Memorandum do not comply in form in all material respects with applicable accounting requirements and with the published rules and regulations of the Commission with respect to financial statements included or incorporated in quarterly reports on Form 10-Q under the Exchange Act; and said unaudited financial statements are not in conformity with generally accepted accounting principles applied on a basis substantially consistent with that of the audited financial statements included in the Final Memorandum; or

(2) with respect to the period subsequent to March 31, 2003, there were any changes, at a specified date not more than five days prior to the date of the letter, in the long-term debt of Triton and its subsidiaries or capital stock of Triton or decreases in the stockholders' equity of the Triton or net current assets of the Triton as compared with the amounts shown on the March 31, 2003 consolidated balance sheet included in the Final Memorandum, or for the period from April 1, 2003 to such specified date there were any decreases, as compared with the corresponding period in the preceding year in income from operations or in total or per share amounts of net income of Triton and its subsidiaries; or

(iii) they have performed certain other specified procedures as a result of which they determined that certain information of an accounting, financial or statistical nature (which is limited to accounting, financial or statistical information derived from the general accounting records of the Triton and its subsidiaries) set forth in the Final

Memorandum in the Final Memorandum, agrees with the accounting records of the Triton and its subsidiaries, excluding any questions of legal interpretation.

References to the Final Memorandum in this Section 6(g) include any amendment or supplement thereto at the date of the applicable letter.

(h) Subsequent to the Execution Time or, if earlier, the dates as of which information is given in the Final Memorandum (exclusive of any amendment or supplement thereto), there shall not have been (i) any change or decrease specified in the letter or letters referred to in paragraphs (e), (f) and (g) of this Section 6; or (ii) any change, or any development involving a prospective change, in or affecting the condition (financial or otherwise), prospects, earnings, business or properties of (i) the Company and its subsidiaries, taken as a whole, or (ii) Arch Western and its subsidiaries, taken as a whole, whether or not arising from transactions in the ordinary course of business, except as set forth in or contemplated in the Final Memorandum (exclusive of any amendment or supplement thereto) the effect of which, in any case referred to in clause (i) or (ii) above, is, in the sole judgment of the Representatives, so material and adverse as to make it impractical or inadvisable to proceed with the offering, sale or delivery of the Securities as contemplated by the Final Memorandum (exclusive of any amendment or supplement thereto).

(i) The Securities shall have been designated as PORTAL-eligible securities in accordance with the rules and regulations of the NASD, and the Securities shall be eligible for clearance and settlement through The Depository Trust Company.

(j) Subsequent to the Execution Time, there shall not have been any decrease in the rating of any of the Company's debt securities or Arch Western's debt securities by any "nationally recognized statistical rating organization" (as defined for purposes of Rule 436(g) under the Act) or any notice given of any intended or potential decrease in any such rating or of a possible change in any such rating that does not indicate the direction of the possible change.

(k) Prior to the Closing Date, the Company shall have furnished to the Representatives an executed copy of an Agreement of Members of Arch Western pursuant to which Delta Housing Inc. and Arch Western Acquisition Corporation agreed that the consummation of the transactions contemplated by this Agreement, the Indenture, the Registration Rights Agreement, the Pledge Agreement and the Final Memorandum are permitted under the Limited Liability Company Agreement of Arch Western.

(l) Prior to the Closing Date, the Company shall have received from PNC Bank, on behalf of the lenders party under the $350,000,000 Amended and Restated Revolving Credit Facility , dated as of April 18, 2002, by and among the Company and the lenders party thereto (the "Company Credit Facility"), (i) an irrevocable waiver of any Event of Default (as defined in, and under, the Company Credit Facility) caused, directly or indirectly, by the transactions contemplated by this Agreement, the Indenture, the Registration Rights Agreements, the Pledge Agreement and the Final Memorandum and (ii) an irrevocable consent to the consummation of such transactions; and such waiver and consent, a copy of which shall have been furnished to the Representatives prior to the Closing Date, shall be in full force and effect on the Closing Date.

(m) Prior to the Closing Date, the Issuer, the Company and the Guarantors shall have furnished to the Representatives such further consents, waivers, information, certificates and documents as the Representatives may reasonably request.

If any of the conditions specified in this Section 6 shall not have been fulfilled in all material respects when and as provided in this Agreement, or if any of the opinions and certificates mentioned above or elsewhere in this Agreement shall not be in all material respects reasonably satisfactory in form and substance to the Representatives and counsel for the Initial Purchasers, this Agreement and all obligations of the Initial Purchasers hereunder may be canceled at, or at any time prior to, the Closing Date by the Representatives. Notice of such cancellation shall be given to the Company in writing or by telephone or facsimile confirmed in writing.

The documents required to be delivered by this Section 6 will be delivered at the office of counsel for the Initial Purchasers, at Shearman & Sterling LLP, 599 Lexington Avenue, New York, New York 10022-6069, on the Closing Date.

7. Reimbursement of Expenses. If the sale of the Securities provided for herein is not consummated because any condition to the obligations of the Initial Purchasers set forth in Section 6 hereof is not satisfied, because of any termination pursuant to Section 10 hereof or because of any refusal, inability or failure on the part of the Issuer, the Company or any Guarantor to perform any agreement herein or comply with any provision hereof other than by reason of a default by any of the Initial Purchasers, each of the Issuer, the Company and the Guarantors, jointly and severally, agrees that it will reimburse the Initial Purchasers severally through Citigroup Global Markets Inc. on demand for all out-of-pocket expenses (including reasonable fees and disbursements of counsel) that shall have been incurred by them in connection with the proposed purchase and sale of the Securities.

8. Indemnification and Contribution. (a) Each of the Issuer, the Company and the Guarantors, jointly and severally, agrees to indemnify and hold harmless each Initial Purchaser, the affiliates, directors, officers, employees and agents of each Initial Purchaser and each person who controls any Initial Purchaser within the meaning of either the Act or the Exchange Act against any and all losses, claims, damages or liabilities, joint or several, to which they or any of them may become subject under the Act, the Exchange Act or other Federal or state statutory law or regulation, at common law or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon any untrue statement or alleged untrue statement of a material fact contained in the Preliminary Memorandum, the Final Memorandum (or in any supplement or amendment thereto) or any information provided by the Issuer or any Guarantor to any holder or prospective purchaser of Securities pursuant to Section 5(h), or in any amendment thereof or received by it supplement thereto, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, and agrees to reimburse each such indemnified party, as incurred, for any legal or other expenses reasonably incurred by them in connection with investigating or defending any such loss, claim, damage, liability or action; provided, however, that neither the Issuer, nor the Company nor any Guarantor will be liable in any such case to the extent that any such loss, claim, damage or liability arises out of or is based

upon any such untrue statement or alleged untrue statement or omission or alleged omission made in the Preliminary Memorandum or the Final Memorandum, or in any amendment thereof or supplement thereto, in reliance upon and in conformity with written information furnished to the Issuer, the Company or any Guarantor by or on behalf of any Initial Purchasers through the Representatives specifically for inclusion therein. This indemnity agreement will be in addition to any liability which the Issuer, the Company or any Guarantor may otherwise have.

(b) Each Initial Purchaser severally and not jointly agrees to indemnify and hold harmless the Issuer, the Company and the Guarantors, each of their respective directors, each of their respective officers, and each person who controls the Issuer, the Company or any Guarantor within the meaning of either the Act or the Exchange Act, to the same extent as the foregoing indemnity from each of the Issuer, the Company and the Guarantors to each Initial Purchaser, but only with reference to written information relating to such Initial Purchaser furnished to the Issuer, the Company or any Guarantor by or on behalf of such Initial Purchaser through the Representatives specifically for inclusion in the Preliminary Memorandum or the Final Memorandum (or in any amendment or supplement thereto). This indemnity agreement will be in addition to any liability which any Initial Purchaser may otherwise have. Each of the Issuer, the Company and the Guarantors acknowledges that the statements set forth in the paragraph related to stabilization, syndicate covering transactions and penalty bids on page 127 of the Preliminary Memorandum and the Final Memorandum, constitute the only information furnished in writing by or on behalf of the Initial Purchasers for inclusion in the Preliminary Memorandum or the Final Memorandum (or in any amendment or supplement thereto).

(c) Promptly after receipt by an indemnified party under this Section 8 of notice of the commencement of any action, such indemnified party will, if a claim in respect thereof is to be made against the indemnifying party under this Section 8, notify the indemnifying party in writing of the commencement thereof; but the failure so to notify the indemnifying party (i) will not relieve it from liability under paragraph (a) or (b) above unless and to the extent it did not otherwise learn of such action and such failure results in the forfeiture by the indemnifying party of substantial rights and defenses; and (ii) will not, in any event, relieve the indemnifying party from any obligations to any indemnified party other than the indemnification obligation provided in paragraph (a) or (b) above. The indemnifying party shall be entitled to appoint counsel of the indemnifying party's choice at the indemnifying party's expense to represent the indemnified party in any action for which indemnification is sought (in which case the indemnifying party shall not thereafter be responsible for the fees and expenses of any separate counsel retained by the indemnified party or parties except as set forth below); provided, however, that such counsel shall be satisfactory to the indemnified party. Notwithstanding the indemnifying party's election to appoint counsel to represent the indemnified party in an action, the indemnified party shall have the right to employ separate counsel (including local counsel), and the indemnifying party shall bear the reasonable fees, costs and expenses of such separate counsel if (i) the use of counsel chosen by the indemnifying ' represent the indemnified party would present such counsel with a conflict of interest; (ii) the actual or potential defendants in, or targets of, any such action include both the indemnified party and the indemnifying party and the indemnified party shall have reasonably concluded that there may be legal defenses available to it and/or other indemnified parties which are different from or additional to those available to the indemnifying party; (iii) the indemnifying party shall not have employed counsel satisfactory to the indemnified party to

represent the indemnified party within a reasonable time after notice of the institution of such action; or (iv) the indemnifying party shall authorize the indemnified party to employ separate counsel at the expense of the indemnifying party. An indemnifying party will not, without the prior written consent of the indemnified parties, settle or compromise or consent to the entry of any judgment with respect to any pending or threatened claim, action, suit or proceeding in respect of which indemnification or contribution may be sought hereunder (whether or not the indemnified parties are actual or potential parties to such claim or action) unless such settlement, compromise or consent includes an unconditional release of each indemnified party from all liability arising out of such claim, action, suit or proceeding and does not involve any statement as to or any admission of fault, culpability or failure to act by or on behalf of any indemnified party.

(d) In the event that the indemnity provided in paragraph (a) or (b) of this Section 8 is unavailable to or insufficient to hold harmless an indemnified party for any reason, the Issuer, the Company, the Guarantors and the Initial Purchasers agree to contribute to the aggregate losses, claims, damages and liabilities (including legal or other expenses reasonably incurred in connection with investigating or defending same) (collectively "Losses") to which the Issuer, the Company, the Guarantors and one or more of the Initial Purchasers may be subject in such proportion as is appropriate to reflect the relative benefits received by the Issuer, the Company and the Guarantors, taken as a whole, on the one hand and by the Initial Purchasers on the other from the offering of the Securities; provided, however, that in no case shall any Initial Purchaser (except as may be provided in any agreement among the Initial Purchasers relating to the offering of the Securities) be responsible for any amount in excess of the purchase discount or commission applicable to the Securities purchased by such Initial Purchaser hereunder. If the allocation provided by the immediately preceding sentence is unavailable for any reason, the Issuer, the Company, the Guarantors and the Initial Purchasers shall contribute in such proportion as is appropriate to reflect not only such relative benefits but also the relative fault of the Issuer, the Company and the Guarantor, taken as a whole, on the one hand and of the Initial Purchasers on the other in connection with the statements or omissions which resulted in such Losses, as well as any other relevant equitable considerations. Benefits received by each of the Issuer, the Company and the Guarantors shall be deemed to be equal to the total net proceeds from the offering (before deducting expenses) received by the Issuer, the Company and the Guarantors, taken as a whole, and benefits received by the Initial Purchasers shall be deemed to be equal to the total purchase discounts and commissions. Relative fault shall be determined by reference to, among other things, whether any untrue or any alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information provided by the Issuer, the Company and the Guarantors, taken as a whole, on the one hand or the Initial Purchasers on the other, the intent of the parties and their relative knowledge, access to information and opportunity to correct or prevent such untrue statement or omission. The Issuer, the Company, the Guarantors and the Initial Purchasers agree that it would not be just and equitable if contribution were determined by pro rata allocation or any other method of allocation which does not take account of the equitable considerations referred to above. Notwithstanding the provisions of this paragraph (d), no person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. For purposes of this Section 8, each person who controls an Initial Purchaser within the meaning of either the Act or the Exchange Act and each affiliate, director, officer, employee and agent of an Initial Purchaser shall have the same rights

to contribution as such Initial Purchaser, and each person who controls the Issuer, the Company or any Guarantor within the meaning of either the Act or the Exchange Act and each respective officer and director of each of the Issuer, the Company and the Guarantors shall have the same rights to contribution as each of the Issuer, the Company and the Guarantors, subject in each case to the applicable terms and conditions of this paragraph (d). The Initial Purchasers' obligations in this Section 8 to contribute are several in proportion to their respective underwriting obligations and not joint.

9. Default by an Initial Purchaser. If any one or more Initial Purchasers shall fail to purchase and pay for any of the Securities agreed to be purchased by such Initial Purchaser hereunder and such failure to purchase shall constitute a default in the performance of its or their obligations under this Agreement, the remaining Initial Purchasers shall be obligated severally to take up and pay for (in the respective proportions which the principal amount of Securities set forth opposite their names in Schedule I hereto bears to the aggregate principal amount of Securities set forth opposite the names of all the remaining Initial Purchasers) the Securities which the defaulting Initial Purchaser or Initial Purchasers agreed but failed to purchase; provided, however, that in the event that the aggregate principal amount of Securities which the defaulting Initial Purchaser or Initial Purchasers agreed but failed to purchase shall exceed 10% of the aggregate principal amount of Securities set forth in Schedule I hereto, the remaining Initial Purchasers shall have the right to purchase all, but shall not be under any obligation to purchase any, of the Securities, and if such nondefaulting Initial Purchasers do not purchase all the Securities, this Agreement will terminate without liability to any nondefaulting Initial Purchaser, the Issuer, the Company or any Guarantor. In the event of a default by any Initial Purchaser as set forth in this Section 9, the Closing Date shall be postponed for such period, not exceeding five Business Days, as the Representatives shall determine in order that the required changes in the Final Memorandum or in any other documents or arrangements may be effected. Nothing contained in this Agreement shall relieve any defaulting Initial Purchaser of its liability, if any, to the Issuer, the Company, any Guarantor or any nondefaulting Initial Purchaser for damages occasioned by its default hereunder.

10. Termination. This Agreement shall be subject to termination in the absolute discretion of the Representatives, by notice given to the Company prior to delivery of and payment for the Securities, if at any time prior to such time (i) trading in the Company's securities shall have been suspended by the Commission or the New York Stock Exchange or trading in securities generally on the New York Stock Exchange shall have been suspended or limited or minimum prices shall have been established on such Exchange; (ii) a banking moratorium shall have been declared either by Federal or New York State authorities; or (iii) there shall have occurred any outbreak or escalation of hostilities, declaration by the United States of a national emergency or war or other calamity or crisis the effect of which on financial markets is such as to make it, in the sole judgment of the Representatives, impracticable or inadvisable to proceed with the offering or delivery of the Securities as contemplated by the Final Memorandum (exclusive of any amendment or supplement thereto).

11. Representations and Indemnities to Survive. The respective agreements, representations, warranties, indemnities and other statements of each of the Issuer, the Company, the Guarantors or their respective officers and of the Initial Purchasers set forth in or made pursuant to this Agreement will remain in full force and effect, regardless of any investigation

made by or on behalf of the Initial Purchasers or the Issuer, the Company, any Guarantor or any of the officers, directors or controlling persons referred to in Section 8 hereof, and will survive delivery of and payment for the Securities. The provisions of Sections 7 and 8 hereof shall survive the termination or cancellation of this Agreement.

12. Notices. All communications hereunder will be in writing and effective only on receipt, and, if sent to the Representatives, will be mailed, delivered or telefaxed to the Citigroup Global Markets Inc., General Counsel (fax no.: (212) 816-7912) and confirmed to the General Counsel Citigroup Global Markets Inc., at 388 Greenwich Street, New York, New York 10013, Attention: General Counsel; or, if sent to the Issuer, the Company or any Guarantor, will be mailed, delivered or telefaxed and confirmed to it at Arch Coal Inc., CityPlace One, Suite 300, St. Louis, Missouri 63141, Attention: General Counsel (fax no.: (314) 994-2734).

13. Successors. This Agreement will inure to the benefit of and be binding upon the parties hereto and their respective successors and the officers and directors and controlling persons referred to in Section 8 hereof, and, except as expressly set forth in Section 5(h) hereof, no other person will have any right or obligation hereunder.

14. Applicable Law. This Agreement will be governed by and construed in accordance with the laws of the State of New York applicable to contracts made and to be performed within the State of New York.

15. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall constitute an original and all of which together shall constitute one and the same instrument.

16. Headings. The section headings used herein are for convenience only and shall not affect the construction hereof.

17. Definitions. The terms which follow, when used in this Agreement, shall have the meanings indicated.

"Act" shall mean the Securities Act of 1933, as amended, and the rules and regulations of the Commission promulgated thereunder.

"Affiliate" shall have the meaning specified in Rule 501(b) of Regulation D.

"Business Day" shall mean any day other than a Saturday, a Sunday or a legal holiday or a day on which banking institutions or trust companies are authorized or obligated by law to close in The City of New York.

"Commission" shall mean the Securities and Exchange Commission.

"Exchange Act" shall mean the Securities Exchange Act of 1934, as amended, and the rules and regulations of the Commission promulgated thereunder.

"Execution Time" shall mean, the date and time that this Agreement is executed and delivered by the parties hereto.

"Investment Company Act" shall mean the Investment Company Act of 1940, as amended, and the rules and regulations of the Commission promulgated thereunder.

"NASD" shall mean the National Association of Securities Dealers, Inc.

"Preferred Return" shall have the meaning ascribed to it in the Limited Liability Company Agreement of Arch Western Resources, LLC, dated as of June 1, 1998, between Delta Housing Corporation and Arch Western Acquisition Corporation.

"Regulation D" shall mean Regulation D under the Act.

"Regulation S" shall mean Regulation S under the Act.

"Repayment Event" shall mean any event or condition which gives the holder of any note, debenture or other evidence of indebtedness (or any person acting on such holder's behalf) the right to require the repurchase, redemption or repayment of all or a portion of such indebtedness by the Company or any of its subsidiaries.

"Subsidiary" shall mean a "significant subsidiary" as such term is defined in Rule 1-02 of Regulation S-X promulgated under the Act (each, a "Subsidiary" and, collectively, the "Subsidiaries")

"subsidiary" of a specified person shall mean an affiliate controlled by such person directly, or indirectly through one or more intermediaries, and in the case of each of the Company and Arch Western shall be deemed to include Canyon Fuel.

"Transaction Documents" shall mean, collectively, this Agreement, the Indenture, the Registration Rights Agreement, the Pledge Agreement and the Company Notes.

"Trust Indenture Act" shall mean the Trust Indenture Act of 1939, as amended, and the rules and regulations of the Commission promulgated thereunder.

If the foregoing is in accordance with your understanding of our agreement, please sign and return to us the enclosed duplicate hereof, whereupon this Agreement and your acceptance shall represent a binding agreement among the Issuer, the Company, the Guarantors and the several Initial Purchasers.

Very truly yours,

Arch Western Finance, LLC

By /s/ JAMES E. FLORCZAK

Name: James E. Florczak
Title: Vice President &Treasurer

Arch Coal, Inc.

By /s/ ROBERT G. JONES

Name: Robert G. Jones
Title: Vice President - Law, General Counsel

Arch Western Resources, LLC

By /s/ JAMES E. FLORCZAK

Name: James E. Florczak
Title: Vice President & Treasurer

Thunder Basin Coal Company, L.L.C.

By /s/ JAMES E. FLORCZAK

Name: James E. Florczak
Title: Vice President & Treasurer

Mountain Coal Company, L.L.C.

By /s/ JAMES E. FLORCZAK

Name: James E. Florczak
Title: Vice President & Treasurer

Arch of Wyoming, LLC

By /s/ JAMES E. FLORCZAK

Name: James E. Florczak
Title: Vice President & Treasurer

The foregoing Agreement is hereby
confirmed and accepted as of the
date first above written.

Citigroup Global Markets Inc.
J.P. Morgan Securities Inc.
Morgan Stanley & Co. Incorporated

By: Citigroup Global Markets Inc.

By: /s/ CHRISTOPHER M. BLAKE

Name: Christopher M. Blake
Title: Vice President

For themselves and the other several
Initial Purchasers named in
Schedule I to the foregoing Agreement.

SCHEDULE I

Initial Purchasers	Principal Amount of Securities to Be Purchased
Citigroup Global Markets Inc.	US$175,000,000
J.P. Morgan Securities Inc.	175,000,000
Morgan Stanley & Co. Incorporated	175,000,000
PNC Capital Markets, Inc.	70,000,000
Merrill Lynch, Pierce, Fenner & Smith Incorporated	24,500,000
Credit Suisse First Boston LLC	24,500,000
Credit Lyonnais Securities (USA) Inc	17,500,000
U.S. Bancorp Piper Jaffray Inc.	15,750,000
BNY Capital Markets, Inc.	15,750,000
BNP Paribas Securities Corp	7,000,000
Total	US$700.000,000

SCHEDULE II

Subsidiary Guarantors	Jurisdiction of Organization
Arch of Wyoming, LLC	Delaware
Mountain Coal Company, L.L.C.	Delaware
Thunder Basin Coal Company, L.L.C.	Delaware

Selling Restrictions for Offers and Sales outside the United States

(1)(a) The Securities have not been and will not be registered under the Act and may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons except in accordance with Regulation S under the Act or pursuant to an exemption from the registration requirements of the Act. Each Initial Purchaser represents and agrees that, except as otherwise permitted by Section 4(a) of the Agreement to which this is an exhibit, it has offered and sold the Securities, and will offer and sell the Securities, (i) as part of their distribution at any time; and (ii) otherwise until 40 days after the later of the commencement of the offering and the Closing Date, only in accordance with Rule 903 of Regulation S under the Act. Accordingly, each Initial Purchaser represents and agrees that neither it, nor any of its Affiliates nor any person acting on its or their behalf has engaged or will engage in any directed selling efforts with respect to the Securities, and that it and they have complied and will comply with the offering restrictions requirement of Regulation S. Each Initial Purchaser agrees that, at or prior to the confirmation of sale of Securities (other than a sale of Securities pursuant to Section 4(a) of the Agreement to which this is an exhibit), it shall have sent to each distributor, dealer or person receiving a selling concession, fee or other remuneration that purchases Securities from it during the distribution compliance period a confirmation or notice to substantially the following effect:

"The Securities covered hereby have not been registered under the U.S. Securities Act of 1933 (the "Act") and may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons (i) as part of their distribution at any time or (ii) otherwise until 40 days after the later of the commencement of the offering and [specify closing date of the offering], except in either case in accordance with Regulation S or Rule 144A under the Act. Terms used above have the meanings given to them by Regulation S."

(b) Each Initial Purchaser also represents and agrees that it has not entered and will not enter into any contractual arrangement with any distributor with respect to the distribution of the Securities, except with its Affiliates or with the prior written consent of the Company.

(c) Terms used in this section have the meanings given to them by Regulation S.

(2) Each Initial Purchaser represents and agrees that (i) it has not offered or sold and, prior to the date six months after the date of issuance of the Securities, will not offer or sell any Securities to persons in the United Kingdom except to persons whose ordinary activities involve them in acquiring, holding, managing or disposing of investments (as principal or as agent) for the purposes of their businesses or otherwise in circumstances which have not resulted and will not result in an offer to the public in the United Kingdom within the meaning of the Public Offers of Securities Regulations 1995; (ii) it has complied and will comply with all applicable provisions of the Financial Services and Markets Act 2000 ("FMSA") with respect to anything done by it in relation to the Securities in, from or otherwise involving the United

Kingdom; and (iii) it has only communicated and will only communicate or cause to be communicated any invitation or inducement to engage in investment activity (within the meaning of Section 21 of the FMSA) received by it in connection with the issue or sale of any Securities in which Section 21(1) of the FMSA does not apply to the Issuer or the Guarantors.

EXHIBIT 3.1

CERTIFICATE OF FORMATION
OF
ARCH WESTERN FINANCE, LLC
A Limited Liability Company

FIRST: The name of the limited liability company is:

Arch Western Finance, LLC

SECOND: The address of the limited liability company's registered office in the State of Delaware is 1209 Orange Street, in the City of Wilmington, County of New Castle. The name of its registered agent at such address is The Corporation Trust Company.

THE UNDERSIGNED, being the individual forming the limited liability company, has executed, signed and acknowledged this Certificate of Formation this 3rd day of June, 2003.

/s/ Jeffrey W. Acre

Name: Jeffrey W. Acre
Title: Authorized Person

EXHIBIT 3.2

LIMITED LIABILITY COMPANY AGREEMENT

OF

ARCH WESTERN FINANCE LLC

A DELAWARE LIMITED LIABILITY COMPANY

DATED AS OF JUNE 4, 2003

LIMITED LIABILITY COMPANY AGREEMENT

OF

ARCH WESTERN FINANCE LLC,

A DELAWARE LIMITED LIABILITY COMPANY

This Limited Liability Company Agreement (this "Agreement") of Arch Western Finance LLC is entered into by Arch Western Resources, LLC, a Delaware Limited Liability Company, together with any future member of the LLC, (the "Member").

The Member, by execution of this Agreement, hereby forms a limited liability company pursuant to and in accordance with the Delaware Limited Liability Company Act (6 Del. C Section 18-101, et seq.), as amended from time to time (the "Act"), and hereby agrees as follows:

1. Name.

The name of the limited liability company formed hereby is Arch Western Finance LLC, (the "Company").

2. Maintenance.

The Company will be maintained as a limited liability company under and pursuant to the Act and this Agreement. Except as provided in this Agreement, the administration of the Company shall be governed by the Act.

3. Certificates.

The Certificate of Formation shall be filed with the Secretary of State of the State of Delaware. Upon the filing of the Certificate of Formation with the Secretary of State of the State of Delaware, the Member shall thereafter be designated as an authorized person within the meaning of the Act.

4. Purposes.

The Company shall have all powers now or hereafter conferred or permitted by the laws of the State of Delaware on limited liability companies formed under the Act and, subject to the terms of this Agreement, may do any and all lawful acts or things that are necessary, appropriate, incidental or convenient for the furtherance and accomplishment of the purposes of the Company. Without limiting the generality of the foregoing, the Company may enter into, deliver and perform all contracts, agreements and other undertakings and engage in all activities and transactions as may be necessary or appropriate to carry out its purposes.

5. Registered Office and Agent.

The address of the registered office of the Company in the State of Delaware is c/o The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, Delaware 19801. The name and address of the registered agent of the Company for service of process on the Company in the State of Delaware is The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, Delaware 19801.

6. Principal Executive Office.

The principal executive office of the Company shall be located at, and the Company's business shall be conducted from, such place or places as the Members may designate from time to time. The initial principal executive office of the Company shall be located at One CityPlace Drive, Suite 300, St. Louis, Missouri 63141.

7. Member.

The name, present mailing address and percentage interest of the Member ("membership interest") is set forth on Schedule A. The membership interest created hereunder as set forth on Schedule A are securities as defined in Section 8-103(c) of the Uniform Commercial Code as adopted in Delaware. The business and affairs of the Company shall be managed by a Board of Directors selected, and subject to removal with or without cause, by the Member which shall have all powers and rights necessary, appropriate or advisable to effectuate and carry out the purposes and business of the Company. The Board of Directors shall include those individuals listed on Schedule B attached hereto which schedule may be revised by the Member at any time or from time to time. The Directors will be deemed "Managers" within the meaning of the Act. Each Member and Director is hereby designated as an authorized person, within the meaning of the Act, to execute, deliver and file the certificate of formation of the Company (and any amendments and/or restatements thereof); provided that, except to the extent specifically referenced in this Agreement, no Member shall have the authority to bind or otherwise act for the Company. Except for the power to select and remove members of the Board of Directors, the Member shall have no power or authority with respect to the operations of the Company and shall only have the specific rights and privileges set forth herein or as provided by applicable law.

8. Board of Directors

Meetings of the Board of Directors shall be held at the principal place of business of the Company or at any other place that a majority of the directors determines. In the alternative, meetings may be held by conference telephone, provided that each director can hear the others. The presence of a majority of the directors shall constitute a quorum for the transaction of business. The vote of a majority of the directors present at a meeting at which a quorum is present shall be the act of the Board of Directors. The Board of Directors may also make decisions, without

holding a meeting, by written consent of all of the directors. In connection with the management of the business and affairs of the Company, the Board of Directors and officers of the Company shall execute, deliver and file any certificates (and any amendments and/or restatements thereof) necessary for the Company to qualify to do business in a jurisdiction in which the Company may wish to conduct business. The execution by one Director or by one officer, as applicable, or by one Member, as applicable, of any of the foregoing certificates (and any amendments and/or restatements thereof) shall be sufficient.

9. Officers.

The Managers may, from time to time as they deem advisable, appoint officers of the Company (the "Officers") and assign in writing titles (including, without limitation, President, Vice President, Secretary, and Treasurer) to any such person. Unless the Managers decide otherwise, if the title is one commonly used for officers of a business corporation formed under the Delaware General Corporation Law, the assignment of such title shall constitute the delegation to such person of the authorities and duties that are normally associated with that office. The initial officers are listed on Schedule C attached hereto which schedule may be revised by either the Member of Managers at any time or from time to time. Any delegation pursuant to this Section 9 may be revoked at any time by the Managers.

10. Limited Liability.

Except as otherwise provided by the Act, the debts, obligations and liabilities of the Company, whether arising in contract, tort or otherwise, shall be solely the debts, obligations and liabilities of the Company, and the Member shall not be obligated personally for any such debt, obligation or liability of the Company solely by reason of being a member of the Company.

11. Capital Contributions.

The Member is deemed admitted as the Member of the Company upon its execution and delivery of this Agreement. The Member will contribute the amount of United States Dollars to the Company as listed on Schedule A attached hereto.

12. Additional Contributions.

The Member is not required to make any additional capital contribution to the Company. However, a Member may make additional capital contributions to the Company at such times and in such amounts as determined by the Member.

13. Allocation of Profits and Losses.

The Company's profits and losses shall be allocated to the Member.

14. Distributions.

Distributions shall be made to the Member at the times and in the aggregate amounts determined by the Member. Notwithstanding any provision to the contrary contained in this Agreement, the Company shall not make a distribution to any Member on account of its interests in the Company if such distribution would violate Section 18-607 of the Act or other applicable law.

15. Other Business.

The Member may engage in or possess an interest in other business ventures (unconnected with the Company) of every kind and description, independently or with others. The Company shall not have any rights in or to such independent ventures or the income or profits therefrom by virtue of this Agreement.

16. Exculpation and Indemnification.

No Member, no Affiliate of a member, nor any Manager, Officer, employee or agent of the Company ("Indemnified Party") shall be liable to the Company, or any other person or entity who has an interest in the Company, for any loss, damage or claim incurred by reason of any act or omission performed or omitted by such Member or Officer in good faith on behalf of the Company and in a manner reasonably believed to be within the scope of the authority conferred on such Member or Officer by this Agreement, unless such act or omission constituted bad faith, gross negligence, fraud or willful misconduct. To the full extent permitted by applicable law, an Indemnified Party shall be entitled to indemnification from the Company for any loss, damage or claim incurred by an Indemnified Party by reason of any act or omission performed or omitted by an Indemnified Party in good faith on behalf of the Company and in a manner reasonably believed to be within the scope of the authority conferred on an Indemnified Party by this Agreement, unless such act or omission constituted bad faith, gross negligence, fraud or willful misconduct; provided, however, that any indemnity under this Section 16 shall be provided out of and to the extent of Company assets only, and no Member shall have personal liability on account thereof.

17. Assignments.

A Member may assign in whole or in part its limited liability company interest with the written consent of all other Members. If a Member transfers all of its interest in the Company pursuant to this Section, the transferee shall be admitted to the Company upon its execution of an instrument signifying its agreement to be bound by the terms and conditions of this Agreement. Such admission shall be deemed effective immediately prior to the transfer, and, immediately following such admission, the transferor Member shall cease to be a member of the Company.

18. Resignation.

A Member may resign from the Company with the written consent of the Member. If a Member is permitted to resign pursuant to this Section, an additional

member shall be admitted to the Company, subject to Section 17, upon its execution of an instrument signifying its agreement to be bound by the terms and conditions of this Agreement. Such admission shall be deemed effective immediately prior to the resignation, and, immediately following such admission, the resigning Member shall cease to be a member of the Company.

19. Admission of Additional Members.

One or more additional members of the Company may be admitted to the Company with the written consent of all of the Member.

20. Dissolution.

a. The Company shall dissolve, and its affairs shall be wound up upon the first to occur of the following: (i) the written consent of the Member, (ii) the retirement, resignation or dissolution of the Member or the occurrence of any other event which terminates the continued membership of the Member in the Company unless the business of the Company is continued in a manner permitted by the Act, or (iii) the entry of a decree of judicial dissolution under Section 18-802 of the Act.

b. The bankruptcy of the Member will not cause the Member to cease to be a member of the Company and upon the occurrence of such an event, the business of the Company shall continue without dissolution.

c. In the event of dissolution, the Company shall conduct only such activities as are necessary to wind up its affairs (including the sale of the assets of the Company in an orderly manner), and the assets of the Company shall be applied in the manner, and in the order of priority, set forth in Section 18-804 of the Act.

21. Separability of Provisions.

Each provision of this Agreement shall be considered separable and if for any reasons any provision or provisions herein are determined to be invalid, unenforceable or illegal under any existing or future law, such invalidity, unenforceability or illegality shall not impair the operation of or affect those portions of this Agreement which are valid, enforceable and legal.

22. Terms Generally.

The definitions in this Agreement shall apply equally to both the singular and plural forms of the terms defined. Whenever the context may require, any pronoun shall include the corresponding masculine, feminine and neuter forms. The words "include", "includes" and "including" shall be deemed to be followed by the phrase "without limitation." The words "herein", "hereof" and "hereunder" and words of similar import refer to this Agreement in its entirety and not to any part hereof unless the context shall otherwise require. All references herein to Sections shall be deemed references to Sections of this Agreement unless the context shall otherwise require. Unless the context shall otherwise require, any references to any agreement or other

instrument or statute or regulation are to it as amended and supplemented from time to time (and, in the case of a statute or regulation, to any corresponding provisions of successor statutes or regulations).

23. Counterparts.

This Agreement may be executed in any number of counterparts, each of which shall be deemed an original of this Agreement.

24. Entire Agreement.

This Agreement constitutes the entire agreement of the Member with respect to the subject matter hereof.

25. Governing Law.

This Agreement shall be governed by, and construed under, the laws of the State of Delaware (without regard to conflict of laws principles), all rights and remedies being governed by said laws.

26. Amendments.

This Agreement may not be modified, altered, supplemented or amended except pursuant to a written agreement executed and delivered by the Member.

IN WITNESS WHEREOF, the undersigned has duly executed this Agreement as of the 4th day of June, 2003.

THUNDER BASIN COAL COMPANY, LLC
Member

By: /s/ PAUL A. LANG

Paul A. Lang
President

SCHEDULE A

NAME AND ADDRESS OF MEMBER	AGREED VALUE OF CAPITAL CONTRIBUTION	PERCENTAGE INTEREST
Arch Western Resources, LLC One CityPlace Drive Suite 300 CityPlace One St. Louis, Missouri 63141	$1,000.00	100%

SCHEDULE B

DIRECTORS

Robert G. Jones

Robert J. Messey

SCHEDULE C

NAME	TITLE
Robert J. Mesey	President
Robert G. Jones	Vice President
James E. Florczak	Vice President & Treasurer
C. David Steele	Vice President - Tax
Janet L. Horgan	Secretary
Anne W. O'Donnell	Assistant Secretary

EXHIBIT 3.3

CERTIFICATE OF FORMATION
OF
ARCH WESTERN RESOURCES, LLC
A Limited Liability Company

FIRST: The name of the limited liability company is:

Arch Western Resources, LLC

SECOND: The address of the limited liability company's registered office in the State of Delaware is Corporation Trust Center, 1209 Orange Street, in the City of Wilmington, County of New Castle. The name of its registered agent at such address is The Corporation Trust Company.

THE UNDERSIGNED, being the individual forming the limited liability company, has executed, signed and acknowledged this Certificate of Formation this 27th day of February, 1998.

/s/ Miriam Rogers Singer

Name: Miriam Rogers Singer

EXHIBIT 3.4

LIMITED LIABILITY COMPANY AGREEMENT

OF

ARCH WESTERN RESOURCES LLC,

A DELAWARE LIMITED LIABILITY COMPANY

dated as of June 1, 1998

between

ARCH WESTERN ACQUISITION CORPORATION

and

DELTA HOUSING INC.

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LIMITED LIABILITY COMPANY AGREEMENT
OF
ARCH WESTERN RESOURCES LLC,
A DELAWARE LIMITED LIABILITY COMPANY

This LIMITED LIABILITY COMPANY AGREEMENT of ARCH WESTERN RESOURCES LLC (the "Company") is entered into as of the 1st day of June, 1998, by and between Arch Western Acquisition Corporation, a Delaware corporation ("Arch Member") directly or indirectly owned by Arch Coal, Inc., a Delaware corporation ("Arch"), and Delta Housing Inc., a Delaware corporation ("ARCO Member") directly or indirectly owned by Atlantic Richfield Company, a Delaware corporation ("ARCO").

WHEREAS, on March 17, 1998 (the "Formation Date"), Arch Member caused the Company to be formed as a Delaware limited liability company; and

WHEREAS, on the date hereof, Arch Member has acquired for cash, among other things (i) a 65% membership interest in Canyon Fuel Company, a Delaware limited liability company ("Canyon Fuel"), (ii) all of the membership interests in Mountain Coal Company L.L.C., a Delaware limited liability company ("MCC"), and (iii) all of the membership interests in ARCO Uinta Sub, a Delaware limited liability company ("AUS"), in each case from ARCO Uinta Coal Company, a Delaware corporation ("ARCO Uinta"), pursuant to that certain Purchase and Sale Agreement dated as of March 22, 1998 between Arch, Arch Member, ARCO and ARCO Uinta (the "Purchase and Sale Agreement"), and contributed such assets, together with membership interests owned by Arch Member in Arch of Wyoming LLC, a Delaware limited liability company ("Arch Wyoming"), to the Company in exchange for membership interests in the Company; and

WHEREAS, on the date hereof ARCO has (i) contributed certain assets to Thunder Basin Coal Company L.L.C., a Delaware limited liability company ("TBCC"), and has contributed all of the membership interests in TBCC to the Company in exchange for interests in the Company, (ii) contributed such membership interests in the Company to ARCO Member, and (iii) contributed all of the stock owned by it of L.A. Export Terminal Inc., a Delaware corporation ("LAXT"), and certain other assets, to AUS in exchange for interests in AUS, and ARCO Member has contributed its membership interests in State Leases LLC, a Delaware limited liability company ("SLLLC"), to the Company in exchange for membership interests in the Company; and

WHEREAS, certain of the foregoing transactions have been effected pursuant to a Limited Liability Contribution Agreement, dated as of March 22, 1998 (the "Contribution Agreement"), among Arch, Arch Member, ARCO, ARCO Member and the Company, providing for, among other things, additional capitalization of the Company and the admission of each of

Arch Member, ARCO and ARCO Member as members or continuing members of the Company (each, a "Member");

NOW, THEREFORE, in consideration of the mutual covenants and agreements herein contained and for other good and valuable consideration the receipt and sufficiency of which are hereby acknowledged, the Members hereby agree as follows:

SECTION 1

GENERAL PROVISIONS

1.1 Maintenance.

The Members hereby agree to maintain the Company as a limited liability company under and pursuant to the Act (as hereinafter defined) and this Agreement. Except as provided in this Agreement, the rights, duties, liabilities and obligations of the Members and the administration, dissolution, winding up and termination of the Company shall be governed by the Act.

1.2 Name.

The name of the Company shall be Arch Western Resources LLC and all business of the Company shall be conducted in such name or, in the discretion of the Managing Member, under any other names (but excluding a name that includes the name ARCO, Atlantic Richfield or any derivation thereof, unless ARCO Member has consented thereto).

1.3 Purpose.

(a) Subject to, and upon the terms and conditions of this Agreement, the purposes and business of the Company shall be to manage and maintain a business engaged in the production trading, marketing and sale of coal, to acquire, hold, own, operate, manage, finance, encumber, sell, or otherwise dispose of and otherwise use the Property, and to enter into any lawful transaction and engage in any lawful activities in furtherance of the foregoing purposes and as may be necessary, incidental or convenient to carry out the business and purposes of the Company, including the issuance and performance of the Company Debt and any Successor Debt.

(b) The Company shall have all the powers now or hereafter conferred by the laws of the State of Delaware on limited liability companies formed under the Act and, subject to the terms of this Agreement, may do any and all lawful acts or things that are necessary, appropriate, incidental or convenient for the furtherance and accomplishment of the purposes of the Company. Without limiting the generality of the foregoing, the Company may enter into, deliver and perform all contracts, agreements and other undertakings and engage in all activities and transactions as may be necessary or appropriate to carry out its purposes and conduct its business.

(c) Contemporaneously with the execution and delivery of this Agreement, the transactions contemplated by the Purchase and Sale Agreement and the Contribution Agreement shall have been consummated, pursuant to which, among other things, Arch Member has contributed to the Company the Arch Sub Membership Interests and the Cash Contribution, and ARCO Member has contributed to the Company the ARCO Sub Membership Interests and certain other assets and rights as provided in the Contribution Agreement.

(d) Simultaneously with the execution and delivery of this Agreement, the Company has issued the Company Debt and ARCO Member has executed and delivered the ARCO Member Guarantee.

1.4 Principal Executive Office.

The principal executive office of the Company shall be located in such place as determined by the Managing Member, and the Managing Member may change the location of the principal executive office of the Company to any other place, within or without the State of Delaware, upon ten Business Days' prior notice to each of the Members, provided that such principal executive office shall be located in the United States. The initial principal executive office of the Company shall be located at Suite 300, CityPlace One, St. Louis, Missouri 63141. The Managing Member may establish and maintain such additional offices and places of business of the Company, within or without the State of Delaware, as it deems appropriate.

1.5 Term.

The term of the Company commenced on the Formation Date and shall continue until the winding up and liquidation of the Company and its business is completed following a Liquidating Event, as provided in Section 8.

1.6 Filings; Agent for Service of Process.

(a) The Managing Member shall take any and all actions reasonably necessary to perfect and maintain the status of the Company as a limited liability company under the laws of Delaware. The Managing Member shall cause amendments to the Certificate of Formation of the Company (the "Certificate") to be filed whenever required by the Act. The Members shall be provided with copies of each document filed or recorded as contemplated by this Section 1.6 promptly following the filing or recording thereof.

(b) The Managing Member shall cause to be filed an original or amended Certificate and shall take any and all other actions as may be reasonably necessary to perfect and maintain the status of the Company as a limited liability company or similar type of entity under the laws of any other states or jurisdictions in which the Company engages in business.

(c) The registered agent for service of process on the Company shall be CT Corporation or any successor as appointed by the Managing Member in accordance with the Act. The registered office and statutory agent in Delaware shall be as set forth in the Certificate until such time as the registered office or statutory agent is changed in accordance with the Act.

1.7 Title to Property.

No Member shall have any ownership interest in its individual name or right in any Property owned, directly or indirectly, by the Company, and each Member's Interest shall be personal property for all purposes. The Company shall hold all of its Property in the name of the Company or its nominee and not in the name of any Member. Members' Interests shall not be "securities" governed by Article 8 of the Uniform Commercial Code of any jurisdiction, and the Members will neither cause, suffer nor permit any action that would produce a contrary result.

1.8 Payments of Individual Obligations.

The Company's credit and Property shall be used solely for the benefit of the Company, and no Property of the Company shall be transferred or encumbered for, or in payment of, any individual obligation of any Member.

1.9 Independent Activities.

Each Member and any of its Affiliates shall be required to devote only such time to the affairs of the Company as such Member determines in its sole discretion may be necessary to manage and operate the Company to the extent contemplated by this Agreement, and nothing in this Agreement shall preclude any Member from engaging in the coal business or any other business for its own account, whether in the geographic area of any of the Property or otherwise; provided that ARCO Member and its Affiliates shall not engage in the coal business in the State of Wyoming or the State of Colorado for two years after the date of this Agreement.

1.10 Definitions.

Capitalized words and phrases used in this Agreement have the following meanings:

"Act" means the Delaware Limited Liability Company Act, as the same may be amended from time to time.

"Acceptable Debt Rating" means with respect to any Person, that such Person's unsecured noncredit-enhanced Indebtedness has a rating of at least Ba3 from Moody's Investors Service or at least BB- from Standard & Poors Ratings Group (a division of McGrall Hill, Inc.).

"Accountants" means, as of any time, such firm of nationally recognized independent certified public accountants that, as of such time, has been appointed by the Managing Member as the accountants for the Company.

"Additional Capital Contributions" means, with respect to each Member, the Capital Contributions made by such Member pursuant to Section 2.3, reduced by the amount of any liabilities of such Member assumed by the Company in connection with such Capital Contributions or which are secured by any Property contributed by such Member as a part of such Capital Contributions.

"Additional Contribution Agreement" means a contribution agreement providing for the contribution of Property or cash to the Company, the terms of which have been approved by the Managing Member.

"Adjusted Capital Account Deficit" means, with respect to any Member, the deficit balance, if any, in such Member's Capital Account as of the end of the relevant Allocation Year, after giving effect to the following adjustments: (i) credit to such Capital Account any amounts which such Member is obligated to restore pursuant to any provision of this Agreement or is deemed to be obligated to restore pursuant to the penultimate sentences of Regulations Sections 1.704-2(g)(1) and 1.704-2(i)(5); and (ii) debit to such Capital Account the items described in Sections 1.704-1(b)(2)(ii)(d)(4), 1.704-1(b)(2)(ii)(d)(5) and 1.704-1(b)(2)(ii)(d)(6) of the Regulations. The foregoing definition of Adjusted Capital Account Deficit is intended to comply with the provisions of Section 1.704-1(b)(2)(ii)(d) of the Regulations and shall be interpreted consistently therewith.

"Affiliate" means, with respect to any Person, any other Person that directly and/or indirectly through one or more intermediaries controls, is controlled by, or is under common control with such Person. For purposes of this definition, the term "controls" (including its correlative meanings "controlled by" and "under common control with") shall mean the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of a Person, whether through the ownership of voting securities, by contract or otherwise. Notwithstanding the foregoing, (i) neither the Company, nor any Person controlled by the Company, shall be deemed to be an Affiliate of any Member or of any Affiliate of any Member and (ii) no Member or any Affiliate thereof shall be deemed to be an Affiliate of any other Member or any Affiliate thereof solely by virtue of its Interest in the Company. As used with respect to ARCO, "Affiliate" shall not include ARCO Chemical Company, a Delaware corporation, or Vastar Resources, Inc., a Delaware corporation. As used with respect to Arch, "Affiliate" shall not include Ashland Inc., a Kentucky corporation.

"Agreement" means this Limited Liability Company Agreement, including all Schedules hereto, as amended from time to time.

"Allocation Year" means (i) the period commencing on the Formation Date and ending on December 31, 1998, (ii) any subsequent twelve (12) month period commencing on

January 1 and ending on December 31, or (iii) any portion of the period described in clause (i) or (ii) for which the Company is required to allocate Profits, Losses, and other items of Company income, gain, loss or deduction pursuant to this Agreement.

"Arch Intercompany Loan" means each loan or advance made by the Company to Arch or an Affiliate of Arch, which shall be evidenced by a demand promissory note of Arch or such Affiliate, shall bear interest payable no less frequently than quarterly from the date made until paid in full at a rate per annum to be determined by the Managing Member that is no less favorable to the Company than if such loan or advance had been made to ARCH or such Affiliate by an unaffiliated financial institution.

"Arch Sub Membership Interests" means the membership interests owned by Arch Member in Canyon Fuel, MCC, AUS and Arch Wyoming.

"ARCO Assets" shall mean the ARCO Sub Membership Interests (and the assets, rights and properties of each of the entities whose membership interests are included therein) and all other assets and rights contributed to the Company by ARCO or any Affiliate of ARCO pursuant to the Contribution Agreement.

"ARCO Member Guarantee" means the Collection Guaranty Agreement, dated as of even date herewith, executed and delivered by ARCO Member, pursuant to which ARCO Member has guaranteed the Company's obligations under the Company Debt and Successor Debt.**

"ARCO Sub Membership Interests" shall mean the entire membership interest in TBCC, and certain other assets and interests described in the Contribution Agreement.

"Available Cash" means as of any date the cash of the Company as of such date less such portion thereof as the Managing Member determines to reserve for Company expenses, debt payments, sinking fund provisions applicable to the Company Debt, Successor Debt or other Indebtedness of the Company, capital improvements, replacements, and contingencies.

"Base Credit Level" means, with respect to the Interest Ratio or the Indebtedness Ratio, as the case may be, for each calendar year specified in the table below, the applicable ratio set opposite such year:

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** ARCO Member Guarantee shall provide that ARCO Member shall not be required to extend such guarantee beyond the fifteenth anniversary of the Closing Date.

YEAR	INTEREST RATIO	INDEBTEDNESS RATIO
1998	2.5 : 1	4.5 : 1
1999	2.5 : 1	4.5 : 1
2000 and thereafter	3.0 : 1	3.5 : 1

"Base Credit Level Compliance" means, as to any Person on any date, that such Person (a) had, as of the last day of the fiscal quarter ended next preceding such date, an Interest Ratio not less than the Base Credit Level Interest Ratio applicable on such date, and an Indebtedness Ratio not greater than the Base Credit Level Indebtedness Ratio applicable on such date, or (b) has, on such date, an Acceptable Debt Rating.

"Business Day" means a day of the year on which banks are not required or authorized to close IN the State of Missouri or the State of California.

"Capital Account" means, with respect to any Member, the Capital Account maintained for such Member in accordance with the following provisions:

(i) To each Member's Capital Account there shall be credited such Member's respective Capital Contribution, such Member's distributive share of Profits and any items in the nature of income or gain which are allocated pursuant to Section 3.3 or Section 3.4, and the amount of any Company liabilities which are assumed by such Member or secured by any Property distributed to such Member as permitted by this Agreement.

(ii) To each Member's Capital Account there shall be debited the amount of cash and the Gross Asset Value of any Property distributed or deemed to be distributed to such Member pursuant to any provision of this Agreement, such Member's distributive share of Losses and any items in the nature of expenses or losses which are allocated pursuant to Section 3.3 or Section 3.4, and the amount of any liabilities of such Member assumed by the Company or which are secured by any property contributed by such Member to the Company.

(iii) In the event all or a portion of an Interest is transferred in accordance with the terms of this Agreement, the transferee shall succeed to the Capital Account of the transferor to the extent it relates to the transferred Interest.

(iv) In determining the amount of any liability for purposes of subparagraphs (i) and (ii) of this definition of "Capital Account," there shall be taken into account Code Section 752(c) and any other applicable provisions of the Code and Regulations.

The foregoing provisions and the other provisions of this Agreement relating to the maintenance of Capital Accounts are intended to comply with Section 1.704-1(b) of the Regulations, and shall be interpreted and applied in a manner consistent with such Regulations.

"Capital Contribution" means, with respect to any Member, the amount of money and the initial Gross Asset Value of any Property (other than money) contributed to the Company with respect to the Interests in the Company held or purchased by such Member, including Additional Capital Contributions.

"Capitalized Lease Obligation" means, with respect to any Person, the obligation of such Person to pay rent or other amounts under a lease of (or other agreement conveying the right to use) real or personal property that is required to be classified and accounted for as a capital lease obligation on a balance sheet of such Person under GAAP and, for purposes of this Agreement, the amount of such obligation at any date will be the capitalized amount thereof at such date, determined in accordance with GAAP.

"Cash Contribution" shall mean the contribution by Arch Member to the Company of cash in the amount of $25,000,000 to reimburse ARCO Member for certain expenditures as permitted under Section 707 of the Code), which contribution forms part of Arch Member's Original Capital Contribution.

"Code" means the Internal Revenue Code of 1986, as the same may be amended from time to time.

"Common Percentage Interest" means initially 99.5% for Arch Member and 0.5% for ARCO Member, or such other percentage determined by dividing the positive balance in the respective Member's Capital Account (less any Preferred Amount included therein) by the aggregate of the positive capital account balances of all Members Capital Accounts.

"Company" has the meaning specified in the preamble of this Agreement.

"Company Debt" means that certain indebtedness of the Company in the aggregate original principal amount of $675,000,000 incurred by the Company concurrently with the execution and delivery of this Agreement.

"Consolidated EBITDA" means, for any Person whose Base Credit Level Compliance is being determined for any Test Period, the Consolidated Net Income of such Person and its Subsidiaries for such Test Period, increased (to the extent deducted in determining such Consolidated Net Income) by the sum of (i) all taxes of such Person and its Subsidiaries paid or accrued according to GAAP for such Test Period; (ii) Consolidated Interest Expense of such Person and its Subsidiaries for such Test Period; and (iii) depreciation, depletion and amortization and similar non-cash cost recovery expenses (including, to the extent not otherwise included, that percentage of the depreciation, depletion and amortization and such expenses attributable to any Subsidiary of such Person that is not wholly owned equal to the percentage of the equity in such Subsidiary owned by such Person) of such Person and its Subsidiaries for such Test Period determined in accordance with GAAP; provided, however, notwithstanding the foregoing, the Consolidated EBITDA of the Company for each fiscal quarter of the fiscal year

ended at December 31, 1997 and for the first two fiscal quarters of the fiscal year ended at December 31, 1998 shall be deemed to be $46,000,000.

"Consolidated Indebtedness" means, for any Person whose Base Credit Level Compliance is being determined for any Test Period, Indebtedness of such Person and its Subsidiaries determined on a consolidated basis in accordance with GAAP as of the last day of such Test Period.

"Consolidated Interest Expense" means (without duplication), with respect to any Person whose Base Credit Level Compliance is being determined for any Test Period, the aggregate amount of interest expense of such Person during such Test Period in respect of all Indebtedness of such Person and its Subsidiaries, including (i) the interest portion of any deferred payment obligation and (ii) the portion of any rental obligation in respect of any Capitalized Lease Obligation allocable to interest expense, all determined on a consolidated basis in accordance with GAAP; provided, however, that for purposes of calculating the Consolidated Interest Expense of the Company and its Subsidiaries for any Test Period, Consolidated Interest Expense for such Test Period shall be reduced by the sum of an amount equal to the interest paid in cash to the Company during such Test Period and, without duplication, the amount of accrued interest recorded by the Company in respect of Arch Intercompany Loans if the obligor thereon is in Base Credit Level Compliance.

"Consolidated Net Income" means, with respect to any Person whose Base Credit Level Compliance is being determined, for any Test Period, the consolidated net income (or loss) of such Person and its Subsidiaries for such Test Period, as determined in accordance with GAAP but without regard to any lease payments to ARCO Member under the Little Thunder Lease, provided that there shall be excluded (on an after-tax basis):

(i) the income (or loss) of any other Person accrued prior to the date it becomes a Subsidiary or is merged into or consolidated with such Person, or a Subsidiary of such Person, and the income (or loss) of any other Person, substantially all of the assets of which have been acquired in any manner, realized by such Person prior to the date of acquisition;

(ii) the income (or loss) of any other Person (other than a Subsidiary) in which such Person, or any Subsidiary of such Person, has an ownership interest, except to the extent that any such income has been actually received by such Person, or such Subsidiary, in the form of cash dividends or similar cash distributions;

(iii) any restoration to income of any contingency reserve, except to the extent that provision for such reserve was made out of income accrued during such Test Period;

(iv) any aggregate gain (or any aggregate net loss) during such Test Period arising from the sale, conversion, exchange or other disposition of property (other than in the ordinary course of business);

(v) any gains (or losses) resulting from any writeup, writedown or writeoff of any property;

(vi) any gain from the collection of the proceeds of life insurance policies; and

(vii) any income or gain (or loss) during such Test Period determined in accordance with GAAP resulting from (A) any change in accounting principles, (B) any prior Test Period adjustments resulting from any change in accounting principles, (C) any other extraordinary items, or (D) any discontinued operations or the disposition thereof.

"Controlled Affiliate" of any Person means the Parent of such Person and each Subsidiary of such Parent.

"Credit Ratios" means, as to any Person, the Interest Ratio and the Indebtedness Ratio of such Person.

"Damages" has the meaning specified in the Tax Sharing Agreement.

"Depreciation" means, for each Allocation Year, an amount equal to the depreciation, amortization, cost depletion, or other cost recovery deduction allowable for federal income tax purposes with respect to an asset for such Allocation Year, except that if the Gross Asset Value of an asset differs from its adjusted basis for federal income tax purposes at the beginning of such Allocation Year, Depreciation shall be an amount which bears the same ratio to such beginning Gross Asset Value as the federal income tax depreciation, amortization, cost depletion or other cost recovery deduction for such Allocation Year bears to such beginning adjusted tax basis; provided, however, that if the adjusted basis for federal income tax purposes of an asset at the beginning of such Allocation Year is zero, subject to Section 3.6 of this Agreement, Depreciation shall be determined with reference to such beginning Gross Asset Value using the method selected by the Managing Member and agreed to by ARCO Member.

"Dispose" (including its correlative meanings, "Disposed of", "Disposition" and "Disposed"), with respect to any Interest, means to Transfer, pledge, hypothecate or otherwise dispose of such Interest, in whole or in part, voluntarily or involuntarily, except by operation of law in connection with a merger, consolidation or other business combination of the Company and except that such term shall not include any pledge or hypothecation of, or granting of a security interest in, an Interest that is approved by the Managing Member in connection with any financing obtained on behalf of the Company.

"Final Determination" means with respect to any issue or item (i) the execution of a final and irrevocable closing agreement or other settlement agreement with the Internal Revenue Service, (ii) the expiration of the time for filing a claim for refund or, if a refund claim has been timely filed, the expiration of the time for instigating suit in respect of such refund claim, (iii) the expiration of the time for filing a petition with the Tax Court if no such petition has been filed and no suit has been instigated in respect of the subject matter of such petition, or (iv) a final, unappealable decision of any court of competent jurisdiction.

"Fiscal Year" means (i) the period commencing on the Formation Date and ending on December 31, 1998, (ii) any subsequent twelve (12) month period commencing on January 1 and ending on December 31, or (iii) the period commencing on the immediately preceding January 1 and ending on the date on which all Property is distributed to the Members pursuant to Section 8.2.

"GAAP" means generally accepted accounting principles in effect in the United States of America from time to time.

"Gross Asset Value" means, with respect to any asset, the asset's adjusted basis for federal income tax purposes, except as follows:

(i) The initial Gross Asset Value of any asset contributed by a Member to the Company shall be the gross fair market value of such asset as set forth on Schedule 2.1 in the case of the Original Capital Contributions, and otherwise as set forth in the Additional Contribution Agreement;

(ii) The Gross Asset Values of all Company assets shall be adjusted to equal their gross fair market values (taking Code Section 7701(g) into account) as of the following times: (A) the acquisition of an Interest by any new Member in exchange for more than a de minimis Capital Contribution; (B) the distribution by the Company to a Member of more than a de minimis amount of Property as consideration for an Interest; and (C) the liquidation of the Company within the meaning of Regulations Section 1.704-1(b)(2)(ii)(g);

(iii) The Gross Asset Value of any Company asset distributed to any Member shall be adjusted to equal the gross fair market value of such asset on the date of distribution;

(iv) The Gross Asset Values of Company assets shall be increased (or decreased) to reflect any adjustments to the adjusted basis of such assets pursuant to Code Section 734(b) or Code Section 743(b), but only to the extent that such adjustments are taken into account in determining Capital Accounts pursuant to Section 1.704-1(b)(2)(iv)(m) of the Regulations, subparagraph (v) of the definition of "Profits" and "Losses" and Section 3.3(i), provided, however, that Gross Asset Values shall not be adjusted pursuant to this subparagaph (iv) to the extent that an adjustment pursuant to subparagraph (ii) is required in connection with a transaction that would otherwise result in an adjustment pursuant to this subparagraph (iv); and

(v) If Gross Asset Value is required to be determined for the purpose of Section 7, Gross Asset Value shall be determined in the manner set forth in such Section.

If the Gross Asset Value of an asset has been determined or adjusted pursuant to subparagraph (i), (ii), (iii) or (iv) hereof, such Gross Asset Value shall thereafter be adjusted by the

Depreciation taken into account with respect to such asset for purposes of computing Profits and Losses.

"Hypothetical Income Tax Amount" means for any Fiscal Year the product of (i) the sum of 4% and the daily weighted average highest marginal federal income tax rate applicable to domestic corporations in effect for such Fiscal Year expressed together as a percentage and (ii) the excess, if any, of (A) the cumulative amount of net taxable income, gain, loss and deduction reported by the Company on its Internal Revenue Service Forms 1065 over its life determined as of the end of such Fiscal Year, over (B) the larger of zero (0) or the cumulative amount of net taxable income, gain, loss and deduction reported by the Company on its Internal Revenue Service Forms 1065 over its life determined as of the beginning of such Fiscal Year.

"Indebtedness" means (without duplication), with respect to any Person, (i) any liability of such Person (A) for borrowed money, or under any reimbursement obligation relating to a letter of credit, bankers' acceptance or note purchase facility, (B) evidenced by a bond, note, debenture or similar instrument, (C) for the balance deferred and unpaid of the purchase price for any Property or any obligation upon which interest charges are customarily paid (except for trade payables arising in the ordinary course of business), or (D) for any Capitalized Lease Obligation; (ii) any obligation (excluding landowner royalty obligations) of any Person secured by (or for which the holder of such obligation has an existing right, contingent or otherwise, to be secured by) a consensual lien on property owned or acquired, whether or not any obligation secured thereby has been assumed, by such Person; and (iii) all guarantees of such Person of the indebtedness of any other Person of the type referred to in clause (i), except for guarantee obligations of Arch, not exceeding $25,000,000, of the reimbursement obligations of its Affiliates in respect of a letter of credit supporting the outstanding bonds issued by Dominion Terminal Associates.

"Indebtedness Ratio" means, with respect to any Test Period for any Person whose Base Credit Level Compliance is being determined, the ratio of Consolidated Indebtedness of such Person, on the last day of such Test Period, to Consolidated EBITDA for such Test Period; provided, however, that for purposes of calculating the Indebtedness Ratio of the Company for any Test Period (i) Indebtedness of the Company on the last day of such Test Period shall be reduced by (a) the outstanding principal amount of all Arch Intercompany Loans if but only if, on the last day of such Test Period the obligor on such Arch Intercompany Loans (or the guarantor of payment thereof) is in Base Credit Level Compliance and (b) the cash balance of the Company and its Subsidiaries on the last day of such Test Period, and (ii) Consolidated EBITDA of the Company shall be increased by the amount of accrued interest recorded by the Company in respect of Arch Intercompany Loans if the obligor thereon is in Base Credit Level Compliance.

"Interest" means, as to any Member, all of the interests of such Member in the Company, including any interest represented by the Preferred Capital Amount and any and all benefits to which the holder of an interest in the Company may be entitled as provided in this

Agreement and under the Act, together with all obligations of such Member to comply with the terms and provisions of this Agreement.

"Interest Ratio" means, with respect to any Test Period for any Person whose Base Credit Level Compliance is being determined, the ratio of Consolidated EBITDA of such Person, for such Test Period to Consolidated Interest Expense of such Person for such Test Period.

"Involuntary Bankruptcy" means, with respect to any Person, without the consent or acquiescence of such Person, the entering of an order for relief or approving a petition for relief or reorganization or any other petition seeking any reorganization, arrangement, composition, readjustment, liquidation, dissolution or other similar relief under any present or future bankruptcy, insolvency or similar statute, law or regulation, or the filing of any such petition against such Person which petition shall not be dismissed within 60 days, or, without the consent or acquiescence of such Person, the entering of an order appointing a trustee, custodian, receiver or liquidator of such Person or of all or any substantial part of the property of such Person which order shall not be dismissed within 60 days.

"Little Thunder Lease" means the Master Lease dated August 8, 1997 between LTLC as lessor and TBCC as lessee, as amended pursuant to an Amendment to Master Lease dated January 27, 1998.

"LTLC" means Little Thunder Leasing Company, a Delaware corporation.

"Major Actions" has the meaning specified in Section 5.1(c).

"Managing Member" means Arch Member.

"Nonrecourse Deductions" has the meaning set forth in Section 1.704-2(b)(1) of the Regulations.

"Nonrecourse Liability" has the meaning set forth in Section 1.704-2(b)(3) of the Regulations.

"Parent" means (i) with respect to Arch Member (and its Controlled Affiliates), Arch, and (ii) with respect to ARCO Member (and its Controlled Affiliates), ARCO. With respect to any other Person hereafter admitted to the Company as a Member, the Parent with respect to such Member shall be the Person identified as such in an Additional Contribution Agreement or in a Schedule to be attached to this Agreement in connection with the admission of such Member. In the event of a Permitted Transaction, the new Parent of the applicable Member immediately following such Permitted Transaction will be the ultimate parent entity (as determined in accordance with the Hart-Scott-Rodino Antitrust Improvements Act of 1976 and the rules and regulations promulgated thereunder (the "HSR Act")) of such Member (or such Member if it is its own ultimate parent entity); provided that if such ultimate parent entity is not a Publicly Held Person then the next highest corporate entity in the ownership chain from such ultimate parent entity through the Member which is a Publicly Held Person shall be deemed to be

the new Parent. If there is no intermediate Publicly Held Person or if the ultimate parent entity is an individual, the Parent shall be the highest entity in the ownership chain from the ultimate parent entity through the Member which is not an individual.

"Partner Nonrecourse Debt" has the meaning set forth in Section 1.704-2(b)(4) of the Regulations.

"Partner Nonrecourse Debt Minimum Gain" means an amount, with respect to each Partner Nonrecourse Debt, equal to the Partnership Minimum Gain that would result if such Partner Nonrecourse Debt were treated as a Nonrecourse Liability, determined in accordance with Section 1.704-2(i)(3) of the Regulations.

"Partner Nonrecourse Deductions" has the meaning set forth in Sections 1.704-2(i)(1) and 1.704-2(i)(2) of the Regulations.

"Partnership Minimum Gain" has the meaning set forth in Sections 1.704-2(b)(2) and 1.704-2(d) of the Regulations.

"Permitted Transaction" with respect to a Member means a transaction or series of related transactions in which the Parent or any Affiliate of a Member Transfers its interest in any Affiliate that owns an Interest in the Company to a Controlled Affiliate.

"Person" means any individual, partnership, corporation, limited liability company, trust, or other entity.

"Preferred Capital Amount" means that portion of ARCO Member's Original Capital Contribution equal to $2,399,000, for which capital ARCO Member is entitled to a preferential distribution in accordance with this Agreement. This Preferred Capital Amount will be reduced by any payments with respect to the Preferred Capital Amount in excess of accrued Preferred Return.

"Preferred Return" means an amount equal to 4% per annum, compounded annually, calculated on the Preferred Capital Amount balance.

"Profits" and "Losses" means, for each Allocation Year, an amount equal to the Company's taxable income or loss for such Allocation Year, determined in accordance with Code Section 703(a) (for this purpose, all items of income, gain, loss, or deduction required to be stated separately pursuant to Code Section 703(a)(1) shall be included in taxable income or loss), with the following adjustments (without duplication):

(i) Any income of the Company that is exempt from federal income tax and not otherwise taken into account in computing Profits or Losses pursuant to this definition of "Profits" and "Losses" shall be added to such taxable income or loss;

(ii) Any expenditures of the Company described in Code Section 705(a)(2)(B) or treated as Code Section 705(a)(2)(B) expenditures pursuant to Regulations Section 1.704-1(b)(2)(iv)(i), and not otherwise taken into account in computing Profits or Losses pursuant to this definition of "Profits" and "Losses," shall be subtracted from such taxable income or loss;

(iii) Gain or loss resulting from any disposition of Property with respect to which gain or loss is recognized for federal income tax purposes shall be computed by reference to the Gross Asset Value of the Property disposed of, notwithstanding that the adjusted tax basis of such Property differs from its Gross Asset Value;

(iv) In lieu of the depreciation, amortization, and other cost recovery deductions taken into account in computing such taxable income or loss, there shall be taken into account Depreciation for such Allocation Year, computed in accordance with the definition of Depreciation;

(v) To the extent an adjustment to the adjusted tax basis of any Company asset pursuant to Code Section 734(b) or Code Section 743 is required pursuant to Regulations Section 1.704-1(b)(2)(iv)(m)(4) to be taken into account in determining Capital Accounts as a result of a distribution other than in liquidation of a Member's Interest, the amount of such adjustment shall be treated as an item of gain (if the adjustment increases the basis of the asset) or loss (if the adjustment decreases the basis of the asset) from the disposition of the asset and shall be taken into account for purposes of computing Profits or Losses; and

(vi) Notwithstanding any other provision of this definition of "Profits" or Losses," any items which are allocated pursuant to Section 3.3 or Section 3.4 shall not be taken into account in computing Profits or Losses.

The amounts of the items of income, gain, loss or deduction available to be allocated pursuant to Sections 3.3 and 3.4 shall be determined by applying rules analogous to those set forth in this definition of "Profits" and "Losses."

"Publicly Held" means, with respect to any Person, that such Person has a class of equity securities registered under Section 12(b) or 12(g) of the Securities Exchange Act of 1934, as amended.

"Property" means all real and personal property owned, contributed to or acquired by the Company and any improvements thereto, and shall include both tangible and intangible property.

"Regulations" means the Income Tax Regulations, including Temporary Regulations, promulgated under the Code.

"Subsidiary" of any Person means a corporation, company or other entity (i) more than 50% of whose outstanding shares or equity securities are, as of the time of such determination, owned or controlled, directly or indirectly through one or more Subsidiaries, by such Person, and the shares or securities so owned entitle such person and/or its Subsidiaries to elect at least a majority of the members of the board of directors or other managing authority of such corporation, company or other entity notwithstanding the vote of the holders of the remaining shares or equity securities so entitled to vote or (ii) which does not have outstanding shares or securities, as may be the case in a partnership, joint venture or unincorporated association, but more than 50% of whose ownership interest is, as of the time of such determination, owned or controlled, directly and/or indirectly through one or more Subsidiaries, by such Person, or in which the ownership interest so owned entitles such Person and/or Subsidiaries to make the decisions for such corporation, company or other entity.

"Successor Debt" means indebtedness incurred by the Company to refinance or repay the Company Debt or other Successor Debt; provided, however, that the indebtedness incurred to refinance or repay any Company Debt or Successor Debt shall not exceed the aggregate principal amount of such Company Debt or Successor Debt outstanding immediately prior to such refinancing or repayment.

"Tax Sharing Agreement" means that certain agreement of even date herewith by and among Arch, Arch Member and ARCO Member.

"Test Period" means, in respect of any proposed Major Action, the period of the most recent four consecutive fiscal quarters of the Person whose Base Credit Level Compliance is being determined for which financial statements of such Person are available on the date on which such Major Action is proposed to be taken.

"Transfer" (including its correlative meaning, "Transferred") means, as a noun, any sale, exchange, assignment or transfer and, as a verb, to sell, exchange, assign or transfer.

1.11 Additional Definitions.

Defined Term	Defined in
"Arch"	Preamble
"Arch Member"	Preamble
"Arch Member Original Capital Contribution"	Section 2.1
"Arch Wyoming"	Preamble
"ARCO"	Preamble
"ARCO Member"	Preamble
"ARCO Member Original Capital Contribution"	Section 2.1
"ARCO Uinta"	Preamble
"Agents"	Section 10.7
"AUS"	Preamble

"Call Notice"	Section 7.4(b)
"Canyon Fuel"	Preamble
"Certificate"	Section 1.6
"Confidential Information"	Section 10.7
"Contribution Agreement"	Preamble
"Exchange Act"	Section 6.2
"First Appraiser"	Section 7.6
"Formation Date"	Preamble
"Gross Appraised Value"	Section 7.6
"Issuance Items"	Section 3.3(h)
"LAXT"	Preamble
"Liquidating Events"	Section 8.1
"MCC"	Preamble
"Member"	Preamble
"Member Loan"	Section 2.5
"Net Equity"	Section 7.5
"Net Equity Notice"	Section 7.5
"Original Capital Contributions"	Section 2.1
"Permitted Transfer"	Section 7.2
"Purchase and Sale Agreement"	Preamble
"Put Notice"	Section 7.4(a)
"Receiving Party"	Section 10.7
"Regulatory Allocations"	Section 3.4
"Restricted Party"	Section 10.7
"Second Appraiser"	Section 7.6
"Senior Credit Agreement"	Section 2.5
"SLLLC"	Preamble
"Tagalong Notice"	Section 7.8
"Tagalong Offer"	Section 7.8
"Tagalong Period"	Section 7.8
"Tagalong Purchaser"	Section 7.8
"Tagalong Transaction"	Section 7.8
"Tax Matters Partner"	Section 6.3
"TBCC"	Preamble
"Third Appraiser"	Section 7.6
"Transferring Member"	Section 7.8

1.12 Terms Generally.

The definitions in Sections 1.10 and 1.11 and elsewhere in this Agreement shall apply equally to both the singular and plural forms of the terms defined. Whenever the context may require, any pronoun shall include the corresponding masculine, feminine and neuter forms. The words "include", "includes" and "including" shall be deemed to be followed by the phrase

"without limitation." The words "herein", "hereof" and "hereunder" and words of similar import refer to this Agreement (including the Schedules) in its entirety and not to any part hereof unless the context shall otherwise require. All references herein to Sections and Schedules shall be deemed references to Sections of, and Schedules to, this Agreement unless the context shall otherwise require. Unless the context shall otherwise require, any references to any agreement or other instrument or statute or regulation are to it as amended and supplemented from time to time (and, in the case of a statute or regulation, to any corresponding provisions of successor statutes or regulations). Any reference in this Agreement to a "day" or number of "days" (without the explicit qualification of "Business") shall be interpreted as a reference to a calendar day or number of calendar days. If any action or notice is to be taken or given on or by a particular calendar day, and such calendar day is not a Business Day, then such action or notice shall be deferred until, or may be taken or given on, the next Business Day.

SECTION 2

MEMBERS' CAPITAL CONTRIBUTIONS

2.1 Members' Original Capital Contributions.

The transfer to the Company by Arch Member of the Arch Sub Membership Interests and the Cash Contribution ("Arch Member Original Capital Contribution") and the transfer to the Company by ARCO and ARCO Member of the ARCO Sub Membership Interests in accordance with the Contribution Agreement ("ARCO Member Original Capital Contribution") shall constitute the Members' Original Capital Contributions. Such Original Capital Contributions shall have the respective Gross Asset Values set forth in Schedule 2.1 of this Agreement.

2.2 Capital Accounts.

(a) A single Capital Account shall be maintained for each Member (regardless of the time or manner in which such interests were acquired) in accordance with the capital accounting rules of Section 704(b) of the Code, and the regulations thereunder (including particularly Section 1.704-1(b)(2)(iv) of the Regulations).

(b) If the Gross Asset Value of any Company Property is adjusted, the Capital Accounts of the Members shall first be adjusted to reflect the manner in which the unrealized income, gain, loss and deduction inherent in such Property (that has not been reflected in the Capital Account or Preferred Capital Amount previously) would be allocated among the Members if there were a taxable disposition of such Property for such Gross Asset Value.

(c) The Tax Matters Partner shall direct the Accountants to make all necessary adjustments in each Member's Capital Account as required by the capital accounting rules of Section 704(b) of the Code and the Regulations thereunder.

2.3 Additional Capital Contributions; Preemptive Right.

Arch Member may contribute to the Company from time to time cash or other property, provided that:

(a) any Capital Contribution made pursuant to this Section 2.3 shall be subject to the terms and provisions of an Additional Contribution Agreement;

(b) in the event of any Additional Capital Contribution by Arch Member or any other Person, ARCO Member shall have the preemptive right and option to subscribe for and contribute, in cash or property (including conversion of all or part of its Preferred Capital Amount for value based on the principal amount thereof and any accrued but unpaid Preferred Return), all or such portion of the contemplated Additional Capital Contribution as ARCO Member desires and as is necessary to maintain ARCO Member's Common Percentage Interest in the Company; and

(c) to the extent ARCO Member shall not agree with the Gross Asset Values proposed by the Managing Member in connection with any Additional Contribution Agreement involving non-cash contributions, ARCO Member shall be entitled by notice to invoke the appraisal procedures in Section 7.6 for determination of such Gross Asset Values.

2.4 Company Funds.

The funds of the Company shall be utilized for the Company's benefit as the Managing Member shall determine, including being deposited in such bank accounts, utilized in Company operations, contributed or loaned to Subsidiaries of the Company, or, subject to Section 5.1(c) and any limitations imposed in Senior Credit Agreements, invested in such investments or loaned, from time to time, to the Managing Member on a demand basis, which loans shall bear interest at a rate equal to the interest rate applicable to borrowings by Arch under its primary bank credit facility.

2.5 Other Borrowings; Member Loans.

(a) In order to satisfy the Company's financial needs, the Company may, if so approved by the Managing Member and subject to Section 5.1(c), borrow from (i) banks, lending institutions or other unrelated third parties, and may pledge Company Property or the production of income therefrom to secure and provide for the repayment of such loans and (ii) any Member or an Affiliate of a Member. Loans made by a Member or an Affiliate of a Member (a "Member Loan") shall be evidenced by a promissory note of the Company and, subject to the last two sentences of Section 2.5(b), shall bear interest payable quarterly from the date made until paid in full at a rate per annum to be determined by the Managing Member that is no less favorable to the Company than if the loan had been made by an independent third party.

(b) Unless otherwise determined by the Managing Member, all Member Loans shall be unsecured and the promissory notes evidencing the same shall be nonnegotiable and, except as otherwise provided in Section 2.5(c), nontransferable. Repayment of the principal amount of and accrued interest on all Member Loans shall be subordinated to the repayment of the principal of and accrued interest on the Company Debt, the Successor Debt and any other indebtedness for borrowed money of the Company to third party lenders to the extent required by the applicable provisions of the instruments creating such indebtedness to third party lenders ("Senior Credit Agreements"). All amounts required to be paid in accordance with the terms of the Member Loans and all amounts permitted to be prepaid thereon shall be applied to the notes held by the Members in accordance with the order of payment contemplated by Section 8.2(b)(ii) and (iii). Subject to the terms of applicable Senior Credit Agreements, Member Loans shall be repaid to the Members at such times as the Company has sufficient funds to permit such repayment without jeopardizing the Company's ability to meet its other obligations on a timely basis. Nothing contained in this Agreement or in any promissory note issued by the Company hereunder shall require the Company or any Member to pay interest or any amount as a penalty at a rate exceeding the maximum amount of interest permitted to be collected from time to time under applicable usury laws. If the amount of interest or of such penalty payable by the Company or any Member on any date would exceed the maximum permissible amount, it shall be automatically reduced to such amount, and interest or the amount of the penalty for any subsequent period, to the extent less than that permitted by applicable usury laws, shall, to that extent, be increased by the amount of such reduction.

(c) An election by a Member to purchase all or any portion of another Member's Interest pursuant to Section 7 shall also constitute an election to purchase an equivalent portion of any outstanding Member Loans held by such selling Member, and each purchasing Member shall be obligated to purchase a percentage of such Member Loans equal to the percentage of the selling Member's Interest such purchasing Member is obligated to purchase for a price equal to the outstanding principal and accrued and unpaid interest on such Member Loans through the date of the closing of such purchase (or such lesser amount as shall be specified by the selling Member as the price for such Member Loans).

2.6 Other Matters.

(a) No Member shall have the right to demand or, except as otherwise provided in Sections 4.2 and 8.2, receive a return of all or any part of its Capital Account or its Capital Contributions or withdraw from the Company without the consent of all Members. Subject to Section 8, under circumstances requiring a return of all or any part of its Capital Account or Capital Contributions, no Member shall have the right to receive Property other than cash.

(b) No Member shall have any obligation to restore any portion of any deficit balance in such Member's Capital Account, whether upon liquidation of its interest in the Company, liquidation of the Company or otherwise.

(c) No other Member shall have any personal liability for the repayment of any Capital Contributions of any Member.

(d) No Member shall be entitled to receive interest on its Capital Contributions or Capital Account.

SECTION 3

ALLOCATIONS

3.1 Profits.

After giving effect to the allocations set forth in Sections 3.3 and 3.4, Profits for any Allocation Year shall be allocated in the following order and priority: (a) first, to ARCO Member in an amount sufficient to cover the aggregate amounts distributed pursuant to this Section 3.1 for the current and all prior periods to equal the total amount of Preferred Return paid to ARCO Member during the current and all prior periods, (b) second, to Members in proportion to, and to the extent of, an amount equal to the excess, if any, of (i) the cumulative losses allocated to each such Member pursuant to Section 3.2(b) for all prior Allocation Years, over (ii) the cumulative profits allocated to such Member pursuant to this Section 3.1(b) for all prior Allocation Years, and (c) thereafter, among the Members in proportion to their respective Common Percentage Interests.

3.2 Losses.

After giving effect to the allocations set forth in Sections 3.3 and 3.4, Losses for any Allocation Year shall be allocated among the Members (a) first, in proportion to their Common Percentage Interests to the extent of their respective positive capital accounts, (b) second, to Members having positive capital account balances in proportion to such positive capital account balances, and (c) thereafter, in proportion to their respective Common Percentage Interests.

3.3 Certain Allocations.

The following allocations shall be made in the following order:

(a) Minimum Gain Chargeback. Except as otherwise provided in Section 1.704-2(f) of the Regulations, notwithstanding any other provision of this Section 3, if there is a net decrease in Partnership Minimum Gain during any Allocation Year, each Member shall be allocated items of Company income and gain for such Allocation Year (and, if necessary, subsequent Allocation Years) in an amount equal to such Member's share of the net decrease in Partnership Minimum Gain, determined in accordance with Section 1.704-2(g) of the Regulations. Allocations pursuant to the previous sentence shall be made in proportion to the respective amounts required to be allocated to each Member pursuant thereto. The items to be so allocated shall be determined in accordance with Sections 1.704-2(f)(6) and 1.704-2(j)(2) of the Regulations. This Section 3.3(a) is intended to comply with the minimum gain chargeback requirement in Section 1.704-2(f) of the Regulations and shall be interpreted consistently therewith.

(b) Partner Minimum Gain Chargeback. Except as otherwise provided in Section 1.704-2(i)(4) of the Regulations, notwithstanding any other provision of this Section 3, if there is a net decrease in Partner Nonrecourse Debt Minimum Gain attributable to Partner Nonrecourse Debt during any Allocation Year, each Member who has a share of the Partner Nonrecourse Debt Minimum Gain attributable to such Partner Nonrecourse Debt, determined in accordance with Section 1.704-2(i)(5) of the Regulations, shall be allocated items of Company income and gain for such Allocation Year (and, if necessary, subsequent Allocation Years) in an amount equal to such Member's share of the net decrease in Partner Nonrecourse Debt Minimum Gain attributable to such Partner Nonrecourse Debt, determined in accordance with Section 1.704-2(i)(4) of the Regulations. Allocations pursuant to the previous sentence shall be made in proportion to the respective amounts required to be allocated to each Member pursuant thereto. The items to be so allocated shall be determined in accordance with Sections 1.704-2(i)(4) and 1.704-2(j)(2) of the Regulations. This Section 3.3(b) is intended to comply with the minimum gain chargeback requirement in Section 1.704-2(i)(4) of the Regulations and shall be interpreted consistently therewith.

(c) Qualified Income Offset. In the event any Member unexpectedly receives any adjustments, allocations, or distributions described in Section 1.704-1(b)(2)(ii)(d)(4), Section 1.704-1(b)(2)(ii)(d)(5) or Section 1.704-1(b)(2)(ii)(d)(6) of the Regulations, items of Company income and gain shall be specially allocated to each such Member in an amount and manner sufficient to eliminate, to the extent required by the Regulations, the Adjusted Capital Account Deficit of such Member as quickly as possible, provided that an allocation pursuant to this Section 3.3(c) shall be made only if and to the extent that such Member would have an Adjusted Capital Account Deficit after all other allocations provided for in this Section 3 have been tentatively made as if this Section 3.3(c) were not in the Agreement.

(d) Gross Income Allocation. In the event any Member has a deficit Capital Account at the end of any Allocation Year which is in excess of the sum of (i) the amount such Member is obligated to restore pursuant to any provision of this Agreement, and (ii) the amount such Member is deemed to be obligated to restore pursuant to the penultimate sentences of Regulations Sections 1.704-2(g)(1) and 1.704-2(i)(5), each such Member shall be specially allocated items of Company income and gain in the amount of such excess as quickly as possible, provided that an allocation pursuant to this Section 3.3(d) shall be made only if and to the extent that such Member would have a deficit Capital Account in excess of such sum after all other allocations provided for in this Section 3 have been made as if Section 3.3(c) hereof and this Section 3.3(d) were not in the Agreement.

(e) Nonrecourse Deductions. Nonrecourse Deductions for any Allocation Year shall be allocated among the Members in proportion to their respective Common Percentage Interests.

(f) Nonrecourse Debt Allocation. To the extent necessary to determine a Member's share of nonrecourse liabilities under Section 1.752-3(a)(3) of the Regulations, the Company Debt shall be allocated 100% to ARCO Member and all other nonrecourse liabilities of the Company shall be allocated to the Members in proportion to their respective Common Percentage Interests.

(g) Partner Nonrecourse Deductions. Any Partner Nonrecourse Deductions for any Allocation Year shall be allocated to the Member who bears the economic risk of loss with respect to the Partner Nonrecourse Debt to which such Partner Nonrecourse Deductions are attributable in accordance with Section 1.704-2(i)(1) of the Regulations.

(h) Section 754 Adjustments. To the extent an adjustment to the adjusted tax basis of any Company asset pursuant to Code Section 734(b) or Code Section 743(b) is required pursuant to Section 1.704-1(b)(2)(iv)(m)(2) or 1.704-1(b)(2)(iv)(m)(4) of the Regulations to be taken into account in determining Capital Accounts as the result of a distribution to a Member in complete liquidation of its Interest, the amount of such adjustment to Capital Accounts shall be treated as an item of gain (if the adjustment increases the basis of the asset) or loss (if the adjustment decreases such basis) and such gain or loss shall be allocated to the Members in accordance with their interests in the Company in the event Section 1.704-1(b)(2)(iv)(m)(2) of the Regulations applies, or to the Member to whom such distribution was made in the event Section 1.704-1(b)(2)(iv)(m)(4) of the Regulations applies.

(i) Allocations Relating to Taxable Issuance of Company Interests. Any income, gain, loss or deduction realized as a direct or indirect result of the issuance of an Interest by the Company to a Member (the "Issuance Items") shall be allocated among the Members so that, to the extent possible, the net amount of such Issuance Items, together with all other allocations under this Agreement to each Member, shall be equal to the net amount that would have been allocated to each such Member if the Issuance Items had not been realized.

3.4 Curative Allocations.

The allocations set forth in Sections 3.3(a), 3.3(b), 3.3(c), 3.3(d), 3.3(e), 3.3(g), 3.3(h) and 3.3(i) (the "Regulatory Allocations") are intended to comply with certain requirements of the Regulations. It is the intent of the Members that, to the extent possible, all Regulatory Allocations shall be offset either with other Regulatory Allocations or with allocations of other items of Company income, gain, loss or deduction pursuant to this Section 3.4. Therefore, notwithstanding any other provision of this Section 3 (other than the Regulatory Allocations), the Managing Member shall make such offsetting allocations of Company income, gain, loss or deduction in whatever manner it determines appropriate so that, after such offsetting allocations are made, each Member's Capital Account balance is, to the extent possible, equal to the Capital Account balance such Member would have had if the Regulatory Allocations were not part of the Agreement and all Company items were allocated pursuant to Sections 3.1, 3.2 and 3.3(i). In exercising its discretion under this Section 3.4, the Managing Member shall take into account future Regulatory Allocations under Sections 3.3(a) and 3.3(b) that, although not yet made, are likely to offset other Regulatory Allocations previously made under Section 3.3(e) and 3.3(g).

3.5 Other Allocation Rules.

(a) For purposes of determining the Profits, Losses, or any other items allocable to any period, Profits, Losses, and any such other items shall be determined on a daily, monthly, or other basis, as determined by the Managing Member using any permissible method under Code Section 706 and the Regulations thereunder.

(b) The Members are aware of the income tax consequences of the allocations made by this Section 3 and hereby agree to be bound by the provisions of this Section 3 in reporting their shares of Company income and loss for income tax purposes.

3.6 Tax Allocations: Code Section 704(c).

In accordance with Code Section 704(c) and the Regulations thereunder, income, gain, loss, and deduction with respect to any Property contributed to the capital of the Company shall, solely for tax purposes, be allocated among the Members so as to take account of any variation between the adjusted basis of such Property to the Company for federal income tax purposes and its initial Gross Asset Value (computed in accordance with the definition of Gross Asset Value).

In the event the Gross Asset Value of any Company asset is adjusted pursuant to subparagraph (ii) of the definition of Gross Asset Value, subsequent allocations of income, gain, loss, and deduction with respect to such asset shall take account of any variation between the adjusted basis of such asset for federal income tax purposes and its Gross Asset Value in the same manner as under Code Section 704(c) and the Regulations thereunder. With respect to the

allocations under this Section 3.6, for purposes of Code Section 704(c), the Company shall employ the method prescribed in Section 1.704-3(b) of the Regulations (the "traditional method") or any equivalent successor Regulations.

Any elections or other decisions relating to such allocations shall be made by the Managing Member in any manner that reasonably reflects the purpose and intention of this Agreement. Allocations pursuant to this Section 3.6 are solely for purposes of federal, state, and local taxes and shall not affect, or in any way be taken into account in computing, any Member's Capital Account or share of Profits, Losses, other items, or distributions pursuant to any provision of this Agreement.

SECTION 4

DISTRIBUTIONS

4.1 Initial Distribution.

As soon as is practicable after the issuance of the Company Debt, there shall be distributed to ARCO Member cash in the amount of $700,000,000, of which $25,000,000 is to reimburse ARCO Member for certain capital expenditures under Section 1.707-4(d) of the Regulations.

4.2 Available Cash.

(a) Except as otherwise provided in Sections 4.3 and 8.2 and subject to any applicable provisions of the Company Debt or Successor Debt, distributions to the Members shall be made first to ARCO Member in an amount equal to the accrued and unpaid cumulative Preferred Return, if any, and second, to the Members pro rata in proportion to each Member's respective Common Percentage Interests.

(b) Any such distributions may be made at such times and in such amounts as the Managing Member shall determine. Except as otherwise provided in Section 4.3, or as may be determined desirable by both the Managing Member and the maker of any Member Loans, the Company shall pay in full all Member Loans (in accordance with the order of payment contemplated by Section 8.2(b)) prior to making any cash distributions to the Members.

4.3 Tax Distributions.

Subject to applicable provisions of the Company Debt or Successor Debt, Available Cash shall be distributed to the Members in proportion to their Common Percentage Interests within 135 days after the end of each Fiscal Year of the Company in an aggregate amount equal to the Hypothetical Income Tax Amount for such Fiscal Year.

4.4 Amounts Withheld.

All amounts withheld pursuant to the Code or any provision of any state or local tax law from any payment or distribution to a Member shall be treated as amounts paid or distributed to such Member pursuant to this Section 4 for all purposes under this Agreement. The Managing Member is authorized to withhold from payments and distributions to any Member and to pay over to any federal, state, or local government any amounts required to be so withheld pursuant to the Code or any provisions of any other federal, state, or local law.

SECTION 5

MANAGEMENT

5.1 Authority of the Managing Member.

(a) General Authority. Subject to Section 5.1(c), the Managing Member shall conduct the business and affairs of the Company. Except where the approval of the Members is expressly required by this Agreement or non-waivable provisions of applicable law, the Managing Member shall have full and complete authority, power and discretion to manage and control the business, affairs and property of the Company, to make all decisions regarding those matters and to perform any and all other acts or activities customary or incident to the management of the Company's business.

(b) Delegation. The Managing Member shall have the power to delegate authority to such officers, employees, agents and representatives of the Company as it may from time to time deem appropriate.

(c) Actions Requiring Consent of Members. Each of the following actions (each such action, whether it constitutes a single and separate transaction or part of a series of two or more related transactions, being treated as a single and separate action and being herein referred to as a "Major Action") shall require the prior written approval of all the Members if the Company shall not on the date on which such Major Action is proposed to be taken be in Base Credit Level Compliance:

(1) any distributions of cash or Property to, or any loans to or other investments in, any Member or any Affiliate of any Member, except for Required Tax Distributions as set forth in Section 4.3;

(2) incurrence by the Company of any Indebtedness other than the Company Debt or any Successor Debt;

(3) the sale, lease, abandonment or other disposition of all or any portion of the assets, properties and rights of the Company otherwise than in the ordinary course of business; and

(4) the consolidation or merger of the Company with or into any other Person.

(e) Covenant. The Managing Member covenants and agrees that the Company will treat the Company Debt and the Successor Debt as a "recourse liability" as defined in Section 1.752-1(a)(1) of the Regulations with respect to which ARCO Member bears the "economic risk of loss" for purposes of Section 1.752-2 of the Regulations unless such treatment is inconsistent with any Final Determination with respect to this matter for the Company.

5.2 Officers.

(a) Enumeration. The Managing Member shall designate a President, a Treasurer and a Secretary of the Company, and it may, if it so determines, choose a Chairman of the Board and a Vice Chairman of the Board among its members. The Managing Member may also choose one or more Vice Presidents or other officers, one or more Assistant Secretaries and one or more Assistant Treasurers. Each such officer shall hold office until his successor is elected and qualified or until his earlier resignation or removal. The Managing Member may remove any officer with or without cause at any time, but such removal shall be without prejudice to the contractual rights, if any, of such officer with the Company.

(b) President. The President shall manage the day-to-day operations of and the business of the Company, subject to the control, supervision and oversight of the Managing Member.

(c) Vice President. The Vice President or if there shall be more than one, the Vice Presidents, in the order of their seniority unless otherwise specified by the Managing Member, shall have all of the powers and perform all of the duties of the President during the absence or inability to act of the President. Each Vice President shall also have such other powers and perform such other duties as shall from time to time be prescribed by the Managing Member, the Chairman or the President.

(d) Secretary. The Secretary shall have custody of the seal of the Company, if any, and of all books, records, and papers of the Company, except such as shall be in the charge of the Treasurer or of some other person authorized to have custody and possession thereof by direction of the Managing Member. The Secretary shall also have such other powers and perform such other duties as are incident to the office of the Secretary of a corporation or as shall from time to time be prescribed by, or pursuant to authority delegated by, the Managing Member.

(e) Treasurer. The Treasurer shall keep full and accurate accounts of the receipts and disbursements of the Company in books belonging to the Company, shall deposit all moneys and other valuable effects of the Company in the name and to the credit of the Company in such depositories as may be designated by the Managing Member, and shall also have such other powers and perform such other duties as are incident to the office of the Treasurer of a corporation or as shall from time to time be prescribed by, or pursuant to authority delegated by, the Managing Member.

(f) Other Officers and Assistant Officers. The powers and duties of each other officer or assistant officer who may from time to time be chosen by the Managing Member shall be as specified by, or pursuant to authority delegated by, the Managing Member at the time of the appointment of such other officer or assistant officer or from time to time thereafter. In addition, each officer designated as an assistant shall assist in the performance of the duties of the officer to which he or she is assistant and shall have the powers and perform the duties of such officer during the absence or inability to act of such officer.

(g) Contracts. Any contract to be entered into by the Company may be signed by the President or any Vice President or by any person authorized to do so by the Managing Member, the Chairman or the President.

5.3 Liability of Members.

No Member, Managing Member, former Member, no Affiliate of any thereof, nor any partner, shareholder, director, officer, employee or agent of any of the foregoing, shall be liable in damages for any act or failure to act in such Person's capacity as a Member, Managing Member or otherwise on behalf of the Company unless such act or omission constituted bad faith, gross negligence, fraud or willful misconduct of such Person or a violation by such Person of this Agreement. Subject to Section 5.4, each Member, former Member, each Affiliate of any thereof, and each partner, shareholder, director, officer, employee and agent of any of the foregoing, shall be indemnified and held harmless by the Company, its receiver or trustee from and against any liability for damages and expenses, including reasonable attorneys' fees and disbursements and amounts paid in settlement, resulting from any threatened, pending or completed action, suit or proceeding relating to or arising out of such Person's acts or omissions in such Person's capacity as a Member, Managing Member or otherwise involving such Person's activities on behalf of the Company, except to the extent that such damages or expenses result from the bad faith, gross negligence, fraud or willful misconduct of such Person or a violation by such Person of this Agreement. Any indemnity by the Company, its receiver or trustee under this Section 5.3 shall be provided out of and to the extent of Company Property only.

5.4 Indemnification.

Any Person asserting a right to indemnification under Section 5.3 shall so notify the Company in writing. If the facts giving rise to such indemnification shall involve any actual or

threatened claim or demand by or against a third party, the indemnified Person shall give such notice promptly (but the failure to so notify shall not relieve the indemnifying Person from any liability which it otherwise may have to such indemnified Person hereunder except to the extent the indemnifying Person is actually prejudiced by such failure to notify). The indemnifying Person shall be entitled to control the defense or prosecution of such claim or demand in the name of the indemnified Person, with counsel satisfactory to the indemnified Person, if it notifies the indemnified Person in writing of its intention to do so within 20 days of its receipt of such notice, without prejudice, however, to the right of the indemnified Person to participate therein through counsel of its own choosing, which participation shall be at the indemnified Person's expense unless (i) the indemnified Person shall have been advised by its counsel that use of the same counsel to represent both the indemnifying Person and the indemnified Person would present a conflict of interest (which shall be deemed to include any case where there may be a legal defense or claim available to the indemnified Person which is different from or additional to those available to the indemnifying Person), in which case the indemnifying Person shall not have the right to direct the defense of such action on behalf of the indemnified Person, or (ii) the indemnifying Person shall fail vigorously to defend or prosecute such claim or demand within a reasonable time. Whether or not the indemnifying Person chooses to defend or prosecute such claim, the Members shall cooperate in the prosecution or defense of such claim and shall furnish such records, information and testimony and attend such conferences, discovery proceedings, hearings, trials and appeals as may reasonably be requested in connection therewith.

The indemnified Person shall not settle or permit the settlement of any claim or action for which it is entitled to indemnification without the prior written consent of the indemnifying Person, unless the indemnifying Person shall have failed to assume the defense thereof after the notice and in the manner provided above.

The indemnifying Person may not without the consent of the indemnified Person agree to any settlement (i) that requires such indemnified Person to make any payment that is not indemnified hereunder, (ii) does not grant a general release to such indemnified Person with respect to the matters underlying such claim or action, or (iii) that involves the sale, forfeiture or loss of, or the creation of any lien on, any material property of such indemnified Person. Notwithstanding the foregoing, the indemnifying Person may not in connection with any such investigation, defense or settlement, without the consent of the indemnified Person, take or refrain from taking any action which would reasonably be expected to materially impair the indemnification of such indemnified Person hereunder or would require such indemnified Person to take or refrain from taking any action or to make any public statement, which such indemnified Person reasonably considers to materially adversely affect its interests.

Upon the request of any indemnified Person, the indemnifying Person shall use reasonable efforts to keep such indemnified Person reasonably apprised of the status of those aspects of such investigation and defense controlled by the indemnifying Person and shall provide such information with respect thereto as such indemnified Person may reasonably request.

5.5 Interested Party Transactions.

Except for the Contribution Agreement and ARCO Member Guarantee, any contract, agreement, relationship or transaction between the Company or any of its Subsidiaries, on the one hand and any Member or any Person in which a Member (including its Controlled Affiliates) has a direct or indirect material financial interest or which has a direct or indirect material financial interest in such Member (each, an "Interested Person") on the other hand, shall be (i) on terms no less favorable to the Company than those generally being provided to or available from unrelated third parties. Notwithstanding the foregoing, in no event may any contract or agreement between the Company or any of its Subsidiaries and Interested Persons involve any subject matter outside the ordinary course of the Company's mining business (including within such business the making of any Arch Intercompany Loans).

SECTION 6

ACCOUNTING, BOOKS AND RECORDS

6.1 Accounting, Books and Records.

The Company shall maintain at its principal office separate books of account for the Company which (i) shall fully and accurately reflect all transactions of the Company, all costs and expenses incurred, all charges made, all credits made and received, and all income derived in connection with the conduct of the Company and the operation of its business in accordance with GAAP or, to the extent inconsistent therewith, in accordance with this Agreement and (ii) shall include all documents and other materials with respect to the Company's business as are usually maintained by persons engaged in similar businesses. The Company shall use the accrual method of accounting in preparation of its annual reports and for tax purposes and shall keep its books and records accordingly. Any Member or its designated representative shall have the right, at any reasonable time and for any lawful purpose related to the affairs of the Company or the investment in the Company by such Member, (i) to have access to and to inspect and copy the contents of such books or records, (ii) to visit the facilities of the Company and (iii) to discuss the affairs of the Company with its officers, employees, attorneys, accountants, customers and suppliers. The Company shall not charge such Member for such examination and each Member shall bear its own expenses in connection with any examination made for any such Member's account.

6.2 Reports.

(a) In General. The controller of the Company shall be responsible for the preparation of financial reports of the Company and the coordination of financial matters of the Company with the Accountants.

(b) Periodic and Other Reports. The Company shall cause to be delivered to each Member the financial statements listed in clauses (i) through (iii) below, prepared, in each case, in accordance with GAAP (and, if required by any Member for purposes of reporting under the Securities Exchange Act of 1934, as amended ("Exchange Act"), Regulation S-X), any of the reports and information listed in subsection (d) below and such other reports as any Member may reasonably request from time to time:

(1) As soon as practicable following the end of each Fiscal Year (and in any event not later than 75 days after the end of such Fiscal Year) and at such time as distributions are made to the Members pursuant to Section 8.2 following the occurrence of a Liquidating Event, a balance sheet of the Company as of the end of such Fiscal Year or at the time such distributions are made and the related statements of operations, Members' Capital Accounts and changes therein, and cash flows for such Fiscal Year, together with appropriate notes to such financial statements and supporting schedules, and, if audited, a copy of the audit report thereon by the independent public accountants then serving the Company, and in each case, to the extent the Company was in existence, setting forth in comparative form the corresponding figures for the immediately preceding Fiscal Year (in the case of the balance sheet) and the two immediately preceding Fiscal Years (in the case of the statements).

(2) As soon as practicable following the end of each of the first three fiscal quarters of each Fiscal Year (and in any event not later than 45 days after the end of each such fiscal quarter), a balance sheet of the Company as of the end of such fiscal quarter and the related statements of operations, Members' Capital Accounts and changes therein, and cash flows for such fiscal quarter and for the Fiscal Year to date, in each case, to the extent the Company was in existence, setting forth in comparative form the corresponding figures for the prior Fiscal Year's fiscal quarter and interim period corresponding to the fiscal quarter and interim period just completed.

(3) If the Company is a reporting company under the Exchange Act, all annual and quarterly reports on Form 10-K and 10-Q, all current reports on Form 8-K and all other reports or information required to be filed under the Exchange Act or otherwise prepared and distributed by the Company to any Member or other holders of equity in the Company.

(4) Together with the financial statements delivered pursuant to the foregoing clauses (i) and (ii), a certificate of the chief financial officer of the Managing Member, as to (a) compliance by the Company, and by each other Person whose Base Credit Level Compliance purports to be evidenced by such certificate, with the Credit Ratios as of the last day of the Test Period ended on the last day of the reporting period

covered by such financial statements, and/or, in each case containing calculations in reasonable detail demonstrating such compliance, and/or (b) stating whether on the last day of the reporting period covered by such financial statements, any other such Person, had an Acceptable Debt Rating.

6.3 Tax Returns and Information.

(a) The Managing Member shall act as the "Tax Matters Partner" of the Company within the meaning of Section 6231(a)(7) of the Code (and in any similar capacity under applicable state or local law) (the "Tax Matters Partner"). If the Managing Member shall cease to be a Member, then the Member with the greatest Common Percentage Interest shall thereafter act as the Tax Matters Partner. The Tax Matters Partner shall take reasonable action to cause each other Member to be treated as a "notice partner" within the meaning of Section 6231(a)(8) of the Code. All reasonable expenses incurred by a Member while acting in its capacity as Tax Matters Partner shall be paid or reimbursed by the Company. Each Member shall have the right to have five Business Days advance notice from the Tax Matters Partner of the time and place of, and to participate in (i) any material aspect of any administrative proceeding relating to the determination of Company items at the Company level and (ii) any material discussions with the Internal Revenue Service relating to the allocations pursuant to Section 3 of this Agreement. The Tax Matters Partner shall not initiate any action or proceeding in any court, extend any statute of limitations, or take any other action contemplated by Sections 6222 through 6232 of the Code that would legally bind any other Member other than indirectly through the Company being bound by such action. The Company shall from time to time upon request of any other Member confer, and cause the Company's tax attorneys and Accountants to confer, with such other Member and its attorneys and accountants on any matters relating to a Company tax return or any tax election.

(b) The Company shall cause all federal, state, local and other tax returns and reports (including amended returns) required to be filed by the Company to be prepared and timely filed with the appropriate authorities and shall cause all income or franchise tax returns or reports required to be filed by the Company to be sent to each Member for review at least 15 Business Days prior to filing. Unless otherwise determined by the Managing Member, all such income or franchise tax returns of the Company shall be prepared by the Accountants. The cost of preparation of any returns by the Accountants or other outside preparers shall be borne by the Company. Except as otherwise expressly provided herein, all elections required or permitted to be made by the Company under the Code (or applicable state or local tax law) shall be made in such manner as may be determined by the Managing Member to be in the best interests of the Members as a group.

(c) The Company shall cause to be provided to each Member as soon as possible after the close of each Fiscal Year (and, in any event, no later than 135 days after the end of each Fiscal Year), a schedule setting forth such Member's distributive share of the Company's income, gain, loss, deduction and credit as determined for federal income tax purposes and any

other information relating to the Company that is reasonably required by such Member to prepare its own federal, state, local and other tax returns. At any time after such schedule and information have been provided, upon at least five Business Days' notice from a Member, the Company shall also provide each Member with a reasonable opportunity during ordinary business hours to review and make copies of all work papers related to such schedule and information or to any return prepared under paragraph (b) above. The Tax Matters Partner shall also cause to be provided to each Member, at the time that the quarterly financial statements are required to be delivered pursuant to Section 6.2(b)(ii) above, an estimate of each Member's share of all items of income, gain, loss, deduction and credit of the Company for the fiscal quarter just completed and for the Fiscal Year to date for federal income tax purposes.

(d) The Company, each Member and each Affiliate of a Member agrees to take no action inconsistent with the tax-free nature of the reorganization of LTLC, the contribution of the ARCO Assets to the Company, the contribution to ARCO Member of an interest in the Company and the distributions to ARCO Member pursuant to Section 4.1 except to the extent requested by ARCO Member in writing. Each Member and each Affiliate of a Member agrees to take any action pursuant to this Section 6.3(d) reasonably requested by ARCO Member. The Company and each Member will not file any protective claim or election in connection with these matters unless (i) directed to do so by ARCO or (ii) they receive ARCO's prior written consent to such filing, which consent will not be unreasonably withheld.

SECTION 7

DISPOSITIONS OF INTERESTS

7.1 Restriction on Dispositions.

Except as otherwise permitted by this Agreement, no Member shall Dispose of all or any portion of its Interest.

7.2 Permitted Transfers.

Subject to the conditions and restrictions set forth in Section 7.3, a Member may at any time Transfer all or any portion of its Interest (a) to any Controlled Affiliate of such Member, (b) in connection with a Permitted Transaction, (c) to the administrator or trustee of such Member to whom such Interest is transferred in an Involuntary Bankruptcy, (d) pursuant to and in compliance with Section 7.4 or (e) with the prior written consent of the other Members (each a "Permitted Transfer"), provided that unless approved by all Members, no Transfer of a Member's Interest (other than pursuant to Section 7.4) will be a Permitted Transfer if such Transfer would reasonably likely result in (y) a breach of any covenant, representation or other agreement in any

instrument with respect to the Company Debt or any Successor Debt; or (z) otherwise materially adversely affect the creditworthiness of the Company.

After any Permitted Transfer, the Transferred Interest shall continue to be subject to all the provisions of this Agreement, including the provisions of this Section 7 with respect to the Disposition of Interests. Except in the case of a Transfer of a Member's entire Interest made in compliance herewith, no Member shall withdraw from the Company, except with the consent of the Managing Member. The withdrawal of a Member, whether or not permitted, shall not relieve the withdrawing Member of its obligations under Section 10.7 and shall not relieve such Member or any of its Affiliates of its obligations under, or result in a termination of or otherwise affect, any agreement between the Company and such Member or Affiliate then in effect, except to the extent provided therein.

7.3 Conditions to Permitted Transfers.

A Transfer shall not be treated as a Permitted Transfer unless and until the following conditions are satisfied:

(a) Except in the case of a Transfer involuntarily by operation of law, the transferor and transferee shall execute and deliver to the Company such documents as may be necessary or appropriate in the opinion of counsel to the Company to effect such Transfer. In the case of a Transfer of Interests involuntarily by operation of law, the Transfer shall be confirmed by presentation to the Company of legal evidence of such Transfer, in form and substance satisfactory to counsel to the Company. In all cases, the Company shall be reimbursed by the transferor and/or transferee for all costs and expenses that it reasonably incurs in connection with such Transfer (including reasonable attorneys' fees and expenses, but excluding the portion of the costs of determining Net Equity that are to be borne by the Company as provided in Section 7.4(d));

(b) Except in the case of a Transfer involuntarily by operation of law, the transferee of an Interest (other than, with respect to clause (A) below, a transferee that was a Member prior to the Transfer) shall, by written instrument in form and substance reasonably satisfactory to the Managing Member (and, in the case of clause (B) below, the transferor Member), (A) accept and adopt the terms and provisions of this Agreement, including this Section 8, and (B) assume the obligations of the transferor Member under this Agreement with respect to the Transferred Interest. The transferor Member shall be released from all such assumed obligations except (x) as otherwise provided in Section 10.7, (y) those obligations or liabilities of the transferor Member arising out of a breach of this Agreement and (z) in the case of a transfer to any Person other than a Member or any of its Controlled Affiliates, those obligations or liabilities of the transferor Member based on events occurring, arising or maturing prior to the date of Transfer;

(c) Except in the case of a Transfer involuntarily by operation of law, the transferor and its Affiliates will be obligated to sell to the transferee, and the transferee will be obligated to buy from the transferor and its Affiliates, all Member Loans of the Company held directly or indirectly by the transferor or an Affiliate thereof. If the transferee is a Member or a Controlled Affiliate thereof, the terms of such purchase will include those provided in Section 2.5;

(d) Except in the case of a Transfer involuntarily by operation of law, if required by the Managing Member, the transferee shall deliver to the Company an opinion, satisfactory in form and substance to the Managing Member, of counsel reasonably satisfactory to the Managing Member to the effect that the Transfer of the Interest is in compliance with applicable state and federal securities laws;

(e) Except in the case of a Transfer involuntarily by operation of law, if required by the Managing Member, the transferee (other than a transferee that was a Member prior to the Transfer) shall deliver to the Company evidence of the authority of such Person to become a Member and to be bound by all of the terms and conditions of this Agreement, and the transferee and transferor shall each execute and deliver such other instruments as the Managing Member reasonably deems necessary or appropriate to effect, and as a condition to, such Transfer, including amendments to the Certificate or any other instrument filed with the State of Delaware or any other state or governmental agency;

(f) Unless otherwise approved by the Managing Member, no Transfer of an Interest shall be made except upon terms which would not, in the opinion of counsel chosen by the Managing Member, result in the termination of the Company within the meaning of Section 708 of the Code or cause the application of the rules of Sections 168(g)(1)(B) and 168(h) of the Code or similar rules to apply to the Company. If the immediate Transfer of such Interest would, in the opinion of such counsel, cause a termination within the meaning of Section 708 of the Code, then if, in the opinion of such counsel, the following action would not precipitate such termination, the transferor Member shall be entitled (or required, as the case may be) (i) immediately to Transfer only that portion of its Interest as may, in the opinion of counsel to the Company, be transferred without causing such a termination and (ii) to enter into an agreement to Transfer the remainder of its Interest, in one or more Transfers, at the earliest date or dates on which such Transfer or Transfers may be effected without causing such termination. The purchase price for the Interest shall be allocated between the immediate Transfer and the deferred Transfer or Transfers pro rata on the basis of the percentage of the aggregate Interest being transferred, each portion to be payable when the respective Transfer is consummated, unless otherwise agreed by the parties to the Transfer. In the case of a Transfer by one Member to another Member, the deferred purchase price shall be deposited in an interest-bearing escrow account unless another method of securing the payment thereof is agreed upon by the transferor Member and the transferee Member(s). In determining whether a particular proposed Transfer will result in a termination of the Company, counsel to the Company shall take into account the existence of prior written commitments to Transfer made pursuant to this Agreement and such commitments shall always be given precedence over subsequent proposed Transfers;

(g) The transferor or transferee shall furnish the Company with the transferee's taxpayer identification number, sufficient information to determine the transferee's initial tax basis in the Interest transferred, and any other information reasonably necessary to permit the Company to file all required federal and state tax returns and other legally required information statements or returns. Without limiting the generality of the foregoing, the Company shall not be required to make any distribution otherwise provided for in this Agreement with respect to any transferred Interest until it has received such information; and

(h) Except in the case of a Transfer of an Interest involuntarily by operation of law, the transferor and transferee shall provide the Company with an opinion of counsel, which opinion of counsel shall be reasonably satisfactory to the other Members, to the effect that such Transfer will not cause the Company to become taxable as a corporation for federal income tax purposes.

Upon completion of any Permitted Transfer and compliance with the provisions of this Section 7.3, the transferee of the Interest (if not already a Member) shall be admitted as a Member without any further action.

7.4 Put and Call Rights.

(a) ARCO Member Put Right. At any time after the seventh anniversary of the Closing Date (as defined in the Purchase and Sale Agreement), ARCO Member shall have the right, upon providing at least 60 days' advance written notice to Arch Member (a "Put Notice"), to require Arch Member to purchase all or part of ARCO Member's Interest. The price at which ARCO Member's Interest will be so purchased and sold shall be determined by mutual agreement between Arch Member and ARCO Member. If such price is not so agreed upon within 60 days after the date of the Put Notice, such price shall be equal to the sum of (x) if the Preferred Capital Amount or any part thereof is to be sold, an amount equal to all or such portion of the Preferred Capital Amount and any accrued and unpaid Preferred Return thereon, and (y) if the ARCO Member Common Percentage Interest or any part thereof is to be sold, the Net Equity of such Common Percentage Interest or part thereof determined as of the last day of the fiscal quarter immediately preceding the fiscal quarter in which the Put Notice was given. No Damages or other amounts shall be payable to ARCO Member under the Tax Sharing Agreement in connection with the exercise by ARCO Member of its rights under this Section 7.4(a).

(b) Arch Member Call Rights. At any time after the date hereof, Arch Member shall have the right, upon providing at least 60 days' advance written notice (a "Call Notice") to ARCO Member, to purchase or to cause another person to purchase all, but not less than all, of the ARCO Member Interest at a price equal to the sum of (i) the Preferred Capital Amount and any accrued and unpaid Preferred Return thereon, and (ii) the Net Equity of the ARCO Member Common Percentage Interest determined as of the last day of the fiscal quarter immediately preceding the fiscal quarter in which the Call Notice was given, together with Damages (if any) determined as set forth in the Tax Sharing Agreement.

(c) Post 2013 Call Right. At any time after January 1, 2013, Arch Member shall have the right, upon providing at least 60 days advance written Call Notice to ARCO Member, to purchase all of the ARCO Member Interest and any Interest of ARCO Member Transferred at a price equal to the Net Equity of the ARCO Member Interest and/or Transferred Interest determined as of the last day of the fiscal quarter immediately preceding the fiscal quarter in which the Call Notice was given. No Damages or other amounts shall be payable to ARCO Member under the Tax Sharing Agreement in connection with the exercise by Arch Member of its rights under this Section 7.4(c).

(d) Terms of Purchase; Closing. Unless Arch Member and ARCO Member otherwise agree, the closing of the purchase and sale of ARCO Member's Interest shall occur at the principal office of the Company at 10:00 a.m. (local time at the place of the closing) on the first Business Day occurring on or after the 60th day following the last day of the required advance written notice period (subject to the provisions of Section 7.7). At the closing, Arch Member shall pay to ARCO Member, by cash or other immediately available funds, the purchase price for ARCO Member's Interest and ARCO Member shall deliver to Arch Member good title, free and clear of any liens, claims, encumbrances, security interests or options (other than those created by this Agreement and those securing financing obtained by the Company), to the ARCO Member's Interest thus purchased.

At the closing, the Members shall execute such documents and instruments of conveyance as may be necessary or appropriate to effectuate the transactions contemplated hereby, including the Transfer of the ARCO Member's Interest to Arch Member and the assumption by Arch Member of ARCO Member's obligations with respect to the ARCO Member's Interest Transferred to Arch Member. The Company and each Member shall bear its own costs of such Transfer and closing, including attorneys' fees and filing fees. The cost of determining Net Equity shall be borne by the Company.

7.5 Net Equity.

The "Net Equity" of a Member's Interest, as of any day, shall be the amount that would be distributed to such Member in liquidation of the Company pursuant to Section 8 if (a) all of the Company's business and assets were sold substantially as an entirety for Gross Appraised Value, (b) the Company paid its accrued, but unpaid, liabilities and established reserves pursuant to Section 8.2 for the payment of reasonably anticipated contingent or unknown liabilities and (c) the Company distributed the remaining proceeds to the Members in liquidation, all as of such day, provided that in determining such Net Equity, no reserve for contingent or unknown liabilities shall be taken into account if such Member (or its successor in interest) agrees to indemnify the Company and all other Members for that portion of any such reserve as would be treated as having been withheld pursuant to Section 8.3 from the distribution such Member would have received pursuant to Section 8.2 if no such reserve were established.

The Net Equity of a Member's Interest shall be determined, without audit or certification, from the books and records of the Company by the Accountants. The Net Equity of a Member's

Interest shall be determined within 30 days of the day upon which the Accountants are apprised in writing of the Gross Appraised Value of the Company's business and assets, and the amount of such Net Equity shall be disclosed to the Company and each of the Members by written notice ("Net Equity Notice"). The Net Equity determination of the Accountants shall be final and binding in the absence of a showing of manifest error.

7.6 Gross Appraised Value.

"Gross Appraised Value," as of any day, means the price at which a willing seller would sell, and a willing buyer would buy, the business and assets of the Company, free and clear of all liens and encumbrances, substantially as an entirety and as a going concern in a single arm's-length transaction for cash, without time constraints and without being under any compulsion to buy or sell.

In connection with provisions of this Agreement that require a determination of Gross Appraised Value, the Managing Member shall appoint an appraiser (the "First Appraiser") and the affected Member or Members shall appoint a second appraiser (the "Second Appraiser"). If the Second Appraiser is not timely designated, the determination of the Gross Appraised Value shall be made by the First Appraiser. The First Appraiser, or each of the First Appraiser and the Second Appraiser if the Second Appraiser is timely designated, shall submit its determination of the Gross Appraised Value to the Company, the Members and the Accountants within 45 days of the date of its selection (or the selection of the Second Appraiser, as applicable). If there are two (2) Appraisers and their respective determinations of the Gross Appraised Value vary by less then ten percent of the higher determination, the Gross Appraised Value shall be the average of the two determinations. If such determinations vary by ten percent or more of the higher determination, the two Appraisers shall promptly designate a third appraiser (the "Third Appraiser"). Neither the Company nor any Member shall provide, and the First Appraiser and Second Appraiser shall be instructed not to provide, any information to the Third Appraiser as to the determinations of the First Appraiser and the Second Appraiser or otherwise influence such Third Appraiser's determination in any way. The Third Appraiser shall submit its determination of the Gross Appraised Value to the Company, the Members and the Accountants within 45 days of the date of its selection. The Gross Appraised Value shall be equal to the average of the two closest of the three determinations, provided that, if the difference between the highest and middle determinations is no more than 105% and no less than 95% of the difference between the middle and lowest determinations, then the Gross Appraised Value shall be equal to the middle determination. The determination of the Gross Appraised Value in accordance with the foregoing procedure shall be final and binding on the Company and each Member. If any Appraiser is only able to provide a range in which Gross Appraised Value would exist, the average of the highest and lowest value in such range shall be deemed to be such Appraiser's determination of the Gross Appraised Value of the Company's business and assets. The Third Appraiser selected pursuant to the provisions of this Section shall be an investment banking firm

or other qualified Person with prior experience in appraising businesses comparable to the business of the Company.

7.7 Extension of Time.

If any transfer of a Member's Interest in accordance with this Section 7 requires the consent, approval, waiver, or authorization of any government department, board, bureau, commission, agency or instrumentality as a condition to the lawful and valid Transfer of such Member's Interest to the proposed transferee thereof, then each of the time periods provided in this Section 7, as applicable, for the closing of such Transfer shall be suspended for the period of time during which any such consent, approval, waiver, or authorization is being diligently pursued; provided, however, that in no event shall the suspension of any time period pursuant to this Section 7.7 extend for more than 365 days. Each Member agrees to use its diligent efforts to obtain, or to assist the affected Member or the Managing Member in obtaining, any such consent, approval, waiver, or authorization and shall cooperate and use its diligent efforts to respond as promptly as practicable to all inquiries received by it, by the affected Member or by the Managing Member from any government department, board, bureau, commission, agency or instrumentality for initial or additional information or documentation in connection therewith.

7.8 Tagalong Rights.

In the event that the Managing Member proposes to Transfer all or any portion of its Common Percentage Interest to any person other than a Controlled Affiliate of the Managing Member (a "Tagalong Transaction"), the Tagalong Transaction shall not be permitted hereunder unless the proposed transferee ("Tagalong Purchaser") offers to purchase the entire Interest of ARCO Member if ARCO Member desires to sell such Interest to the Tagalong Purchaser at the same price and on the same terms and conditions as the Tagalong Purchaser has offered to the Managing Member (the "Transferring Member") for its Common Percentage Interest, plus an amount equal to the Preferred Capital Amount and any accrued but unpaid Preferred Return thereon to the date of purchase. Prior to effecting any Tagalong Transaction, the Transferring Member shall deliver to ARCO Member a binding, irrevocable offer (the "Tagalong Offer") by the Tagalong Purchaser to purchase the entire Interest of ARCO Member at the same price and on the same terms and conditions as the Tagalong Purchaser has offered to the Transferring Member (the "Tagalong Notice") for its Common Percentage Interest, plus an amount equal to the Preferred Capital Amount and any accrued but unpaid Preferred Return thereon to the date of purchase. The "Tagalong Offer" shall be irrevocable for a period (the "Tagalong Period") ending at 11:59 p.m., local time at the Company's principal place of business on the 30th day following the date of the Tagalong Notice. At any time during the Tagalong Period, ARCO Member may accept the Tagalong Offer as to the entire amount of its Interest by giving written notice of such acceptance to the Tagalong Purchaser. The Tagalong Purchaser's purchase of the Interest of ARCO Member shall occur at the closing of the Tagalong Transaction (provided such closing is not earlier than 30 Business Days after the Tagalong Notice), subject to Section 7.7.

7.9 Prohibited Dispositions.

Any purported Disposition of all or any part of an Interest that is not a Permitted Transfer shall be null and void and of no force or effect whatever; provided that, if the Company is required to recognize a Disposition that is not a Permitted Transfer (or if the Managing Member, in its sole discretion, elects to recognize a Disposition that is not a Permitted Transfer), the Interest Disposed of shall be strictly limited to the transferor's rights to allocations and distributions as provided by this Agreement with respect to the Transferred Interest, which allocations and distributions may be applied (without limiting any other legal or equitable rights of the Company) to satisfy any debts, obligations, or liabilities for damages that the transferor or transferee of such Interest may have to the Company.

7.10 Representations Regarding Acquisitions of Interests.

Each Member hereby represents and warrants to the Company and the other Members that such Member's acquisition of Interests hereunder is made as principal for such Member's own account and not for resale or distribution of such Interests.

7.11 Distributions and Allocations in Respect of Transferred Interests.

If any Interest is Transferred during any Allocation Year in compliance with the provisions of this Section 7, Profits, Losses, each item thereof, and all other items attributable to the Transferred Interest for such Fiscal Year shall be divided and allocated between the transferor and the transferee by taking into account their varying Percentage Interests during the Fiscal Year in accordance with Code Section 706(d), using any conventions permitted by law and selected by the Managing Member. All distributions on or before the date of such Transfer shall be made to the transferor, and all distributions thereafter shall be made to the transferee. Solely for purposes of making such allocations and distributions, the Company shall recognize such Transfer not later than the end of the calendar month during which it is given notice of such Transfer, provided that, if the Company is given notice of a Transfer at least ten Business Days prior to the Transfer, the Company shall recognize such Transfer as of the date of such Transfer, and provided further that if the Company does not receive a notice stating the date such Interest was Transferred and such other information as the Managing Member may reasonably require within 30 days after the end of the Fiscal Year during which the Transfer occurs, then all such items shall be allocated, and all distributions shall be made, to the Person who, according to the books and records of the Company, was the owner of the Interest on the last day of such Fiscal Year. Neither the Company nor the Managing Member shall incur any liability for making allocations

and distributions in accordance with the provisions of this Section 7.11, whether or not the Managing Member or the Company has knowledge of any Transfer of ownership of any Interest.

SECTION 8

DISSOLUTION AND WINDING UP

8.1 Liquidating Events.

The Company shall dissolve and commence winding up and liquidating upon the first to occur of any of the following ("Liquidating Events"):

(i) The sale of all or substantially all of the Property; and

(ii) The agreement of the Members to dissolve, wind up, and liquidate the Company.

The Members hereby agree that, notwithstanding any provision of the Act, the Company shall not dissolve prior to the occurrence of a Liquidating Event.

The event described in Section 8.1(ii) shall not constitute a Liquidating Event until such time as the Company is otherwise required to dissolve, and commence winding up and liquidating.

8.2 Winding Up.

Upon the occurrence of a Liquidating Event, the Company shall continue solely for the purposes of winding up its affairs in an orderly manner, liquidating its assets, and satisfying the claims of its creditors and Members and no Member shall take any action that is inconsistent with, or not appropriate for, the winding up of the Company's business and affairs. To the extent not inconsistent with the foregoing, this Agreement shall continue in full force and effect until such time as the Company's Property has been distributed pursuant to this Section 8.2 and the Certificate has been canceled in accordance with the Act. The Managing Member shall be responsible for overseeing the winding up and dissolution of the Company, shall take full account of the Company's liabilities and Property, shall cause the Company's Property to be liquidated as promptly as is consistent with obtaining the fair value thereof, and shall cause the proceeds therefrom, to the extent sufficient therefor, to be applied and distributed in the following order:

(a) First, to the payment of all of the Company's debts and liabilities (other than Member Loans) to creditors other than the Members and to the payment of the expenses of liquidation;

(b) Second, to the payment of all Member Loans and all of the Company's debts and liabilities to the Members in the following order and priority:

(1) first, to the payment of all debts and liabilities owed to any Member other than in respect of Member Loans;

(2) second, to the payment of all accrued and unpaid interest on Member Loans, such interest to be paid to each Member and its Affiliates (considered as a group) pro rata in proportion to the interest owed to each such group; and

(3) third, to the payment of the unpaid principal amount of all Member Loans, such principal to be paid to each Member and its Affiliates (considered as a group) pro rata in proportion to the outstanding principal owed to each such group;

(c) Third, in an amount equal to the unpaid cumulative Preferred Return;

(d) Fourth, in an amount equal to the Preferred Capital Amount;

(e) The balance, if any, to the Members in accordance with their Capital Accounts, after giving effect to all contributions, distributions and allocations for all periods;

(f) In the discretion of the Managing Member, a pro rata portion of the distributions that would otherwise be made to the Members pursuant to this Section 8.2 may be:

(1) distributed to a trust established for the benefit of the Members for the purposes of liquidating Company assets, collecting amounts owed to the Company, and paying any contingent or unforeseen liabilities or obligations of the Company. The assets of any such trust shall be distributed to the Members from time to time, in the reasonable discretion of the Managing Member, in the same proportions as the amount distributed to such trust by the Company would otherwise have been distributed to the Members pursuant to this Section 8.2; or

(2) withheld to provide a reasonable reserve for Company liabilities (contingent or otherwise) and to reflect the unrealized portion of any installment obligations owed to the Company, provided that such withheld amounts shall be distributed to the Members as soon as practicable; and

(g) Any such distributions to the Members in respect of their Capital Accounts shall be made in accordance with the time requirements set forth in Treas. Regs. Section 1.704-1(b)(2)(ii)(b)(2).

Each Member and each of its Affiliates (as to Member Loans only) agrees that by accepting the provisions of this Section 8.2 setting forth the priority of the distribution of the assets of the Company to be made upon its liquidation, such Member or Affiliate expressly waives any right which it, as a creditor of the Company, might otherwise have under the Act to receive distributions of assets pari passu with the other creditors of the Company in connection with a distribution of assets of the Company in satisfaction of any liability of the Company, and hereby subordinates to said creditors any such right.

Notwithstanding the foregoing, in the event that the Managing Member shall determine that an immediate sale of part of all the Property would cause undue loss to the Members, or in the event that the Managing Member determines that it would be in the best interests of the Members to distribute the Property to the Members in-kind (which distributions do not, as to the in-kind portions, have to be in the same proportions as they would be if cash were distributed, but all such in-kind distributions shall be equalized, to the extent necessary, with cash), then the Managing Member may either defer liquidation of, and withhold from distribution for a reasonable time, any of the Property except that necessary to satisfy the Company's debts and obligations, or distribute the Property to the Members in-kind.

8.3 Deemed Distribution and Recontribution.

Notwithstanding any other provision of this Section 8, in the event the Company is liquidated within the meaning of Section 1.704-1(b)(2)(ii)(g) of the Regulations but no Liquidating Event has occurred, the Property shall not be liquidated, the Company's liabilities shall not be paid or discharged, and the Company's affairs shall not be wound up. Instead, solely for federal income tax purposes, the Company shall be deemed to have distributed the Property in kind to the Members, who shall be deemed to have assumed and taken subject to all Company liabilities, all in accordance with their respective Capital Accounts. Immediately thereafter, the Members shall be deemed to have recontributed the Property in kind to the Company, which shall be deemed to have assumed and taken subject to all such liabilities.

8.4 Rights of Members.

Except as otherwise provided in this Agreement, (a) each Member shall look solely to the assets of the Company for the return of its Capital Contributions and shall have no right or power to demand or receive property other than cash from the Company, and (b) no Member shall have priority over any other Member as to the return of its Capital Contributions, distributions, or allocations.

If, after the Company ceases to exist as a legal entity, a Member is required to make a payment to any Person on account of any activity carried on by the Company, such paying

Member shall be entitled to reimbursement from each other Member consistent with the manner in which the economic detriment of such payment would have been borne had the amount been paid by the Company immediately prior to its cessation.

8.5 Notice of Dissolution.

In the event a Liquidating Event occurs, the Managing Member shall, within 30 days thereafter, provide written notice thereof to each of the Members.

8.6 Deemed Sale and Allocation.

Upon a distribution in kind of Company Property, such Property shall be deemed to be sold for the fair market value thereof for purposes of making allocations hereunder.

SECTION 9

DISPUTE RESOLUTION

9.1 Dispute Resolution; Arbitration.

(a) Dispute Resolution. Any claim, dispute, difference or controversy between Members arising out of, or relating to, this Agreement, or the subject matter hereof, which cannot be settled by mutual understanding between or among such Members, shall be initially submitted to a panel consisting of an executive management representative of each of the respective Parents of the Members who are party to the claim, dispute, difference or controversy (the "Parties"). The said representatives shall meet and use best efforts to resolve the said claim, dispute, difference or controversy.

(b) Arbitration. In the event that the dispute resolution procedure described in Section 9.1(a) does not result in a final resolution of the claim, dispute, difference or controversy within 90 days of the date of submission thereof for resolution, any Party may invoke the following arbitration rights.

(1) The claim, dispute, difference or controversy arising out of or in relation to this Agreement or the interpretation or breach thereof shall be referred to arbitration under the rules of the American Arbitration Association ("AAA") to the extent such rules are not inconsistent with these paragraphs. Judgment upon the award of the arbitrators may be entered in any court having jurisdiction thereof or application may be made to such court for a judicial confirmation of the award and an order of enforcement, as the case may be. The demand for arbitration shall be made within a reasonable time after the claim, dispute, difference or controversy or other matter in question, has arisen,

but not before 90 days after submission thereof for resolution pursuant to Section 9.1(a), and in any event shall not be made after the date when institution of legal or equitable proceedings, based on such claim, dispute, difference or controversy or other matter in question, would be barred by the applicable statute of limitations.

(2) The independent arbitration panel shall consist of three independent arbitrators, one of whom shall be appointed by each of the Parties, if there are no more than two such Parties, and by the two Parties having the largest Percentage Interest, if there are more than two Parties, with the third to be chosen by the two arbitrators thus appointed. In the event that either Party entitled to do so does not designate an arbitrator, the other may request a United States federal judge or the Executive Secretary of the AAA to designate an arbitrator for such party; and, if the two arbitrators appointed by the Parties are unable to agree on the appointment of the third arbitrator, either arbitrator may petition the AAA to make the appointment.

(3) The place of arbitration shall be Denver, Colorado, or such other place as the parties may agree.

9.2 Jurisdiction; Service of Process.

(a) Jurisdiction. Each Member (a) hereby irrevocably submits itself to the non-exclusive jurisdiction of (i) the Supreme Court for the State of New York, sitting in the Borough of Manhattan, and (ii) the United States District Court for the Southern District of New York, for the purposes of any suit, action or other proceeding brought by the other, or its respective successors or assigns, to compel submission to arbitration, in accordance with Section 9.1 hereof, or to enforce a resolution, settlement, order or award made pursuant thereto, or to enforce any obligation for the payment of money contained herein, and (iii) to the extent permitted by applicable law, hereby waives, and agrees not to assert, by way of motion, as a defense, or otherwise, in any such suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of the above-named courts, that the suit, action or proceeding is brought in an inconvenient forum, that the venue of the suit, action or proceeding is improper or that the agreement to submit to arbitration, as provided in Section 9.1 hereof, or a resolution, settlement, order or award made pursuant thereto, or such an obligation for the payment of money, may not be enforced in or by such court. Nothing contained herein shall be deemed to waive the right of a Member to seek removal of a matter from state court to federal court if such removal is otherwise permissible.

(b) Service of Process. Each Member hereby consents to service of process on it at the office for service of process set forth below as its office for service of process and additionally irrevocably designates and appoints the person named in Schedule 9.2 as its "Agent" and attorney-in-fact to receive service of process in any action, suit or proceeding with respect to any matter as to which it submits to jurisdiction as set forth above, it being agreed that service upon such attorney-in-fact shall constitute valid service upon the Member or its successors or

assigns. Each Member agrees that (x) the sole responsibilities of the Agent shall be (i) to receive such process, (ii) to send a copy of any such process so received to such Member, by registered airmail, return receipt requested, at the address for it set forth in Section 10.1, or at the last address filled in writing by it with the Agent, and (iii) to give prompt telecopied notice of receipt thereof to it at such address (y) the Agent shall have no responsibility for the receipt or nonreceipt by the respective Member of such process, nor for any performance or nonperformance by the respective Member or its respective successors or assigns, and (z) failure of the Agent to send a copy of any such process or otherwise to give notice thereof to the respective Member shall not affect the validity of such service or any judgment in any action, suit or proceeding based thereon. If service of process cannot be effected in the foregoing manner, each Member further irrevocably consents to the service of process in any action, suit or proceeding by the mailing of copies thereof by registered or certified airmail, postage prepaid, return receipt requested, to it at its address set forth in Section 10.1 hereof. The foregoing, however, shall not limit the right of the Member to serve process in any other manner permitted by law. Any judgment against a Member in any suit for which such Member has no further right of appeal shall be conclusive, and may be enforced in other jurisdictions by suit on the judgment, a certified or true copy of which shall be conclusive evidence of the fact and of the amount of any indebtedness or liability of such Member therein described; provided always that the plaintiff may at its option bring suit, or institute other judicial proceedings, against such Member or any of its assets in the courts of any country or place where such party or such assets may be found. Each Member further covenants and agrees that throughout the term of the Company, it shall maintain a duly appointed agent for the service of summonses and other legal processes in New York.

For purposes of this Section 9.2(b), the Agent and offices for service of process for each of the Members shall be as set forth on Schedule 2.1 or such other person or offices as shall be designated in writing by any Member to the other Member.

SECTION 10

MISCELLANEOUS

10.1 Notices.

Any notice, payment, demand, or communication required or permitted to be given by any provision of this Agreement shall be in writing and mailed (certified or registered mail, postage prepaid, return receipt requested) or sent by hand or overnight courier, or by facsimile (with acknowledgment received), charges prepaid and addressed as follows, or to such other address or number as such Person may from time to time specify by notice to the Members:

(a) If to the Company, to the address or number set forth on Schedule 2.1;

(b) If to a Member to the address or number set forth in Schedule 2.1.

All notices and other communications given to a Person in accordance with the provisions of this Agreement shall be deemed to have been given and received (i) four Business Days after the same are sent by certified or registered mail, postage prepaid, return receipt requested, (ii) when delivered by hand or transmitted by facsimile (with acknowledgment received and, in the case of a facsimile only, a copy of such notice is sent no later than the next Business Day by a reliable overnight courier service, with acknowledgment of receipt) or (iii) one Business Day after the same are sent by a reliable overnight courier service, with acknowledgment of receipt.

10.2 Binding Effect.

Except as otherwise provided in this Agreement, this Agreement shall be binding upon and inure to the benefit of the Members and their respective successors, transferees, and assigns.

10.3 Construction.

This Agreement shall be construed simply according to its fair meaning and not strictly for or against any Member.

10.4 Time.

Time is of the essence with respect to this Agreement.

10.5 Table of Contents; Headings.

The table of contents and section and other headings contained in this Agreement are for reference purposes only and are not intended to describe, interpret, define or limit the scope, extent or intent of this Agreement.

10.6 Severability.

Every provision of this Agreement is intended to be severable. If any term or provision hereof is illegal, invalid or unenforceable for any reason whatsoever, that term or provision will be enforced to the maximum extent permissible so as to effect the intent of the Members, and such illegality, invalidity or unenforceability shall not affect the validity or legality of the remainder of this Agreement. If necessary to effect the intent of the Members, the Members will negotiate in good faith to amend this Agreement to replace the unenforceable language with enforceable language which as closely as possible reflects such intent.

10.7 Confidentiality.

(a) Each Member and each of its Controlled Affiliates (each a "Restricted Party") shall, and shall cause its respective officers, directors, employees, attorneys, accountants, consultants and other agents and advisors (collectively, "Agents") to, keep secret and maintain in confidence the terms of this Agreement and all confidential and proprietary information and data of the Company and the other Members or their Affiliates disclosed to it (in each case, a "receiving party") in connection with the formation of the Company and the conduct of the Company's business and in connection with the transactions contemplated by the Contribution Agreement (the "Confidential Information") and shall not disclose Confidential Information, and shall cause its respective Agents not to disclose Confidential Information, to any Person other than the Members, their Controlled Affiliates, their respective Agents that need to know such Confidential Information, or the Company. Each Member further agrees that it shall not use the Confidential Information for any purpose other than monitoring and evaluating its investment, determining and performing its obligations and exercising its rights under this Agreement. The Company and each Member shall take all reasonable measures necessary to prevent any unauthorized disclosure of the Confidential Information by any of their respective Controlled Affiliates or any of their respective Agents.

(b) Nothing herein shall prevent the Company, any Restricted Party or its Agents from using, disclosing or authorizing the disclosure of, Confidential Information it receives in the course of the business of the Company which:

(i) has been published or is in the public domain through no fault of the receiving party;

(ii) prior to receipt hereunder was properly within the legitimate possession of the receiving party or, subsequent to receipt hereunder (or under such Agreement), is lawfully received from a third party having rights therein without restriction of the third party's right to disseminate the Confidential Information and without notice of any restriction against its further disclosure;

(iii) is independently developed by the receiving party through parties who have not had, either directly or indirectly, access to or knowledge of such Confidential Information;

(iv) is disclosed to a third party with the written approval of the party originally disclosing such information, provided that such Confidential Information shall cease to be confidential and proprietary information covered by this Agreement only to the extent of the disclosure so consented to;

(v) subject to the receiving party's compliance with paragraph (d) below, is required to be produced under order of a court of competent jurisdiction or other similar requirements of a governmental agency, provided that such Confidential Information to the extent covered by a protective order or equivalent shall otherwise

continue to be Confidential Information required to be held confidential for purposes of this Agreement; or

(vi) subject to the receiving party's compliance with paragraph (d) below, is necessary or advisable to be disclosed under applicable law or under the rules of a stock exchange or association on which such receiving party's securities (or those of its Affiliate) are listed.

(c) Notwithstanding this Section 10.7, any Member may provide Confidential Information (i) to other Persons considering the consummation of a Permitted Transaction with respect to such Member or (ii) to any financial institution in connection with the provision of funds by such financial institution to such Member, so long as prior to any such disclosure such other Person or financial institution executes a confidentiality agreement that provides protection substantially equivalent to the protection provided the Members and the Company in this Section 10.7.

(d) In the event that any receiving party (i) determines that it is necessary or advisable to disclose Confidential Information under applicable law (other than under the requirements of a stock exchange or association on which such receiving party's securities or those of its Affiliates are listed) or (ii) becomes legally compelled (by oral questions, interrogatories, requests for information or documents, subpoenas, civil investigative demands or otherwise) to disclose any Confidential Information, the receiving party shall provide the disclosing party with prompt written notice so that in the case of clause (i), the disclosing party can work with the receiving party to limit the disclosure to the extent practicable, or in the case of clause (ii), the disclosing party may seek a protective order or other appropriate remedy or waive compliance with the provisions of this Agreement. In the case of said clause (ii) and in the event that the disclosing party is unable to obtain a protective order or other appropriate remedy, or if the disclosing party so directs, the receiving party shall, and shall cause its employees to, exercise all commercially reasonable efforts to obtain a protective order or other appropriate remedy at the disclosing party's reasonable expense. Failing the entry of a protective order or other appropriate remedy or receipt of a waiver hereunder, the receiving party shall furnish only that portion of the Confidential Information which it is advised by opinion of its counsel is legally required to be furnished and shall exercise all commercially reasonable efforts to obtain reliable assurance that confidential treatment shall be accorded such Confidential Information, it being understood that such reasonable efforts shall be at the cost and expense of the disclosing party whose Confidential Information has been sought.

10.8 Further Action.

Each Member, upon the reasonable request of the Managing Member, agrees to perform all further acts and execute, acknowledge, and deliver any documents which may be reasonably necessary, appropriate, or desirable to carry out the intent and purposes of this Agreement.

10.9 Governing Law.

The validity of this Agreement, the construction of its terms and the interpretation of the rights and duties of the Members hereunder shall be governed by the substantive laws of the State of Delaware without regard to the principles of conflict of laws of the State of Delaware or any other jurisdiction (except those that cannot be waived) that would call for the application of the substantive law of any jurisdiction other than the State of Delaware.

10.10 Waiver of Action for Partition.

Each Member irrevocably waives any right that it may have to maintain any action for partition with respect to any of the Property; provided that the foregoing shall not be construed to apply to any action by a Member for the enforcement of its rights under this Agreement. Each Member waives its right to seek a court decree of dissolution (other than a dissolution in accordance with Section 8) or to seek appointment of a court receiver for the Company as now or hereafter permitted under applicable law.

10.11 Counterpart Execution.

This Agreement may be executed in any number of counterparts with the same effect as if all the Members had signed the same document. All counterparts shall be construed together and shall constitute one agreement.

10.12 Specific Performance.

Each Member agrees with the other Members that the other Members would be irreparably damaged if any of the provisions of this Agreement are not performed in accordance with their specific terms and that monetary damages would not provide an adequate remedy in such event. Accordingly, in addition to any other remedy to which the nonbreaching Members may be entitled, at law or in equity, the nonbreaching Members shall be entitled to injunctive relief to prevent breaches of this Agreement and specifically to enforce the terms and provisions hereof.

10.13 Entire Agreement.

The provisions of this Agreement set forth the entire agreement and understanding between the Members pertaining to the subject matter hereof and supersede all prior agreements, oral or written, representations, discussions, negotiations and other communications between the Members pertaining to the subject matter hereof.

10.14 Limitation on Rights of Others.

Nothing in this Agreement, whether express or implied, shall be construed to give any Person other than the Members and their respective successors and permitted assigns any legal or equitable right, remedy or claim under or in respect of this Agreement.

10.15 Waivers; Remedies.

The observance of any term of this Agreement may be waived (either generally or in a particular instance and either retroactively or prospectively) by the party or parties entitled to enforce such term, but any such waiver shall be effective only if in a writing signed by the party or parties against which such waiver is to be asserted. Except as otherwise provided herein, no failure or delay of any Member in exercising any power or right under this Agreement shall operate as a waiver thereof, nor shall any single or partial exercise of any such right or power, or any abandonment or discontinuance of steps to enforce such right or power, preclude any other or further exercise thereof or the exercise of any other right or power.

10.16 Amendment.

This Agreement may be amended only in a writing signed by all Members expressly stating that it is an amendment to this Agreement.

IN WITNESS WHEREOF, the parties have entered into this Limited Liability Company Agreement as of the day first above set forth.

ARCH WESTERN ACQUISITION CORPORATION

By: /s/ JEFFRY N. QUINN

Name: Jeffry N. Quinn
Title: President

DELTA HOUSING INC.

By: /s/ TERRY G. DALLAS

Name: Terry G. Dallas
Title: Vice President

EXHIBIT 3.5

CERTIFICATE OF FORMATION
OF
ARCH OF WYOMING, LLC

A Limited Liability Company

FIRST: The name of the limited liability company is:

Arch of Wyoming, LLC

SECOND: The address of the limited liability company's registered office in the State of Delaware is Corporation Trust Center, 1209 Orange Street, in the City of Wilmington, County of New Castle. The name of its registered agent at such address is The Corporation Trust Company.

THE UNDERSIGNED, being the individual forming the limited liability company, has executed, signed and acknowledged this Certificate of Formation this fourteenth day of April, 1998.

/s/ Miriam Rogers Singer

Name: Miriam Rogers Singer
Authorized Person

EXHIBIT 3.6

LIMITED LIABILITY COMPANY AGREEMENT

OF

ARCH OF WYOMING, LLC

This Limited Liability Company Agreement (this "Agreement") of Arch of Wyoming, LLC is entered into by Arch Coal, Inc., a Delaware corporation (the "Member").

The Member, by execution of this Agreement, hereby forms a limited liability company pursuant to and in accordance with the Delaware Limited Liability Company Act (6 Del. C Section 18-101, et seq.), as amended from time to time (the "Act"), and hereby agrees as follows:

1. Name. The name of the limited liability company formed hereby is Arch of Wyoming, LLC (the "Company").

2. Certificates. Miriam Rogers Singer, as an authorized person within the meaning of the Act, shall execute, deliver and file the Certificate of Formation with the Secretary of State of the State of Delaware. Upon the filing of the Certificate of Formation with the Secretary of State of the State of Delaware, her powers as an authorized person shall cease and the Member shall thereafter be designated as an authorized person within the meaning of the Act. The member or an Officer shall execute, deliver and file any other certificates (and any amendments and/or restatements thereof) necessary for the Company to qualify to do business in a jurisdiction in which the Company may wish to conduct business.

3. Purposes. The Company shall have all powers now or hereafter conferred by the laws of the State of Delaware on limited liability companies formed under the Act and, subject to the terms of this Agreement, may do any and all lawful acts or things that are necessary, appropriate, incidental or convenient for the furtherance and accomplishment of the purposes of the Company. Without limiting the generality of the foregoing, the Company may enter into, deliver and perform all contracts, agreements and other undertakings and engage in all activities and transactions as may be necessary or appropriate to carry out its purposes.

4. Principal Business Office. The principal business office of the Company shall be located at such location as may hereafter be determined by the Member.

5. Registered Office. The address of the registered office of the Company in the State of Delaware is c/o The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, New Castle county, DE 19801.

6. Registered Agent. The name and address of the registered agent of the Company for service of process on the Company in the State of Delaware is The

Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, New Castle County, DE 19801.

7. Member. The name and the mailing address of the Member is set forth on Schedule A attached hereto.

8. Limited Liability. Except as otherwise provided by the Act, the debts, obligations and liabilities of the Company, whether arising in contract, tort or otherwise, shall be solely the debts, obligations and liabilities of the Company, and the Member shall not be obligated personally for any such debt, obligation or liability of the Company solely by reason of being a member of the Company.

9. Capital Contributions. The Member is deemed admitted as the Member of the Company upon its execution and delivery of this Agreement. The Member will contribute the amount of United States Dollars to the Company as listed on Schedule A attached hereto.

10. Additional Contributions. The Member is not required to make any additional capital contribution to the Company. However, a Member may make additional capital contributions to the Company at such times and in such amounts as determined by the member.

11. Allocation of Profits and Losses. The Company's profits and losses shall be allocated to the Member.

12. Distributions. Distributions shall be made to the Member at the times and in the aggregate amounts determined by the Member. Notwithstanding any provision to the contrary contained in this Agreement, the Company shall not make a distribution to any Member on account of its interests in the Company if such distribution would violate Section 18-607 of the Act or other applicable law.

13. Management. In accordance with Section 18-402 of the Act, management of the Company shall be vested in the Member. The Member shall have the power to do any and all acts necessary, convenient or incidental to or for the furtherance of the purposes described herein, including all powers, statutory or otherwise, possessed by members of a limited liability company under the laws of the State of Delaware. The Member has the authority to bind the Company.

14. Officers. The Member may, from time to time as it deems advisable, appoint officers of the Company (the "Officers") and assign in writing titles (including, without limitation, President, Vice President, Secretary, and Treasurer) to any such person. Unless the Member decides otherwise, if the title is one commonly used for officers of a business corporation formed under the Delaware General Corporation Law, the assignment of such title shall constitute the delegation to such person of the authorities and duties that are normally associated with that office. Any delegation pursuant to this Section 14 may be revoked at any time by the Member. The initial Officers are listed on Schedule B attached hereto. The Member may revise Schedule B in its sole discretion at any time.

15. Other business. The Member may engage in or possess an interest in other business ventures (unconnected with the Company) of every kind and description, independently or with others. The Company shall not have any rights in or to such independent ventures or the income or profits therefrom by virtue of this Agreement.

16. Exculpation and Indemnification. No Member, no Affiliate of a member, nor any Officer, employee or agent of the Company ("Indemnified Party") shall be liable to the Company, or any other person or entity who has an interest in the Company, for any loss, damage or claim incurred by reason of any act or omission performed or omitted by such Member or Officer in good faith on behalf of the Company and in a manner reasonably believed to be within the scope of the authority conferred on such Member or Officer by this Agreement, unless such act or omission constituted bad faith, gross negligence, fraud or wilful misconduct. To the full extent permitted by applicable law, an Indemnified Party shall be entitled to indemnification from the Company for any loss, damage or claim incurred by an Indemnified Party by reason of any act or omission performed or omitted by an Indemnified Party in good faith on behalf o the Company and in a manner reasonably believed to be within the scope of the authority conferred an Indemnified Party by this Agreement, unless such act or omission constituted bad faith, gross negligence, fraud or wilful misconduct; provided, however, that any indemnity under this Section 16 shall be provided out of and to the extent of Company assets only, and no Member shall have personal liability on account thereof.

17. Assignments. A Member may assign in whole or in part its limited liability company interest with the written consent of the Member. If a Member transfers all of its interest in the Company pursuant to this Section, the transferee shall be admitted to the Company upon its execution of an instrument signifying its agreement to be bound by the terms and conditions of this Agreement. Such admission shall be deemed effective immediately prior to the transfer, and, immediately following such admission, the transferor Member shall cease to be a member of the Company.

18. Resignation. A Member may resign from the Company with the written consent of the Member. If a Member is permitted to resign pursuant to this Section, an additional member shall be admitted to the Company, subject to Section19, upon its execution of an instrument signifying its agreement to be bound by the terms and conditions of this Agreement. Such admission shall be deemed effective immediately prior to the resignation, and, immediately following such admission, the resigning Member shall cease to be a member of the Company.

19. Admission of Additional Members. One or more additional members of the Company may be admitted to the Company with the written consent of the Member.

20. Dissolution.

a. The Company shall dissolve, and its affairs shall be wound up upon the first to occur of the following: (i) the written consent of the Member, (ii) the retirement, resignation or dissolution of the Member or the occurrence of any other event which terminates the continued membership of the Member in the Company unless the business of the Company is continued in a manner permitted by the Act, or (iii) the entry of a decree of judicial dissolution under Section 18-802 of the Act.

b. The bankruptcy of the Member will not cause the Member to cease to be a member of the Company and upon the occurrence of such an event, the business of the Company shall continue without dissolution.

c. In the event of dissolution, the Company shall conduct only such activities as are necessary to wind up its affairs (including the sale of the assets of the Company in an orderly manner), and the assets of the Company shall be applied in the manner, and in the order of priority, set forth in Section 18-804 of the Act.

21. Separability of Provisions. Each provision of this Agreement shall be considered separable and if for any reasons any provision or provisions herein are determined to be invalid, unenforceable or illegal under any existing or future law, such invalidity, unenforceability or illegality shall not impair the operation of or affect those portions of this Agreement which are valid, enforceable and legal.

22. Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original of this Agreement.

23. Entire Agreement. This Agreement constitutes the entire agreement of the Member with respect to the subject matter hereof.

24. Governing Law. This Agreement shall be governed by, and construed under, the laws of the State of Delaware (without regard to conflict of laws principles), all rights and remedies being governed by said laws.

25. Amendments. This Agreement may not be modified, altered, supplemented or amended except pursuant to a written agreement executed and delivered by the Member.

IN WITNESS WHEREOF, the undersigned, intending to be legally bound hereby, has duly executed this Agreement as of the ___ day of April, 1998.

Arch Coal, Inc.

By: /s/ JEFFRY N. QUINN

Jeffry N. Quinn
Senior Vice President

SCHEDULE A

TO

ARCH OF WYOMING, LLC

LIMITED LIABILITY COMPANY AGREEMENT

MEMBER

Name	Mailing Address	Agreed Value of Capital Contribution	Percentage Interest
Arch Coal, Inc.	CityPlace One Suite 300 St. Louis, MO 63141	$1,000.00	100%

SCHEDULE B

TO

ARCH OF WYOMING, LLC

LIMITED LIABILITY COMPANY AGREEMENT

NAME	TITLE
Paul Lang	President and General Manager
Jeffry N. Quinn	Vice President
David B. Peugh	Vice President
Patrick Kriegshauser	Vice President
Steven E. McCurdy	Vice President
Mark Luzecky	Vice President & Treasurer
Miriam Rogers Singer	Secretary
William H. Rose	Assistant Secretary

EXHIBIT 3.7

CERTIFICATE OF FORMATION

OF

Mountain Coal Company, L.L.C.

1. The name of the limited liability company is Mountain Coal Company, L.L.C.

2. The address of its registered office in the State of Delaware is Corporation Trust Center, 1209 Orange Street, in the City of Wilmington, County of New Castle. The name of its registered agent at such address is The Corporation Trust Company.

IN WITNESS WHEREOF, the undersigned have executed this Certificate of Formation of Mountain Coal Company, L.L.C. this Fifth day of March, 1998.

D.F. Hickey

/s/ D.F. Hickey

Authorized Person

EXHIBIT 3.8

LIMITED LIABILITY COMPANY AGREEMENT
OF
MOUNTAIN COAL COMPANY, L.L.C.

THE UNDERSIGNED is executing this Limited Liability Company Agreement (the "Agreement") for the purpose of forming a limited liability company (the "Company") pursuant to the provisions of the Delaware Limited Liability Company Act, 6 Del. C. Sections 18-101 et seq. (the "Act"), and does hereby agree as follows:

1. Name. The name of the Company shall be Mountain Coal Company, L.L.C., or such other name as the Members may from time to time hereafter designate.

2. Definitions. Capitalized terms not otherwise defined herein shall have the meanings set forth therefor in Section 18-101 of the Act.

3. Purpose. The Company is formed for the purpose of engaging in any lawful business permitted by the Act and the laws of any jurisdiction in which the Company may do business. The Company shall have the power to engage in all activities and transactions which the Members deem necessary or advisable in connection with the foregoing.

4. Offices.

(a) The principal place of business and office of the Company shall be located at, and the Company's business shall be conducted from, such place or places as the Members may designate from time to time.

(b) The registered office of the Company in the State of Delaware shall be located at do The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, Delaware 19801. The name and address of the registered agent of the Company for service of process on the Company in the State of Delaware shall be The Corporation Trust Company, Corporation Trust Center, 1209

Orange Street, Wilmington, Delaware 19801. The Members may from time to time change the registered agent or office by an amendment to the certificate of formation of the Company.

5. Members. The name and business or residence address of each Member of the Company are set forth on Schedule A attached hereto. The business and affairs of the Company shall be managed by a Board of Directors selected (except as provided in the Bylaws), and subject to removal with or without cause, by the Members which shall have all powers and rights necessary, appropriate or advisable to effectuate and carry out the purposes and business of the Company. The Directors will be deemed "Managers" within the meaning of the Act. Each Member and Director is hereby designated as an authorized person, within the meaning of the Act, to execute, deliver and file the certificate of formation of the Company (and any amendments and/or restatements thereof); provided that, except to the extent specifically referenced in this sentence, no Member shall have the authority to bind or otherwise act for the Company. Except for the power to select and remove members of the Board of Directors, the Members shall have no power or authority with respect to the operations of the Company and shall only have the specific rights and privileges set forth herein, in the Bylaws or as provided by applicable law. In connection with the management of the business and affairs of the Company, the Board of Directors and officers of the Company shall execute, deliver and file any certificates (and any amendments and/or restatements thereof) necessary for the Company to qualify to do business in a jurisdiction in which the Company may wish to conduct business. The execution by one Director or by one officer, as applicable, or by one Member, as applicable, of any of the foregoing certificates (and any amendments and/or restatements thereof) shall be sufficient.

6. Term. The term of the Company shall commence on the date of filing of the certificate of formation of the Company in accordance with the Act and shall continue until the Company is dissolved and its affairs are wound up in accordance with Section 13 of this Agreement and a certificate of cancellation is filed in

accordance with the Act.

7. Action by Members. Any action to be taken by the Members of the Company shall require the affirmative vote of Members holding a majority of the Limited Liability Company Interests of the Company (except as otherwise expressly provided herein or in the Bylaws).

8. Capital Contributions. Members shall make capital contributions to the Company in such amounts and at such times as they shall mutually agree pro rata in accordance with profit sharing interests as set forth in Schedule A hereof ("Profit Sharing Interests"), which amounts shall be set forth in the books and records of the Company.

9. Assignments of Member Interest.

a. The Members may not sell, assign, pledge, or otherwise transfer or encumber (collectively "transfer") less than all of their Interest in the Company under any circumstances. Members may not transfer all of their Interest in the Company without the Board of Directors consenting to the proposed transfer by the Member of all of its Interest in the Company which consent may be given or withheld at the sole discretion of the Board of Directors. The transferee of all of the Interest of a Member shall be admitted as the successor Member as provided in Section 9(b) hereof

b. In the event there is at any time a proposed transfer of all of the Interest of a Member of the Company to which the Board of Directors has consented as provided in Section 9(a) hereof, the transfer of such Interest to the transferee thereof and the admission of such transferee as a Member of the Company shall be deemed to occur immediately preceding the withdrawal of the transferring Member with the effect that, in connection with such transfer, there shall at all times be at least one Member of the Company.

c. The Board of Directors shall amend Schedule A hereto from time to time to reflect transfers made in accordance with, and as permitted under, this Section 9. Any purported transfer in

violation of this Section 9 shall be null and void and shall not be recognized by the Company.

10. Resignation. No Member shall have the right to resign from the Company except with the consent of all of the Members and upon such terms and conditions as may be specifically agreed upon between the resigning Member and the remaining Members. The provisions hereof with respect to distributions upon resignation are exclusive and no Member shall be entitled to claim any further or different distribution upon resignation under Section 18-604 of the Act or otherwise.

11. Allocations and Distributions. Distributions of cash or other assets of the Company shall be made at such times and in such amounts as the Members may determine. Distributions shall be made to (and profits and losses of the Company shall be allocated among) Members pro rata in accordance with each of their Profit Sharing Interests, or in such other manner and in such amounts as all of the Members shall agree from time to time and which shall be reflected in the books and records of the Company.

12. Return of Capital. No Member has the right to receive any distributions which include a return of all or any part of such Member's capital contribution, provided that upon the dissolution and winding up of the Company, the assets of the Company shall be distributed as provided in Section 18-804 of the Act.

13. Dissolution. The Company shall be dissolved and its affairs wound up upon the affirmative vote of the Members acting in accordance with Section 7 of this Agreement.

14. Amendments. This Agreement may be amended only upon the written consent of all of the Members.

15. Miscellaneous. Neither the Members nor the Directors shall have any liability for the debts, obligations or liabilities of the Company except to the extent provided by the Act. This Agreement shall be governed by, and construed under, the laws of the State of Delaware, without regard to conflict of law rules.

16. Board of Directors and Officers. The Board of Directors may adopt s and resolutions

as are necessary and appropriate for the regulation of the affairs and the conduct of the business of the Company, and may employ and retain persons as may be necessary or appropriate for the conduct of the Company's business, including employees and agents who may be designated as, officers with titles, including, but not limited to, "chairman," "chief executive officer," "president," "executive vice president," "vice president," "treasurer," "secretary," "managing director," "chief financial officer," "assistant treasurer" and "assistant secretary."

IN WITNESS WHEREOF, the undersigned has duly executed this agreement as of March 6, 1998.

MOUNTAIN COAL COMPANY, MEMBER

By: /s/ MARK J. FRIEDMAN

Name: Mark J. Friedman
Title: Vice President and Secretary

Schedule A

Name and Address of Member	Profit Sharing Interests
Arch Western Resources, LLC One CityPlace Dr. Suite 300 St. Louis, MO 63141	100%

EXHIBIT 3.9

FIRST AMENDMENT TO
LIMITED LIABILITY COMPANY AGREEMENT
OF MOUNTAIN COAL COMPANY LLC

This First Amendment to Limited Liability Company Agreement of Mountain Coal Company LLC, dated as of April ___, 1998 (the "Amendment"), is by Atlantic Richfield Company ("Member").

WHEREAS, Member is a party to a Limited Liability Company Agreement of Mountain Coal Company LLC, dated as of April 8, 1998 (the "Agreement"); and

WHEREAS, Member desires to amend the Agreement.

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants and conditions hereinafter set forth, the Member hereby agrees as follows:

1. Amendments.

(a) Section 8 is hereby amended in its entirety to read as follows:

"8. Capital Contributions. Members shall make capital contributions to the Company in such amounts and at such times as they shall mutually agree pro rata in accordance with profit sharing interests as set forth in Schedule A hereof ("Profit Sharing Interests"), which amounts shall be set forth in the books and records of the Company. The Profit Sharing Interests are deemed to be "securities" governed by Division 8 of the Uniform Commercial Code, as enacted in Delaware.

(b) Section 9 is hereby deleted in its entirety.

2. Agreement to Continue as Amended. Except as modified and amended by this Amendment, the Agreement shall remain and continue in full force and effect after the date hereof.

IN WITNESS WHEREOF, the undersigned has duly executed this amendment as of April __, 1998.

ATLANTIC RICHFIELD COMPANY,
MEMBER

By: /s/ TERRY G. DALLAS

Name: Terry G. Dallas
Title: Senior Vice President and
Treasurer

EXHIBIT 3.10

BYLAWS OF

MOUNTAIN COAL COMPANY, L.L.C.

These Bylaws shall be subject to the Limited Liability Company Agreement, as from time to time in effect (the "Agreement"), of Mountain Coal Company, L.L.C., a Delaware limited liability company (the "Company"). In the event of any inconsistency between the terms hereof and the terms of the Agreement, the terms of the Agreement shall control.

ARTICLE I
OFFICES

SECTION 1. PRINCIPAL OFFICE AND REGISTERED AGENT. The principal office of the Company shall be established and maintained at 555 17th Street, Denver, Colorado 80202. In the State of Delaware, the Company shall establish its office at the Company Trust Center, 1209 Orange Street, in the City of Wilmington, County of New Castle. The name of its registered agent at such address is The Company Trust Company.

SECTION 2. OTHER OFFICES. The Company may have other offices, either within or outside of the State of Delaware, at such place or places as the Board of Directors may from time to time appoint or the business of the Company may require.

ARTICLE II
MEETINGS OF MEMBERS

SECTION 1. PLACE OF MEETINGS AND MEETINGS BY TELEPHONE. Meetings of Members shall be held at any place designated by the Board of Directors. In the absence of any such designation, meetings of Members shall be held at the principal place of business of the Company. Any meeting of the Members may be held by conference telephone or similar communications equipment so long as all Members participating in the meeting can hear one another. All Members participating by telephone or similar communications equipment shall be deemed to be present in person at the meeting.

SECTION 2. CALL OF MEETINGS. Meetings of the Members may be called at any time by the Board of Directors or by the Chairman or the President for the purpose of taking action upon any matter requiring the vote or authority of the Members as provided herein or in the Agreement or upon any other matter as to which such vote or authority

is deemed by the Board of Directors or the Chairman or the President to be necessary or desirable. Meetings of the Members shall be called promptly by the Board of Directors upon the written request of any Member.

SECTION 3. NOTICE OF MEETINGS OF MEMBERS. All notices of meetings of Members shall be sent or otherwise given in accordance with Section 4 of this Article II not less then five (5) nor more than ninety (90) days before the date of the meeting. The notice shall specify (i) the place, date, and hour of the meeting, and (ii) the general nature of the business to be transacted.

SECTION 4. MANNER OF GIVING NOTICE. Notice of any meeting of Members shall be given personally or by telephone to each Member or sent by first class mail, by telegram or telecopy (or similar electronic means), or by a nationally recognized overnight courier, charges prepaid, addressed to the Member at the address of that Member appearing on the books of the Company or given by the Member to the Company for the purpose of notice. Notice shall be deemed to have been given at the time when delivered either personally or by telephone, or at the time when deposited in the mail or with a nationally recognized overnight courier, or when sent by telegram or telecopy (or similar electronic means).

SECTION 5. ADJOURNED MEETING; NOTICE. - Any meeting of Members, whether or not a quorum is present, may be adjourned from time to time by the vote of the majority of the Percentage Interests represented at that meeting, either in person or by proxy. When any meeting of Members is adjourned to another time or place, notice need not be given of the adjourned meeting, unless a new record date of the adjourned meeting is fixed or unless the adjournment is for more than sixty (60) days from the date set for the original meeting, in which case the Board of Directors shall set a new record date and shall give notice in accordance with the provisions of Sections 3 and 4 of this Article II. At any adjourned meeting, the Company may transact any business that might have been transacted at the original meeting.

SECTION 6. QUORUM; VOTING. At any meeting of the Members, a Majority in Interest of the Members, present in person or by proxy, shall constitute a quorum for all purposes, unless or except to the extent that the presence of Members holding a higher aggregate Percentage Interest is required by the Agreement or applicable law. Except as otherwise required by the Agreement, these Bylaws, or applicable law, all matters shall be determined by a Majority in Interest of the Members.

SECTION 7. WAIVER OF NOTICE BY CONSENT OF ABSENT MEMBERS. The transactions of a meeting of Members, however called and noticed and wherever held, shall be as valid as though taken at a meeting duly held after regular call and notice if a quorum is present either in person or by proxy and if either before or after the meeting, each person entitled to vote who was not present in person or by proxy signs a written waiver of notice or a consent to a holding of the meeting or an approval of the minutes. The

waiver of notice or consent need not specify either the business to be transacted or the purpose of any meeting of Members. Attendance by a person at a meeting shall also constitute a waiver of notice of that meeting, except when the person objects at the beginning of the meeting to the transaction of any business because the meeting is not lawfully called or convened and except that attendance at a meeting is not a waiver of any right to object to the consideration of matters not included in the notice of the meeting if that objection is expressly made at the beginning of the meeting.

SECTION 8. MEMBER ACTION BY WRITTEN CONSENT WITHOUT A MEETING. Except as provided in the Agreement, any action that may be taken at any meeting of Members may be taken without a meeting and without prior notice if a consent in writing setting forth the action so taken is signed by a Majority in Interest of the Members (or Members holding such higher aggregate Percentage Interest as is required to authorize or take such action under the terms of the Agreement, these Bylaws or applicable law). Any such written consent may be executed and given by telecopy or similar electronic means. Such consents shall be filed with the Secretary of the Company and shall be maintained in the Company's records.

SECTION 9. RECORD DATE FOR MEMBER NOTICE, VOTING, AND GIVING CONSENTS.

(a) For purposes of determining the Members entitled to vote or act at any meeting or adjournment thereof, the Board of Directors may fix in advance a record date which shall not be greater than ninety (90) days nor fewer than five (5) days before the date of any such meeting. If the Board of Directors does not so fix a record date, the record date for determining Members entitled to notice of or to vote at a meeting of Members shall be at the close of business on the business day immediately preceding the day on which notice is given, or if notice is waived, at the close of business on the business day next preceding the day on which the meeting is held.

(b) The record date for determining Members entitled to give consent to action in writing without a meeting shall be the close of business on the day on which the Board of Directors adopt the resolution relating to that action unless another record date (which shall not precede the date of the Board of Directors' resolution relating to the action).

(c) Only Members of record on the record date as herein determined shall have any right to vote or to act at any meeting or give consent to any action relating to such record date, provided that no Member who transfers all or part of such Member's Interest after a record date (and no transferee of such Interest) shall have the right to vote or act with respect to the transferred Interest as regards the matter for which the record date was set.

ARTICLE III
DIRECTORS

SECTION 1. NUMBER AND TERM. The number of directors which shall constitute the whole board shall be not less than three nor more than seven. The directors shall be elected by a Majority in Interest of the Members, except as provided in Section 3 of this Article III, and each director elected shall hold office until his successor is elected and qualified. Directors need not be Members.

SECTION 2. RESIGNATIONS. Any director, member of a committee or other office may resign at any time. Such resignation shall be made in writing, and shall take effect at the time specified therein, and if no time be specified, at the time of its receipt by the President or Secretary. The acceptance of a resignation shall not be necessary to make it effective.

SECTION 3. VACANCIES. If the office of any director, member of a committee or other office becomes vacant, the remaining directors in office, by a majority vote, may appoint any qualified person to fill such vacancy, who shall hold office until his successor shall be duly chosen by the Members.

SECTION 4. REMOVAL. Any director or directors may be removed either for or without cause at any time by the affirmative vote of a Majority in Interest of the Members, by written consent or at a special meeting of the Members called for the purpose.

SECTION 5. INCREASE OF NUMBER. The number of directors may be increased by amendment of these Bylaws by the affirmative vote of a majority of the directors, though less than a quorum, or, by the affirmative vote of a Majority in Interest of the Members, by written consent or at a special meeting called for that purpose, and by like vote the additional directors may be chosen at such meeting to hold office until their successors are elected and qualified.

SECTION 6. POWERS. The Board of Directors shall exercise all of the powers of the Company except such as are by law, or by the Agreement or by these Bylaws conferred upon or reserved to the Members.

SECTION 7. PLACE OF MEETINGS AND MEETINGS BY TELEPHONE. All meetings of the Board of Directors may be held at any place that has been designated from time to time by resolution of the Board of Directors. In the absence of such a designation, regular meetings shall be held at the principal place of business of the Company. Any meeting, regular or special, may be held by conference telephone or similar communications

equipment so long as all directors participating in the meeting can hear one another, and all directors participating by telephone or similar communications equipment shall be deemed to be present in person at the meeting.

SECTION 8. MEETINGS.-

(a) Regular meetings of the Board of Directors shall be held at least twice per year at such times and places as shall be fixed by unanimous approval of the Board of Directors. Such regular meetings shall be held without notice.

(b) Special meetings of the Board of Directors may be called by the President or by the Secretary on the written request of any two directors on at least one day's notice to each director and shall be held at such place or places as may be determined by the directors, or as shall be stated in the call of the meeting. The notice need not specify the purpose of the meeting.

SECTION 9. ACTION WITHOUT A MEETING. Any action required or permitted to be taken at any meeting of the Board of Directors may be taken without a meeting, if prior to such action a written consent thereof is signed by a majority of the directors and such written consent is filed with the minutes of the proceedings of the Board.

SECTION 10. QUORUM. The presence of two directors or one-third of the directors then in office, whichever is greater shall be necessary and sufficient to constitute a quorum for the transaction of business. Every act or decision done or made by the affirmative vote of a majority of directors present at a meeting duly held at which a quorum is present shall be regarded as the act of the Board of Directors. If at any meeting of the Board of Directors there shall be less than a quorum present, a majority of those present may adjourn the meeting from time to time until a quorum is obtained, and no further notice thereof need be given other than by announcement at the meeting which shall be so adjourned.

SECTION 11. WAIVER OF NOTICE. Notice of any meeting need not be given to any director who either before or after the meeting signs a written waiver of notice, a consent to holding the meeting, or an approval of the minutes. The waiver of notice or consent need not specify the purpose of the meeting. All such waivers, consents, and approvals shall be filed with the records of the Company or made a part of the minutes of the meeting. Notice of a meeting shall also be deemed given to any director who attends the meeting without protesting before or at its commencement the lack of notice to that director.

SECTION 12. COMPENSATION. Directors shall not receive any stated salary for their services as directors but by resolution of the Board a fixed fee and expenses of attendance may be allowed for attendance at each meeting. Nothing herein contained shall be construed to preclude any director from serving the Company in any other capacity as an officer, agent or otherwise, and receiving compensation therefor.

ARTICLE IV
OFFICERS

SECTION 1. OFFICERS. The officers of the Company shall be a Chairman of the Board, a President, one or more Vice Presidents, a Treasurer, and a Secretary, and such Assistant Treasurers and Assistant Secretaries as the Board of Directors may deem proper. All of such officers shall be elected by the Board of Directors. None of the officers need be directors. The officers shall be elected at the first meeting of the Board of Directors after each annual meeting. Any two offices, other than those of President and Vice President, may be held by the same person. More than two offices, other than those of President and Secretary, may be held by the same person.

SECTION 2. OTHER OFFICERS AND AGENTS. The Board of Directors may appoint such other officers and agents as it may deem advisable, who shall hold their offices for such terms and shall exercise such powers and perform such duties as shall be determined from time to time by the Board of Directors.

SECTION 3. CHAIRMAN. The Chairman shall, if present, preside at meetings of the Board of Directors and shall exercise and perform such other powers and duties as may from time to time be assigned to him or her by the Board of Directors or prescribed by the Agreement or these Bylaws.

SECTION 4. PRESIDENT. Subject to the supervisory powers of the Chairman, if there be such an officer, the President shall be the chief operating officer of the Company and shall, subject to the control of the Board of Directors and the Chairman, have general supervision, direction, and control of the business and the officers of the Company. He or she shall have the general powers and duties of management usually vested in the office of President of a corporation and shall have such other powers and duties as may be prescribed by the Board of Directors, the Agreement, or these Bylaws.

SECTION 5. VICE PRESIDENT. Each Vice President shall have such powers and shall perform such duties as shall be assigned to him or her by resolution of the Board of Directors.

SECTION 6. TREASURER. The Treasurer shall have the custody of the corporate funds and securities and shall keep full and accurate account of receipts and disbursements in books belonging to the Company. He or she shall deposit all moneys and other valuables in the name and to the credit of the Company in such depositories as may be designated by the Board of Directors.

The Treasurer shall disburse the funds of the Company as may be ordered by the Board of Directors, or the President, taking proper vouchers for such disbursements. He shall render to the President and Board of Directors at the regular meetings of the Board of Directors, or whenever they may request it, an account of his transactions as Treasurer and of the financial condition of the Company. If required by the Board of Directors, he shall give the Company a bond for the faithful discharge of his duties in such amount and with such surety as the board shall prescribe.

SECTION 7. SECRETARY. The Secretary shall give, or cause to be given, notice of all meetings of Members and directors, and all other notices required by law or by these Bylaws, and in case of his or her absence or refusal or neglect to do so, any such notice may be given by any person directed to do so by the President, or by the directors, or Members, upon whose requisition the meeting is called as provided in these Bylaws. He or she shall record all the proceedings of the meetings of the Company and of the directors in a book to be kept for that purpose, and shall perform such other duties as may be assigned to him or her by the directors, the Chairman or the President. He or she shall have the custody of the seal of the Company and shall affix the same to all instruments requiring it, when authorized by the directors, the Chairman, the President or any Vice President, and attest the same.

SECTION 8. ASSISTANT TREASURERS AND ASSISTANT SECRETARIES. Assistant Treasurers and Assistant Secretaries, if any, shall be appointed by the Board of Directors and shall have the powers and perform such duties as may be assigned to them, respectively, by the Directors.

ARTICLE V
RECORDS AND REPORTS

SECTION 1. MAINTENANCE AND INSPECTION OF SHARE REGISTER. The Company shall maintain at its principal place of business a record of its Members, giving the names and addresses of all Members and the Percentage interest held by each Member. Subject to such reasonable standards (including standards governing what information and documents are to be furnished and at whose expense) as may be established by the Board of Directors from time to time, each Member has the right to obtain from the Company, from time to time upon reasonable demand for any purpose reasonably

related to the Member's interest as a Member of the Company, a record of the Company's Members.

SECTION 2. MAINTENANCE AND INSPECTION OF BYLAWS. The Company shall keep at its principal place of business the original or a copy of these Bylaws as amended to date, which shall be open to inspection by the Members at all reasonable times during office hours.

SECTION 3. MAINTENANCE AND INSPECTION OF OTHER RECORDS. The accounting books and records, minutes of proceedings of the Members and the Board of Directors and any committees or delegates of the Board of Directors, and all other information pertaining to the Company that is required to be made available to the Members under the Delaware Act shall be kept at such place or places designated by the Board of Directors or in the absence of such designation, at the principal place of business of the Company. The minutes shall be kept in written form and the accounting books and records and other information shall be kept either in written form or in any other form capable of being converted into written form. The books of account and records of the Company shall be maintained in accordance with generally accepted accounting principles consistently applied during the term of the Company, wherein all transactions, matters, and things relating to the business and properties of the Company shall be currently entered. Subject to such reasonable standards (including standards governing what information and documents are to be furnished and at whose expense) as may be established by the Board of Directors from time to time, minutes, accounting books and records, and other information shall be open to inspection upon the written demand of any Member at any reasonable time during usual business hours for a purpose reasonably related to the Member's interests as a Member. Any such inspection may be made in person or by an agent or attorney and shall include the right to copy and make extracts. Notwithstanding the foregoing, the Board of Directors shall have the right to keep confidential from Members for such period of time as the Board of Directors deem reasonable, any information which the Board of Directors reasonably believe to be in the nature of trade secrets or other information the disclosure of which the Board of Directors in good faith believe is not in the best interests of the Company or could damage the Company or its business or which the Company is required by law or by agreement with a third party to keep confidential.

SECTION 4. INSPECTION BY BOARD OF DIRECTORS. Every director shall have the right at any reasonable time to inspect all books, records, and documents of every kind and the physical properties of the Company for a purpose reasonably related to his or her position as Manager. This inspection by a director may be made in person or by an agent or attorney and the right of inspection includes the right to copy and make extracts of documents.

ARTICLE VI
INDEMNIFICATION

SECTION 1. LIMITATION ON LIABILITY OF MANAGERS AND OFFICERS. No director or officer of the Company shall have any liability to the Company or the Members for any losses sustained or liabilities incurred as a result of any act or omission of such director or officer if (i) the director or officer acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the interests of the Company and (ii) the conduct of the director or officer did not constitute actual fraud, gross negligence, or willful misconduct.

SECTION 2. COMPANY'S OBLIGATION TO INDEMNIFY OFFICERS AND DIRECTORS. The Company shall indemnify and hold harmless the directors and officers of the Company (individually, an "Indemnitee") from and against any and all losses, claims, demands, costs, damages, liabilities, expenses of any nature (including reasonable attorneys' fees and disbursements), judgments, fines, settlements, and other amounts arising from any and all claims, demands, actions, suits, or proceedings, civil, criminal, administrative, or investigative, in which an Indemnitee may be involved, or threatened to be involved, as a party or otherwise, arising out of or incidental to the business of the Company, regardless of whether an Indemnitee continues to be a director or officer at the time any such liability or expense is paid or incurred, if (i) the Indemnitee acted in good faith and in a manner it or he or she reasonably believed to be in, or not opposed to, the interests of the Company, and, with respect to any criminal proceeding, had no reason to believe his or her conduct was unlawful and (ii) the Indemnitee's conduct did not constitute actual fraud, gross negligence or willful misconduct.

SECTION 3. COMPANY'S OBLIGATION TO ADVANCE EXPENSES. Expenses incurred by an Indemnitee in defending any claim, demand, action, suit, or proceeding subject to this Article VI shall, from time to time, be advanced by the Company prior to the final disposition of such claim, demand, action, suit, or proceeding upon receipt by the Company of an undertaking by or on behalf of the Indemnitee to repay such amounts if it is ultimately determined that such person is not entitled to be indemnified as authorized in this Article VI. The indemnification provided by this Article VI shall be in addition to any other rights to which an Indemnitee may be entitled under any agreement, consent of the Members, as a matter of law or equity, or otherwise, shall continue as to an Indemnitee who has ceased to serve in such capacity and shall inure to the benefit of the heirs, successors, assigns and administrators of the Indemnitee. Subject to the foregoing sentence, the provisions of this Article VI are for the benefit of the Indemnitees and shall not be deemed to create any rights for the benefit of any other persons.

ARTICLE VII
AMENDMENTS AND INCORPORATION BY REFERENCE INTO AGREEMENT

SECTION 1. AMENDMENT. These Bylaws may be altered or repealed and Bylaws may be made at any meeting of the Board of Directors, if notice of the proposed alteration or repeal, or bylaw to be made, is contained in the notice of such meeting, by the affirmative vote of a majority of the Board of Directors, or by unanimous written consent of a majority of the directors.

SECTION 2. INCORPORATION BY REFERENCE OF BYLAWS INTO AGREEMENT. These Bylaws and any amendments thereto shall be deemed incorporated by reference in the Agreement.

EXHIBIT 3.11

CERTIFICATE OF FORMATION

OF

Thunder Basin Coal Company, L.L.C.

1. The name of the limited liability company is Thunder Basin Coal Company, L.L.C.

2. The address of its registered office in the State of Delaware is Corporation Trust Center, 1209 Orange Street, in the City of Wilmington, County of New Castle. The name of its registered agent at such address is The Corporation Trust Company.

IN WITNESS WHEREOF, the undersigned have executed this Certificate of Formation of Thunder Basin Coal Company, L.L.C. this Tenth day of July, 1997.

D.F. Hickey

/s/ D.F. Hickey

EXHIBIT 3.12

LIMITED LIABILITY COMPANY AGREEMENT
OF
THUNDER BASIN COAL COMPANY, L.L.C.

THE UNDERSIGNED are executing this Limited Liability Company Agreement (the "Agreement") for the purpose of forming a limited liability company (the "Company") pursuant to the provisions of the Delaware Limited Liability Company Act, 6 Del. C. Sections 18-101 ~ seq. (the "Act"), and do hereby agree as follows:

1. Name. The name of the Company shall be Thunder Basin Coal Company, L.L.C., or such other name as the Members may from time to time hereafter designate.

2. Definitions. Capitalized terms not otherwise defined herein shall have the meanings set forth therefor in Section 18-101 of the Act.

3. Purpose. The Company is formed for the purpose of engaging in any lawful business permitted by the Act or the laws of any jurisdiction in which the Company may do business. The Company shall have the power to engage in all activities and transactions which the Members deem necessary or advisable in connection with the foregoing.

4. Offices.

(a) The principal place of business and office of the Company shall be located at, and the Company's business shall be conducted from, such place or places as the Members may designate from time to time.

(b) The registered office of the Company in the State of Delaware shall be located at do The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, Delaware 19801. The name and address of the registered agent of the Company for service of process on the Company in the State of Delaware shall be The Corporation Trust Company, Corporation Trust Center, 1209 Orange

Street, Wilmington, Delaware 19801. The Members may from time to time change the registered agent or office by an amendment to the certificate of formation of the Company.

5. Members. The name and business or residence address of each Member of the Company are set forth on Schedule A attached hereto. The business and affairs of the Company shall be managed by a Board of Directors selected, and subject to removal with or without cause, by the Members which shall have all powers and rights necessary, appropriate or advisable to effectuate and carry out the purposes and business of the Company. The Directors will be deemed "Managers" within the meaning of the Act. Each Member and Director is hereby designated as an authorized person, within the meaning of the Act, to execute, deliver and file the certificate of formation of the Company (and any amendments and/or restatements thereof); provided that, except to the extent specifically referenced in this sentence, no Member shall have the authority to bind or otherwise act for the Company. Except for the power to select and remove members of the Board of Directors, the Members shall have no power or authority with respect to the operations of the Company and shall only have the specific rights and privileges set forth herein, in the Bylaws or as provided by applicable law. In connection with the management of the business and affairs of the Company, the Board of Directors and officers of the Company shall execute, deliver and file any certificates (and any amendments and/or restatements thereof) necessary for the Company to qualified, to do business in a jurisdiction in which the Company may wish to conduct business. The execution by one Director, or by one Member, as applicable, of any of the foregoing certificates (and any amendments and/or restatements thereof) shall be sufficient.

6. Term. The term of the Company shall commence on the date of filing of the certificate of

formation of the Company in accordance with the Act and shall continue until the Company is dissolved and its affairs are wound up in accordance with Section 13 of this Agreement and a certificate of cancellation is filed in accordance with the Act.

7. Action by Members. Any action to be taken by the Members of the Company shall require the affirmative vote of Members holding a majority of the Limited Liability Company Interests of the Company (except as otherwise expressly provided herein).

8. Capital Contributions. Members shall make capital contributions to the Company in such amounts and at such times as they shall mutually agree pro rata in accordance with profit sharing interests as set forth in Schedule A hereof ("Profit Sharing Interests"), which amounts shall be set forth in the books and records of the Company.

9. Assignments of Company Interest.

a. The Members may not sell, assign, pledge, or otherwise transfer or encumber (collectively "transfer") less than all of their Interest in the Company under any circumstances. Members may not transfer all of their Interest in the Company without the Board of Directors consenting to the proposed transfer by the Member of all of its Interest in the Company which consent may be given or withheld at the sole discretion of the Board of Directors. The transferee of all of the Interest of a Member shall be admitted as the successor Member as provided in Section 9(b) hereof.

b. In the event there is at any time a proposed transfer of all of the Interest of a Member of the Company to which the Board of Directors has consented as provided in Section 9(a) hereof, the transfer of such Interest to the transferee thereof and the admission of such transferee as a Member of the

Company shall be deemed to occur simultaneously with the withdrawal of the transferring Member with the effect that, in connection with such transfer, there shall at all times be at least one Member of the Company.

c. The Board of Directors shall amend Schedule I hereto from time to time to reflect transfers made in accordance with, and as permitted under, this Section 9. Any purported transfer in violation of this Section 9 shall be null and void and shall not be recognized by the Company.

10. Resignation. No Member shall have the right to resign from the Company except with the consent of all of the Members and upon such terms and conditions as may be specifically agreed upon between the resigning Member and the remaining Members. The provisions hereof with respect to distributions upon resignation are exclusive and no Member shall be entitled to claim any further or different distribution upon resignation under Section 18-604 of the Act or otherwise.

11. Allocations and Distributions. Distributions of cash or other assets of the Company shall be made at such times and in such amounts as the Members may determine. Distributions shall be made to (and profits and losses of the Company shall be allocated among) Members pro rata in accordance with each of their Profit Sharing Interests, or in such other manner and in such amounts as all of the Members shall agree from time to time and which shall be reflected in the books and records of the Company.

12. Return of Capital. No Member has the right to receive any distributions which include a return of all or any part of such Member's capital contribution, provided that upon the dissolution and winding up of the Company, the assets of the Company shall be distributed as provided in Section 18-804 of the Act.

13. Dissolution. The Company shall be dissolved and its affairs wound up upon the affirmative vote of the Members acting in accordance with Section 7 of this Agreement.

14. Amendments. This Agreement may be amended only upon the written consent of all of the Members.

15. Miscellaneous. Neither the Members nor the Directors shall have any liability for the debts, obligations or liabilities of the Company except to the extent provided by the Act. This Agreement shall be governed by, and construed under, the laws of the State of Delaware, without regard to conflict of law rules.

16. Board of Directors and Officers. The Board of Directors may adopt by-laws and resolutions as are necessary and appropriate for the regulation of the affairs and the conduct of the business of the Company, and may employ and retain persons as may be necessary or appropriate for the conduct of the Company's business, including employees and agents who may be designated as, officers with titles, including, but not limited to, "chairman," "chief executive officer," "president," executive vice-president," "vice president," "treasurer," "secretary," "managing director," "chief financial officer," "assistant treasurer" and "assistant secretary."

IN WITNESS WHEREOF, the undersigned have duly executed this Agreement as of July 10, 1997.

ATLANTIC RICHFIELD COMPANY,
MEMBER

By: /s/ BRUCE G. WHITMORE

Name: Bruce G. Whitmore
Title: Senior Vice President and General Counsel

SCHEDULE A
REVISED
(AS OF JUNE 1, 1998)

Pursuant to the contribution on .June 1, 1998 of membership interests by Atlantic Richfield Company to Arch Western Resources, LLC per Contribution Agreement among Arch Coal, Inc., Arch Western Acquisition Corporation, Atlantic Richfield Company. Delta Housing Inc. and Arch Western Resources, LLC dated March 22, 1998.

Name and Address of Member	Profit Sharing Interests
Arch Western Resources, LLC CityPlace One, Suite 300 St. Louis, Missouri 63141	100%

EXHIBIT 3.13

FIRST AMENDMENT TO
LIMITED LIABILITY COMPANY AGREEMENT
OF THUNDER BASIN COAL COMPANY, L.L.C.

This First Amendment to Limited Liability Company Agreement of Thunder Basin Coal Company, L.L.C., dated as of May 14, 1998 (the "Amendment"), is by Atlantic Richfield Company ("ARCO").

WHEREAS, ARCO is a party to a Limited Liability Company Agreement of Thunder Basin Coal Company, L.L.C., dated as of July 10, 1997 (the "Agreement"); and

WHEREAS, ARCO desires to amend the Agreement.

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants and conditions hereinafter set forth, ARCO hereby agrees as follows:

1. AMENDMENTS.

(a) Section 8 is hereby amended in its entirety to read as follows:

"8. Capital Contributions. Members shall make capital contributions to the Company in such amounts and at such times as they shall mutually agree pro rata in accordance with profit sharing interests as set forth in Schedule A hereof ("Profit Sharing Interests"), which amounts shall be set forth in the books and records of the Company. The Profit Sharing Interests are deemed to be "securities" governed by Division 8 of the Uniform Commercial Code, as enacted in Delaware."

(b) Section 9 is hereby amended in its entirety to read as follows:

"9. Assignments of Member Interests.

a. Each Member's Interest is transferable either voluntarily or by operation of law. Each Member may sell, assign, pledge or otherwise transfer or encumber (collectively, "Transfer") all or a portion of its Interest. In the event of the Transfer of less than all of the Member's Interest, the transferee shall be admitted on such terms and conditions as the Member and the transferee shall agree upon.

b. At any time there is only one Member, and such Member proposes to Transfer all of its interest in the Company, the Transfer of such Interest to the transferee thereof and the admission of such transferee as a Member of the Company shall be deemed to occur immediately preceding the withdrawal of the transferring Member with the effect that, in connection with such Transfer, there shall at all times be at least one Member of the Company.

c. The Board of Directors shall amend Schedule A hereto from time to time to reflect Transfers made in accordance with, and as permitted under, this Section 9."

2. AGREEMENT TO CONTINUE AS AMENDED. Except as modified and amended by this Amendment, the Agreement shall remain and continue in full force and effect after the date hereof.

IN WITNESS WHEREOF, the undersigned has duly executed this Amendment as of the date first written above.

ATLANTIC RICHFIELD COMPANY,
MEMBER

By: /s/ TERRY G. DALLAS

Terry G. Dallas
Senior Vice President and Treasurer

EXHIBIT 3.14

BYLAWS OF

THUNDER BASIN COAL COMPANY, L.L.C.

These Bylaws shall be subject to the Limited Liability Company Agreement, as from time to time in effect (the "Agreement"), of Thunder Basin Coal Company, L.L.C., a Delaware limited liability company (the "Company"). In the event of any inconsistency between the terms hereof and the terms of the Agreement, the terms of the Agreement shall control.

ARTICLE I
OFFICES

SECTION 1. PRINCIPAL OFFICE AND REGISTERED AGENT. -- The principal office of the Company shall be established and maintained at 555 17th Street, Denver, Colorado 80202. In the State of Delaware, the Company shall establish its office at the Company Trust Center, 1209 Orange Street, in the City of Wilmington, County of New Castle. The name of its registered agent at such address is The Company Trust Company.

SECTION 2. OTHER OFFICES. -- The Company may have other offices, either within or outside of the State of Delaware, at such place or places as the Board of Directors may from time to time appoint or the business of the Company may require.

ARTICLE II
MEETINGS OF MEMBERS

SECTION 1. PLACE OF MEETINGS AND MEETINGS BY TELEPHONE. -- Meetings of Members shall be held at any place designated by the Board of Directors. In the absence of any such designation, meetings of Members shall be held at the principal place of business of the Company. Any meeting of the Members may be held by conference telephone or similar communications equipment so long as all Members participating in the meeting can hear one another. All Members participating by telephone or similar communications equipment shall be deemed to be present in person at the meeting.

SECTION 2. CALL OF MEETINGS. -- Meetings of the Members may be called at any time by the Board of Directors or by the Chairman or the President for the purpose of taking action upon any matter requiring the vote or authority of the Members as provided

herein or in the Agreement or upon any other matter as to which such vote or authority is deemed by the Board of Directors or the Chairman or the President to be necessary or desirable. Meetings of the Members shall be called promptly by the Board of Directors upon the written request of any Member.

SECTION 3. NOTICE OF MEETINGS OF MEMBERS. -- All notices of meetings of Members shall be sent or otherwise given in accordance with Section 4 of this Article II not less then five (5) nor more than ninety (90) days before the date of the meeting. The notice shall specify (i) the place, date, and hour of the meeting, and (ii) the general nature of the business to be transacted.

SECTION 4. MANNER OF GIVING NOTICE. -- Notice of any meeting of Members shall be given personally or by telephone to each Member or sent by first class mail, by telegram or telecopy (or similar electronic means), or by a nationally recognized overnight courier, charges prepaid, addressed to the Member at the address of that Member appearing on the books of the Company or given by the Member to the Company for the purpose of notice. Notice shall be deemed to have been given at the time when delivered either personally or by telephone, or at the time when deposited in the mail or with a nationally recognized overnight courier, or when sent by telegram or telecopy (or similar electronic means)

SECTION 5. ADJOURNED MEETING; NOTICE. -- Any meeting of Members, whether or not a quorum is present, may be adjourned from time to time by the vote of the majority of the Percentage Interests represented at that meeting, either in person or by proxy. When any meeting of Members is adjourned to another time or place, notice need not be given of the adjourned meeting, unless a new record date of the adjourned meeting is fixed or unless the adjournment is for more than sixty (60) days from the date set for the original meeting, in which case the Board of Directors shall set a new record date and shall give notice in accordance with the provisions of Sections 3 and 4 of this Article II. At any adjourned meeting, the Company may transact any business that might have been transacted at the original meeting.

SECTION 6. QUORUM; VOTING. -- At any meeting of the Members, a Majority in Interest of the Members, present in person or by proxy, shall constitute a quorum for all purposes, unless or except to the extent that the presence of Members holding a higher aggregate Percentage Interest is required by the Agreement or applicable law. Except as otherwise required by the Agreement, these Bylaws, or applicable law, all matters shall be determined by a Majority in Interest of the Members.

SECTION 7. WAIVER OF NOTICE BY CONSENT OF ABSENT MEMBERS. -- The transactions of a meeting of Members, however called and noticed and wherever held, shall be as valid as though taken at a meeting duly held after regular call and notice if a quorum is present either in person or by proxy and if either before or after the meeting, each person entitled to vote who was not present in person or by proxy signs a written waiver

of notice or a consent to a holding of the meeting or an approval of the minutes. The waiver of notice or consent need not specify either the business to be transacted or the purpose of any meeting of Members. Attendance by a person at a meeting shall also constitute a waiver of notice of that meeting, except when the person objects at the beginning of the meeting to the transaction of any business because the meeting is not lawfully called or convened and except that attendance at a meeting is not a waiver of any right to object to the consideration of matters not included in the notice of the meeting if that objection is expressly made at the beginning of the meeting.

SECTION 8. MEMBER ACTION BY WRITTEN CONSENT WITHOUT A MEETING. --Except as provided in the Agreement, any action that may be taken at any meeting of Members may be taken without a meeting and without prior notice if a consent in writing setting forth the action so taken is signed by a Majority in Interest of the Members (or Members holding such higher aggregate Percentage Interest as is required to authorize or take such action under the terms of the Agreement, these Bylaws or applicable law). Any such written consent may be executed and given by telecopy or similar electronic means. Such consents shall be filed with the Secretary of the Company and shall be maintained in the Company's records.

SECTION 9. RECORD DATE FOR MEMBER NOTICE, VOTING, AND GIVING CONSENTS.

(a) For purposes of determining the Members entitled to vote or act at any meeting or adjournment thereof, the Board of Directors may fix in advance a record date which shall not be greater than ninety (90) days nor fewer than five (5) days before the date of any such meeting. If the Board of Directors does not so fix a record date, the record date for determining Members entitled to notice of or to vote at a meeting of Members shall be at the close of business on the business day immediately preceding the day on which notice is given, or if notice is waived, at the close of business on the business day next preceding the day on which the meeting is held.

(b) The record date for determining Members entitled to give consent to action in writing without a meeting shall be the close of business on the day on which the Board of Directors adopt the resolution relating to that action unless another record date (which shall not precede the date of the Board of Directors' resolution relating to the action).

(c) Only Members of record on the record date as herein determined shall have any right to vote or to act at any meeting or give consent to any action relating to such record date, provided that no Member who transfers all or part of such Member's Interest after a record date (and no transferee of such Interest) shall have the right to vote or act with respect

to the transferred Interest as regards the matter for which the record date was set.

ARTICLE III
DIRECTORS

SECTION 1. NUMBER AND TERM. -- The number of directors which shall constitute the whole board shall be not less than three nor more than seven. The directors shall be elected by a Majority in Interest of the Members, except as provided in Section 3 of this Article III, and each director elected shall hold office until his successor is elected and qualified. Directors need not be Members.

SECTION 2. RESIGNATIONS. -- Any director, member of a committee or other officer may resign at any time. Such resignation shall be made in writing, and shall take effect at the time specified therein, and if no time be specified, at the time of its receipt by the President or Secretary. The acceptance of a resignation shall not be necessary to make it effective.

SECTION 3. VACANCIES. -- If the office of any director, member of a committee or other officer becomes vacant, the remaining directors in office, by a majority vote, may appoint any qualified person to fill such vacancy, who shall hold office until his successor shall be duly chosen by the Members.

SECTION 4. REMOVAL. -- Any director or directors may be removed either for or without cause at any time by the affirmative vote of a Majority in Interest of the Members, by written consent or at a special meeting of the Members called for the purpose.

SECTION 5. INCREASE OF NUMBER. -- The number of directors may be increased by amendment of these Bylaws by the affirmative vote of a majority of the directors, though less than a quorum, or, by the affirmative vote of a Majority in Interest of the Members, by written consent or at a special meeting called for that purpose, and by like vote the additional directors may be chosen at such meeting to hold office their successors are elected and qualified.

SECTION 6. POWERS. -- The Board of Directors shall exercise all of the powers of the Company except such as are by law, or by the Agreement or by these Bylaws conferred upon or reserved to the Members.

SECTION 7. PLACE OF MEETINGS AND MEETINGS BY TELEPHONE. --All meetings of the Board of Directors may be held at any place that has been designated from time to time by resolution of the Board of Directors. In the absence of such a designation, regular

meetings shall be held at the principal place of business of the Company. Any meeting, regular or special, may be held by conference telephone or similar communications equipment so long as all directors participating in the meeting can hear one another, and all directors participating by telephone or similar communications equipment shall be deemed to be present in person at the meeting.

SECTION 8. MEETINGS. --

(a) Regular meetings of the Board of Directors shall be held at least twice per year at such times and places as shall be fixed by unanimous approval of the Board of Directors. Such regular meetings shall be held without notice.

(b) Special meetings of the Board of Directors may be called by the President or by the Secretary on the written request of any two directors on at least one day's notice to each director and shall be held at such place or places as may be determined by the directors, or as shall be stated in the call of the meeting. The notice need not specify the purpose of the meeting.

SECTION 9. ACTION WITHOUT A MEETING. -- Any action required or permitted to be taken at any meeting of the Board of Directors may be taken without a meeting, if prior to such action a written consent thereof is signed by all the directors and such written consent is filed with the minutes of the proceedings of the Board.

SECTION 10. QUORUM -- The presence of two directors or one-third of the directors then in office, whichever is greater shall be necessary and sufficient to constitute a quorum for the transaction of business. Every act or decision done or made by the affirmative vote of a majority of directors present at a meeting duly held at which a quorum is present shall be regarded as the act of the Board of Directors. If at any meeting of the Board of Directors there shall be less than a quorum present, a majority of those present may adjourn the meeting from time to time until a quorum is obtained, and no further notice thereof need be given other than by announcement at the meeting which shall be so adjourned.

SECTION 11. WAIVER OF NOTICE. -- Notice of any meeting need not be given to any director who either before or after the meeting signs a written waiver of notice, a consent to holding the meeting, or an approval of the minutes. The waiver of notice or consent need not specify the purpose of the meeting. All such waivers, consents, and approvals shall be filed with the records of the Company or made a part of the minutes of the meeting. Notice of a meeting shall also be deemed given to any director who attends the meeting without protesting before or at its commencement the lack of notice to that director.

SECTION 12. COMPENSATION. -- Directors shall not receive any stated salary for their services as directors but by resolution of the Board a fixed fee and expenses of attendance may be allowed for attendance at each meeting. Nothing herein contained shall be construed to preclude any director from serving the Company in any other capacity as an officer, agent or otherwise, and receiving compensation therefor.

ARTICLE IV
OFFICERS

SECTION 1. OFFICERS. -- The officers of the Company shall be a Chairman of the Board, a President, one or more Vice Presidents, a Treasurer, and a Secretary, and such Assistant Treasurers and Assistant Secretaries as the Board of Directors may deem proper. All of such officers shall be elected by the Board of Directors. None of the officers need be directors. The officers shall be elected at the first meeting of the Board of Directors after each annual meeting. Any two offices, other than those of President and Vice President, may be held by the same person. More than two offices, other than those of President and Secretary, may be held by the same person.

SECTION 2. OTHER OFFICERS AND AGENTS. -- The Board of Directors may appoint such other officers and agents as it may deem advisable, who shall hold their offices for such terms and shall exercise such powers and perform such duties as shall be determined from time to time by the Board of Directors.

SECTION 3. CHAIRMAN. -- The Chairman shall, if present, preside at meetings of the Board of Directors and shall exercise and perform such other powers and duties as may from time to time be assigned to him or her by the Board of Directors or prescribed by the Agreement or these Bylaws.

SECTION 4. PRESIDENT. -- Subject to the supervisory powers of the Chairman, if there be such an officer, the President shall be the chief operating officer of the Company and shall, subject to the control of the Board of Directors and the Chairman, have general supervision, direction, and control of the business and the officers of the Company. He or she shall have the general powers and duties of management usually vested in the office of President of a corporation and shall have such other powers and duties as may be prescribed by the Board of Directors, the Agreement, or these Bylaws.

SECTION 5. VICE PRESIDENT. -- Each Vice President shall have such powers and shall perform such duties as shall be assigned to him or her by resolution of the Board of Directors.

SECTION 6. TREASURER. -- The Treasurer shall have the custody of the corporate funds and securities and shall keep full and accurate account of receipts and disbursements in books belonging to the Company. He or she shall deposit all moneys and other valuables in the name and to the credit of the Company in such depositories as may be designated by the Board of Directors.

The Treasurer shall disburse the funds of the Company as may be ordered by the Board of Directors, or the President, taking proper vouchers for such disbursements. He shall render to the President and Board of Directors at the regular meetings of the Board of Directors, or whenever they may request it, an account of his transactions as Treasurer and of the financial condition of the Company. If required by the Board of Directors, he shall give the Company a bond for the faithful discharge of his duties in such amount and with such surety as the board shall prescribe.

SECTION 7. SECRETARY. -- The Secretary shall give, or cause to be given, notice of all meetings of Members and directors, and all other notices required by law or by these Bylaws, and in case of his or her absence or refusal or neglect to do so, any such notice may be given by any person directed to do so by the President, or by the directors, or Members, upon whose requisition the meeting is called as provided in these Bylaws. He or she shall record all the proceedings of the meetings of the Company and of the directors in a book to be kept for that purpose, and shall perform such other duties as may be assigned to him or her by the directors, the Chairman or the President. He or she shall have the custody of the seal of the Company and shall affix the same to all instruments requiring it, when authorized by the directors, the Chairman, the President or any Vice President, and attest the same.

SECTION 8. ASSISTANT TREASURERS AND ASSISTANT SECRETARIES. -- Assistant Treasurers and Assistant Secretaries, if any, shall be appointed by the Board of Directors and shall have the powers and perform such duties as may be assigned to them, respectively, by the Directors.

ARTICLE V
RECORDS AND REPORTS

SECTION 1. MAINTENANCE AND INSPECTION OF SHARE REGISTER. -- The Company shall maintain at its principal place of business a record of its Members, giving the names and addresses of all Members and the Percentage interest held by each Member. Subject to such reasonable standards (including standards governing what information and documents are to be furnished and at whose expense) as may be established by the Board of Directors from time to time, each Member has the right to obtain from the Company, from time to time upon reasonable demand for any purpose reasonably

related to the Member's interest as a Member of the Company, a record of the Company's Members.

SECTION 2. MAINTENANCE AND INSPECTION OF BYLAWS. -- The Company shall keep at its principal place of business the original or a copy of these Bylaws as amended to date, which shall be open to inspection by the Members at all reasonable times during office hours.

SECTION 3. MAINTENANCE AND INSPECTION OF OTHER RECORDS. -- The accounting books and records, minutes of proceedings of the Members and the Board of Directors and any committees or delegates of the Board of Directors, and all other information pertaining to the Company that is required to be made available to the Members under the Delaware Act shall be kept at such place or places designated by the Board of Directors or in the absence of such designation, at the principal place of business of the Company. The minutes shall be kept in written form and the accounting books and records and other information shall be kept either in written form or in any other form capable of being converted into written form. The books of account and records of the Company shall be maintained in accordance with generally accepted accounting principles consistently applied during the term of the Company, wherein all transactions, matters, and things relating to the business and properties of the Company shall be currently entered. Subject to such reasonable standards (including standards governing what information and documents are to be furnished and at whose expense) as may be established by the Board of Directors from time to time, minutes, accounting books and records, and other information shall be open to inspection upon the written demand of any Member at any reasonable time during usual business hours for a purpose reasonably related to the Member's interests as a Member. Any such inspection may be made in person or by an agent or attorney and shall include the right to copy and make extracts. Notwithstanding the foregoing, the Board of Directors shall have the right to keep confidential from Members for such period of time as the Board of Directors deem reasonable, any information which the Board of Directors reasonably believe to be in the nature of trade secrets or other information the disclosure of which the Board of Directors in good faith believe is not in the best interests of the Company or could damage the Company or its business or which the Company is required by law or by agreement with a third party to keep confidential.

SECTION 4. INSPECTION BY BOARD OF DIRECTORS. -- Every director shall have the right at any reasonable time to inspect all books, records, and documents of every kind and the physical properties of the Company for a purpose reasonably related to his or her position as Manager. This inspection by a director may be made in person or by an agent or attorney and the right of inspection includes the right to copy and make extracts of documents.

ARTICLE VI
INDEMNIFICATION

SECTION 1. LIMITATION ON LIABILITY OF MANAGERS AND OFFICERS. -- No director or officer of the Company shall have any liability to the Company or the Members for any losses sustained or liabilities incurred as a result of any act or omission of such director or officer if (i) the director or officer acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the interests of the Company and (ii) the conduct of the director or officer did not constitute actual fraud, gross negligence, or willful misconduct.

SECTION 2. COMPANY'S OBLIGATION TO INDEMNIFY OFFICERS AND DIRECTORS. -- The Company shall indemnify and hold harmless the directors and officers of the Company (individually, an "Indemnitee") from and against any and all losses, claims, demands, costs, damages, liabilities, expenses of any nature (including reasonable attorneys' fees and disbursements), judgments, fines, settlements, and other amounts arising from any and all claims, demands, actions, suits, or proceedings, civil, criminal, administrative, or investigative, in which an Indemnitee may be involved, or threatened to be involved, as a party or otherwise, arising out of or incidental to the business of the Company, regardless of whether an Indemnitee continues to be a director or officer at the time any such liability or expense is paid or incurred, if (i) the Indemnitee acted in good faith and in a manner it or he or she reasonably believed to be in, or not opposed to, the interests of the Company, and, with respect to any criminal proceeding, had no reason to believe his or her conduct was unlawful and (ii) the Indemnitee's conduct did not constitute actual fraud, gross negligence or willful misconduct.

SECTION 3. COMPANY'S OBLIGATION TO ADVANCE EXPENSES. -- Expenses incurred by an Indemnitee in defending any claim, demand, action, suit, or proceeding subject to this Article VI shall, from time to time, be advanced by the Company prior to the final disposition of such claim, demand, action, suit, or proceeding upon receipt by the Company of an undertaking by or on behalf of the Indemnitee to repay such amounts if it is ultimately determined that such person is not entitled to be indemnified as authorized in this Article VI. The indemnification provided by this Article VI shall be in addition to any other rights to which an Indemnitee may be entitled under any agreement, consent of the Members, as a matter of law or equity, or otherwise, shall continue as to an Indemnitee who has ceased to serve in such capacity and shall inure to the benefit of the heirs, successors, assigns and administrators of the Indemnitee. Subject to the foregoing sentence, the provisions of this Article VI are for the benefit of the Indemnitees and shall not be deemed to create any rights for the benefit of any other persons.

ARTICLE VII
AMENDMENTS AND INCORPORATION BY REFERENCE INTO AGREEMENT

SECTION 1. AMENDMENT. -- These Bylaws may be altered or repealed and Bylaws may be made at any meeting of the Board of Directors, if notice of the proposed alteration or repeal, or bylaw to be made, is contained in the notice of such meeting, by the affirmative vote of a majority of the Board of Directors, or by unanimous written consent of a majority of the directors.

SECTION 2. INCORPORATION BY REFERENCE OF BYLAWS INTO AGREEMENT. -- These Bylaws and any amendments thereto shall be deemed incorporated by reference in the Agreement.

EXHIBIT 4.1

Arch Western Finance, LLC,

AS ISSUER

Arch Western Resources, LLC
Arch of Wyoming, LLC
Mountain Coal Company, L.L.C.
Thunder Basin Coal Company, L.L.C.,

AS GUARANTORS

AND

The Bank of New York,

AS TRUSTEE

INDENTURE

Dated as of June 25, 2003

$700,000,000
6 3/4% Senior Notes due 2013

CROSS-REFERENCE TABLE

TIA Sections		Indenture Sections
310	(a)(1)	7.10
	(a)(2)	7.08; 7.10
	(a)(3)	7.12
	(a)(4)	N/A
	(a)(5)	7.10
	(b)	7.03; 7.10
	(c)	N/A
311	(a)	7.03; 7.11
	(b)	7.03; 7.11
	(c)	N/A
312	(a)	2.05(a)
	(b)	13.03
	(c)	13.03
313	(a)	7.06
	(b)(1)	7.06
	(b)(2)	7.06; 7.07
	(c)	7.05; 7.06; 13.02(b)
	(d)	7.06
314	(a)(1)	4.17
	(a)(2)	4.17
	(a)(3)	4.17
	(a)(4)	4.05(a); 8.01(a)
	(b)	N/A
	(c)(1)	13.04(a)
	(c)(2)	13.04(b)
	(d)	N/A
	(e)	13.05
	(f)	N/A
315	(a)	7.01(b)
	(b)	7.05
	(c)	7.01(a)
	(d)	7.01(c)
	(e)	6.11
316	(a) (last sentence)	2.09
	(a)(1)(A)	6.05
	(a)(1)(B)	6.04
	(a)(2)	N/A
	(b)	6.07
	(c)	9.04
317	(a)(1)	6.08
	(a)(2)	6.09
	(b)	2.04
318	(a)	13.01
	(c)	13.01

N/A means not applicable.

Note: The Cross-Reference Table shall not for any purpose be deemed to be a part of the Indenture.

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Exhibits

INDENTURE dated as of June 25, 2003 among Arch Western Finance, LLC, a limited liability company incorporated under the laws of Delaware (the "Issuer"), Arch Western Resources, LLC, a limited liability company organized under the laws of Delaware ("Arch Western"), and Arch of Wyoming, LLC, Mountain Coal Company, L.L.C., and Thunder Basin Coal Company, L.L.C. (each a "Subsidiary Guarantor," collectively the "Subsidiary Guarantors" and together with Arch Western, the "Guarantors") and The Bank of New York, a New York banking corporation (the "Trustee").

RECITALS OF THE ISSUER AND THE GUARANTORS

The Issuer has duly authorized the execution and delivery of this Indenture to provide for the issuance of its (i) 6 3/4% Senior Notes due 2013 issued on the date hereof (the "Original Notes"), (ii) any additional Notes ("Additional Notes") that may be issued on any other Issue Date (as defined herein) and (iii) 6 3/4% Senior Notes due 2013 issued pursuant to the Registration Rights Agreement (as defined herein) in exchange for any Original Notes or Additional Notes (the "Exchange Notes," and together with the Original Notes and any Additional Notes, the "Notes"). Each Guarantor has duly authorized the execution and delivery of this Indenture to provide for the issuance of its Guarantee. Each of the Issuer and the Guarantors has received good and valuable consideration for the execution and delivery of this Indenture and the Guarantees, as the case may be. Each Guarantor will derive substantial direct and indirect benefits from the issuance of the Notes. All necessary acts and things have been done to make (i) the Notes, when duly issued and executed by the Issuer and authenticated and delivered hereunder, the legal, valid and binding obligations of the Issuer, (ii) the Guarantees, when executed by each Guarantor and delivered hereunder, the legal, valid and binding obligations of each Guarantor and (iii) this Indenture a legal, valid and binding agreement of each of the Issuer and the Guarantor in accordance with the terms of this Indenture.

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

For and in consideration of the premises and the purchase of the Notes by the Holders thereof, it is mutually covenanted and agreed, for the equal and proportionate benefit of all Holders, as follows:

ARTICLE ONE
DEFINITIONS AND INCORPORATION BY REFERENCE

SECTION 1.01. Definitions.

"Acquired Debt" means Debt of a Person (a) existing at the time such Person becomes a Restricted Subsidiary, (b) assumed in connection with the acquisition of assets from such Person or (c) at the time it merges or consolidates with the Issuer or any Restricted Subsidiary, in each case. Acquired Debt shall be deemed to be incurred on the date the acquired Person becomes a Restricted Subsidiary, the date of the related acquisition of assets from any Person or at the time of such merger or consolidation, as the case may be.

"Additional Assets" means:

(a) any Property (other than cash, Cash Equivalent and securities) to be owned by Arch Western or any of its Restricted Subsidiaries and used in a Permitted Business; or

(b) Capital Stock of a Person that becomes a Restricted Subsidiary as a result of the acquisition of such Capital Stock by Arch Western or another Restricted Subsidiary from any Person other than Arch Western or an Affiliate of Arch Western; provided, however, that, in the case of this clause (b), such Restricted Subsidiary is primarily engaged in a Permitted Business.

"Affiliate" of any specified Person means:

(a) any other Person directly or indirectly controlling or controlled by or under direct or indirect common control with such specified Person, or

(b) any other Person who is a director or officer of:

(1) such specified Person,

(2) any Subsidiary of such specified Person, or

(3) any Person described in clause (a) above.

For the purposes of this definition, "control," when used with respect to any Person, means the power to direct the management and policies of such Person, directly or indirectly, whether through the ownership of voting securities, by contract or otherwise; and the terms "controlling" and "controlled" have meanings correlative to the foregoing. For purposes of Section 4.09 and 4.10 of this Indenture and the definition of "Additional Assets" only, "Affiliate" shall also mean any beneficial owner of shares representing 5% or more of the total voting power of the Voting Stock (on a fully diluted basis) of Arch Western or of rights or warrants to purchase such Voting Stock (whether or not currently exercisable) and any Person who would be an Affiliate of any such beneficial owner pursuant to the first sentence hereof.

"Arch Coal" means Arch Coal, Inc., a corporation organized under the laws of Delaware.

"Arch Coal Notes" means all existing and future unsubordinated demand promissory notes issued by Arch Coal to Arch Western as consideration for loans and advances made by Arch Western to Arch Coal or any of its Affiliates (other than Arch Western or a Restricted Subsidiary), which shall bear interest payable no less frequently than quarterly from the date made until paid in full at a rate per annum no less favorable to Arch Western than if such loan or advance had been made by an unaffiliated financial institution.

"Arch Western Notes" means, collectively, a demand promissory note issued by Arch Western to Thunder Basin Coal Company, L.L.C. as consideration for the proceeds from the offering of the Notes or any Additional Notes and a demand promissory note issued by Thunder Basin Coal Company, L.L.C. to the Issuer as consideration for the proceeds from the offering of the Notes or any Additional Notes. Each Arch Western Note issued will be in an amount equal to the aggregate principal amount of the Notes or Additional Notes issued.

"Arch Western Guarantee" means the unconditional guarantee by Arch Western of all of the Issuer's obligations under the Notes, including its obligations to pay principal, interest, and premium, if any, with respect to the Notes.

"Asset Sale" means any sale, lease, transfer, issuance or other disposition (or series of related sales, leases, transfers, issuances or dispositions) by Arch Western or any of its Restricted Subsidiaries, including any disposition by means of a merger, consolidation or similar transaction (each referred to for the purposes of this definition as a "disposition"), of

(a) any shares of Capital Stock of a Restricted Subsidiary (other than directors' qualifying shares), or

(b) any other Property of Arch Western or any of its Restricted Subsidiaries outside of the ordinary course of business of Arch Western or such Restricted Subsidiary,

other than, in the case of clause (a) or (b) above,

(1) any disposition by a Restricted Subsidiary to Arch Western or by Arch Western or its Restricted Subsidiary to a Restricted Subsidiary,

(2) any disposition that constitutes a Permitted Investment or Restricted Payment permitted by the covenant described under Section 4.08 of this Indenture.

(3) any disposition effected in compliance with the first paragraph of the covenant described under Section 5.01 of this Indenture and

(4) any disposition in a single transaction or a series of related transactions of assets for aggregate consideration of less than $5,000,000 million.

"Attributable Debt" in respect of a Sale and Leaseback Transaction means, at any date of determination,

(a) if such Sale and Leaseback Transaction is a Capital Lease Obligation, the amount of Debt represented thereby according to the definition of "Capital Lease Obligations," and

(b) in all other instances, the greater of:

(1) the Fair Market Value of the Property subject to such Sale and Leaseback Transaction, and

(2) the present value (discounted at the interest rate borne by the Notes, compounded annually) of the total obligations of the lessee for rental payments during the remaining term of the lease included in such Sale and Leaseback Transaction (including any period for which such lease has been extended).

"Available Cash" means, as of any date, the cash of Arch Western as of such date less amounts necessary to pay for operating expenses, interest, principal and sinking fund payments on indebtedness, capital expenditures, improvements and replacements, contingencies, reserves

and other expenses of Arch Western and its Subsidiaries and less any Net Available Cash received from an Asset Sale consisting of all of the Capital Stock of Canyon Fuel or Mountain Coal Company, L.L.C. not used to Repay any Debt of Arch Western (other than Subordinated Obligations) or reinvest in Additional Assets (including by reason of an Investment in Additional Assets by a Restricted Subsidiary with Net Available Cash received by Arch Western).

"Average Life" means, as of any date of determination, with respect to any Debt or Preferred Stock, the quotient obtained by dividing:

(a) the sum of the product of the numbers of years (rounded to the nearest one-twelfth of one year) from the date of determination to the dates of each successive scheduled principal payment of such Debt or redemption or similar payment with respect to such Preferred Stock not defined multiplied by the amount of such payment by

(b) the sum of all such payments.

"Bankruptcy Law" means any law relating to bankruptcy, insolvency, receivership, winding-up, liquidation, reorganization or relief of debtors or any amendment to, succession to or change in any such law, including, without limitation, the bankruptcy law of the Issuer's jurisdiction and title 11, United States Bankruptcy Code of 1978, as amended.

"Board of Directors" means the board of directors, or equivalent, of Arch Western; provided, however, that if no such entity exists, "Board of Directors" means the board of directors of Arch Coal or, if Arch Coal does not control Arch Western, the board of directors, or equivalent, of the Person that controls Arch Western; provided further, however, that for purposes of Affiliate Transactions with Arch Coal or its Affiliates (other than Arch Western or a Restricted Subsidiary) under Section 4.10 of this Indenture, "Board of Directors" shall mean the board of directors, or equivalent, of Arch Western.

"Business Day" means any day (other than a Saturday or Sunday) which is not a day on which banking institutions in New York, New York are authorized or obligated by law to close for business.

"Canyon Fuel" means Canyon Fuel Company, LLC, a limited liability company organized and existing under the laws of the State of Delaware.

"Capital Lease Obligations" means any obligation under a lease that is required to be capitalized for financial reporting purposes in accordance with GAAP; and the amount of Debt represented by such obligation shall be the capitalized amount of such obligations determined in accordance with GAAP; and the Stated Maturity thereof shall be the date of the last payment of rent or any other amount due under such lease prior to the first date upon which such lease may be terminated by the lessee without payment of a penalty. For purposes of Section 4.07 of this Indenture, a Capital Lease Obligation shall be deemed secured by a Lien on the Property being leased.

"Capital Stock" means, with respect to any Person, any shares or other equivalents (however designated) of any class of corporate stock or partnership or limited liability company interests or any other participations, rights, warrants, options or other interests in the nature of an

equity interest in such Person, including Preferred Stock, but excluding any debt security convertible or exchangeable into such equity interest.

"Capital Stock Sale Proceeds" means the aggregate cash proceeds received by Arch Western from the issuance or sale (other than to a Subsidiary of Arch Coal or an employee stock ownership plan or trust established by Arch Coal or any such Subsidiary for the benefit of their employees) by Arch Western of its Capital Stock (other than Disqualified Stock) after the Issue Date, net of attorneys' fees, accountants' fees, underwriters' or placement agents' fees, discounts or commissions and brokerage, consultant and other fees actually incurred in connection with such issuance or sale and net of taxes or Tax Amount paid or payable as a result thereof.

"Cash Equivalents" means any of the following:

(a) Investments in U.S. Government Obligations maturing within 365 days of the date of acquisition thereof;

(b) Investments in time deposit accounts, certificates of deposit and money market deposits maturing within 90 days of the date of acquisition thereof issued by a bank or trust company organized under the laws of the United States of America or any state thereof having capital, surplus and undivided profits aggregating in excess of $500 million and whose long-term debt is rated "A-3" or "A-" or higher according to Moody's or S&P (or such similar equivalent rating by at least one "nationally recognized statistical rating organization" (as defined in Rule 436 under the Securities Act));

(c) repurchase obligations with a term of not more than 30 days for underlying securities of the types described in clause (a) entered into with:

(1) a bank meeting the qualifications described in clause (b) above, or

(2) any primary government securities dealer reporting to the Market Reports Division of the Federal Reserve Bank of New York;

(d) Investments in commercial paper, maturing not more than 90 days after the date of acquisition, issued by a corporation (other than an Affiliate of Arch Western) organized and in existence under the laws of the United States of America with a rating at the time as of which any Investment therein is made of "P-1" (or higher) according to Moody's or "A-1" (or higher) according to S&P (or such similar equivalent rating by at least one "nationally recognized statistical rating organization" (as defined in Rule 436 under the Securities Act)); and

(e) direct obligations (or certificates representing an ownership interest in such obligations) of any state of the United States of America (including any agency or instrumentality thereof) for the payment of which the full faith and credit of such state is pledged and which are not callable or redeemable at the issuer's option; provided that:

(1) the long-term debt of such state is rated "A-3" or "A-" or higher according to Moody's or S&P (or such similar equivalent rating by at least one "nationally recognized statistical rating organization" (as defined in Rule 436 under the Securities Act)), and

(2) such obligations mature within 180 days of the date of acquisition thereof.

"Change of Control" means the occurrence of any of the following events:

(a) any "person" or "group" (as such terms are used in Sections 13(d) and 14(d) of the Exchange Act or any successor provisions to either of the foregoing), including any group acting for the purpose of acquiring, holding, voting or disposing of securities within the meaning of Rule 13d-5(b)(1) under the Exchange Act, other than Arch Coal, becomes the "beneficial owner" (as defined in Rule 13d-3 under the Exchange Act, except that a person will be deemed to have "beneficial ownership" of all shares that any such person has the right to acquire, whether such right is exercisable immediately or only after the passage of time), directly or indirectly, of 50% or more of the total voting power of the Voting Stock of Arch Western (for purposes of this clause (a), such person or group shall be deemed to beneficially own any Voting Stock of a corporation held by any other corporation (the "parent corporation") so long as such person or group beneficially owns, directly or indirectly, in the aggregate at least a majority of the total voting power of the Voting Stock of such parent corporation); or

(b) the sale, transfer, assignment, lease, conveyance or other disposition, directly or indirectly, of all or substantially all the Property of Arch Western and its Restricted Subsidiaries, considered as a whole (other than a disposition of such Property as an entirety or virtually as an entirety to a Wholly Owned Restricted Subsidiary of Arch Western), shall have occurred, or Arch Western merges, consolidates or amalgamates with or into any other Person or any other Person merges, consolidates or amalgamates with or into Arch Western in any such event pursuant to a transaction in which the outstanding Voting Stock of Arch Western is reclassified into or exchanged for cash, securities or other Property, other than any such transaction where:

(1) the outstanding Voting Stock of Arch Western is reclassified into or exchanged for other Voting Stock of Arch Western or for Voting Stock of the Surviving Person, and

(2) the Holders of the Voting Stock of Arch Western immediately prior to such transaction own, directly or indirectly, not less than a majority of the Voting Stock of Arch Western, or the Surviving Person immediately after such transaction and in substantially the same proportion as before the transaction; or

(c) during any period of two consecutive years, individuals who at the beginning of such period constituted the Board of Directors (together with any new directors whose election or appointment by such Board or whose nomination for election by the shareholders of Arch Western, Arch Coal or such other Person who controls Arch Western, as applicable, was approved by a vote of not less than three-fourths of the directors then still in office who were either directors at the beginning of such period or whose election or nomination for election was previously so approved) cease for any reason to constitute at least a majority of the Board of Directors then in office; or

(d) the adoption of any plan of liquidation or dissolution of Arch Coal, Arch Western or the Issuer; or

(e) the first day on which (1) Arch Coal's direct or indirect percentage ownership of the Capital Stock of Arch Western is less than 80% or (2) Arch Coal ceases to control (as defined in the definition of "Affiliate") Arch Western.

"Code" means the Internal Revenue Code of 1986, as amended.

"Collateral" has the meaning ascribed to it in the Note Pledge Agreement.

"Collateral Trustee" means (a) except as otherwise provided in clause (b) immediately below, the Trustee, acting in such capacity under the Note Pledge Agreement, or (b) in the event a "Collateral Trustee" has been appointed pursuant to a Collateral Trust Agreement, such "Collateral Trustee."

"Collateral Trust Agreement" has the meaning ascribed to it in the Note Pledge Agreement.

"Commission" means the U.S. Securities and Exchange Commission.

"Commodity Price Protection Agreement" means, in respect of a Person, any forward contract, commodity swap agreement, commodity option agreement or other similar agreement or arrangement designed to protect such Person against fluctuations in commodity prices.

"Consolidated Current Liabilities" means, as of any date of determination, the aggregate amount of liabilities of Arch Western and its consolidated Restricted Subsidiaries which may properly be classified as current liabilities (including taxes accrued as estimated), after eliminating:

(a) all intercompany items between Arch Western and any Restricted Subsidiary or between Restricted Subsidiaries, and

(b) all current maturities of long-term Debt.

"Consolidated Interest Coverage Ratio" of a Person means, as of any date of determination, the ratio of:

(a) the aggregate amount of EBITDA of such Person for the most recent four consecutive fiscal quarters ending at least 45 days prior to such determination date to

(b) Consolidated Interest Expense of such Person for such four fiscal quarters;

provided, however, that:

(1) if

(A) since the beginning of such period such Person or any Restricted Subsidiary of such Person has Incurred any Debt that remains outstanding or Repaid any Debt, or

(B) the transaction giving rise to the need to calculate the Consolidated Interest Coverage Ratio is an Incurrence or Repayment of Debt,

Consolidated Interest Expense for such period shall be calculated after giving effect on a pro forma basis to such Incurrence or Repayment as if such Debt was Incurred or Repaid on the first day of such period, provided that, in the event of any such Repayment of Debt, EBITDA for such period shall be calculated as if such Person or such Restricted Subsidiary of such Person had not earned any interest income actually earned during such period in respect of the funds used to Repay such Debt, and

(2) if

(A) since the beginning of such period such Person or any Restricted Subsidiary of such Person shall have made any Asset Sale or an Investment (by merger or otherwise) in any Restricted Subsidiary of such Person (or any Person which becomes a Restricted Subsidiary of such Person) or an acquisition of Property which constitutes all or substantially all of an operating unit of a business,

(B) the transaction giving rise to the need to calculate the Consolidated Interest Coverage Ratio is such an Asset Sale, Investment or acquisition, or

(C) since the beginning of such period any other Person (that subsequently became a Restricted Subsidiary of such Person or was merged with or into such Person or any Restricted Subsidiary of such Person since the beginning of such period) shall have made such an Asset Sale, Investment or acquisition,

then EBITDA for such period shall be calculated after giving pro forma effect to such Asset Sale, Investment or acquisition as if such Asset Sale, Investment or acquisition had occurred on the first day of such period.

If any Debt bears a floating rate of interest and is being given pro forma effect, the interest expense on such Debt shall be calculated as if the base interest rate in effect for such floating rate of interest on the date of determination had been the applicable base interest rate for the entire period (taking into account any Interest Rate Agreement applicable to such Debt if such Interest Rate Agreement has a remaining term in excess of 12 months). In the event the Capital Stock of any Restricted Subsidiary of such Person is sold during the period, such Person shall be deemed, for purposes of clause (1) above, to have Repaid during such period the Debt of such Restricted Subsidiary to the extent such Person and its continuing Restricted Subsidiaries are no longer liable for such Debt after such sale.

"Consolidated Interest Expense" of a Person means, for any period, the total interest expense of such Person and its consolidated Restricted Subsidiaries, plus, to the extent not included in such total interest expense, and to the extent Incurred by such Person or its Restricted Subsidiaries,

(a) interest expense attributable Capital Lease Obligations,

(b) amortization of debt discount and debt issuance cost, including commitment fees,

(c) capitalized interest,

(d) non-cash interest expense,

(e) commissions, discounts and other fees and charges owed with respect to letters of credit and banker's acceptance financing,

(f) net costs associated with Hedging Obligations (including amortization of fees),

(g) Disqualified Stock Dividends,

(h) Preferred Stock Dividends,

(i) interest Incurred in connection with Investments in discontinued operations,

(j) interest accruing on any Debt of any other Person to the extent such Debt is Guaranteed by such Person or any of its Restricted Subsidiaries, and

(k) the cash contributions to any employee stock ownership plan or similar trust to the extent such contributions are used by such plan or trust to pay interest or fees to any Person (other than such Person) in connection with Debt Incurred by such plan or trust.

"Consolidated Net Income" of a Person means, for any period, the net income (loss) of such Person and its consolidated Restricted Subsidiaries; provided, however, that there shall not be included in such Consolidated Net Income:

(a) any net income (loss) of any other Person (other than such Person) if such other Person is not a Restricted Subsidiary, except that:

(1) subject to the exclusion contained in clause (c) below, equity of such Person and its consolidated Restricted Subsidiaries in the net income of any such other Person for such period shall be included in such Consolidated Net Income up to the aggregate amount of cash distributed by such other Person during such period to such Person or its Restricted Subsidiary as a dividend or other distribution (subject, in the case of a dividend or other distribution to a Restricted Subsidiary, to the limitations contained in clause (b) below), and

(2) the equity of such Person and its consolidated Restricted Subsidiaries in a net loss of any other Person for such period shall be included in determining such Consolidated Net Income to the extent such Person or any Restricted Subsidiary of such Person has actually contributed, lent or transferred cash to such other Person,

(b) any net income (loss) of any Restricted Subsidiary if such Restricted Subsidiary is subject to restrictions, directly or indirectly, on the payment of dividends or the making of distributions, directly or indirectly, to such Person, except that:

(1) subject to the exclusion contained in clause (c) below, the equity of such Person and its consolidated Restricted Subsidiaries in the net income of any such Restricted Subsidiary for such period shall be included in such Consolidated Net Income up to the aggregate amount of cash distributed by such Restricted Subsidiary during such period to such Person or another Restricted Subsidiary as a dividend or other distribution (subject, in the case of a dividend or other distribution to another Restricted Subsidiary, to the limitation contained in this clause), and

(2) the equity of such Person and its consolidated Restricted Subsidiaries in a net loss of any such Restricted Subsidiary for such period shall be included in determining such Consolidated Net Income,

(c) any gain (but not loss) realized upon the sale or other disposition of any Property of such Person or any of its consolidated Subsidiaries (including pursuant to any Sale and Leaseback Transaction) that is not sold or otherwise disposed of in the ordinary course of business,

(d) any extraordinary gain or loss,

(e) the cumulative effect of a change in accounting principles; and

(f) any non-cash compensation expense realized for grants of performance shares, stock options or other rights to officers, directors and employees of such Person or any Restricted Subsidiary, provided that such shares, options or other rights can be redeemed at the option of the holder only for Capital Stock of such Person (other than Disqualified Stock).

Notwithstanding the foregoing, for purposes of the covenant described under Section 4.08 of this Indenture only, there shall be excluded from Consolidated Net Income any dividends, repayments of loans or advances or other transfers of Property from Unrestricted Subsidiaries to such Person or a Restricted Subsidiary to the extent such dividends, repayments or transfers increase the amount of Restricted Payments permitted under such covenant pursuant to clause (c)(iv) thereof.

"Consolidated Net Tangible Assets" means, as of any date of determination, the sum of the amounts that would appear on a consolidated balance sheet of Arch Western and its consolidated Restricted Subsidiaries, less any amounts attributable to non-Wholly Owned Restricted Subsidiaries that are not consolidated with Arch Western and plus the portion of the consolidated net tangible assets of a non-Wholly Owned Restricted Subsidiary that is not consolidated with Arch Western equal to the percentage of its outstanding Capital Stock owned by Arch Western and its Restricted Subsidiaries, as of the end of the most recent fiscal quarter ending at least 45 days prior to such determination date as the total assets (less accumulated depreciation and amortization, allowances for doubtful receivables, other applicable reserves and other properly deductible items) of Arch Western and its Restricted Subsidiaries, after giving

effect to purchase accounting and after deducting therefrom Consolidated Current Liabilities and, to the extent otherwise included, the amounts of (without duplication):

(a) the excess of cost over fair market value of assets or businesses acquired;

(b) any revaluation or other write-up in book value of assets subsequent to the last day of the fiscal quarter of Arch Western immediately preceding the Issue Date as a result of a change in the method of valuation in accordance with GAAP; and

(c) unamortized debt discount and expenses and other unamortized deferred charges, goodwill, patents, trademarks, service marks, trade names, copyrights, licenses, organization or developmental expenses and other intangible items.

"Consolidation" means, with respect to any Person, the consolidation of the accounts of such Person and each of its subsidiaries if and to the extent the accounts of such Person and each of its subsidiaries would normally be consolidated with those of such Person, all in accordance with GAAP. The term "Consolidated" shall have a similar meaning.

"Corporate Trust Office" means the office of the Trustee, at which at any particular time its corporate trust business shall be principally administered, which office at the date of execution of this Indenture is located at 101 Barclay Street, Floor 8 West, New York, NY 10286, Attention: Corporate Trust Department Corporate Finance Unit or such other address as the Trustee may designate from time to time by notice to the Holders and the Issuer, or the principal corporate trust office of any successor Trustee (or such other address as such successor Trustee may designate from time to time by notice to the Holders and the Issuer).

"Credit Facility" or "Credit Facilities" means, with respect to any Guarantor and the Restricted Subsidiaries, one or more debt facilities or commercial paper facilities with banks, insurance companies or other institutional lenders providing for revolving credit loans, term loans, notes, receivables financing (including through the sale or factoring of receivables to such lenders or to special purpose entities formed to borrow from or issue securities to such lenders against such receivables), letters of credit or other forms of guarantees and assurances or other credit facilities, including overdrafts, in each case, as amended, restated, modified, renewed, refunded, replaced or refinanced in whole or in part from time to time; provided, however, that "Credit Facilities" will not mean any Debt that expressly provides that it is subordinated in right of payment to any other Indebtedness.

"Currency Exchange Protection Agreement" means, in respect of a Person, any foreign exchange contract, currency swap agreement, currency option or other similar agreement or arrangement designed to protect such Person against fluctuations in currency exchange rates.

"Custodian" means any receiver, trustee, assignee, liquidator, custodian, administrator or similar official under any Bankruptcy Law.

"Debt" means, with respect to any Person on any date of determination (without duplication):

(a) the principal of and premium (if any) in respect of:

(1) debt of such Person for money borrowed, and

(2) debt evidenced by notes, debentures, bonds or other similar instruments for the payment of which such Person is responsible or liable;

(b) all Capital Lease Obligations of such Person and all Attributable Debt in respect of Sale and Leaseback Transactions entered into by such Person;

(c) all obligations of such Person representing the deferred purchase price of Property, all conditional sale obligations of such Person and all obligations of such Person under any title retention agreement (but excluding trade accounts payable arising in the ordinary course of business);

(d) all obligations of such Person for the reimbursement of any obligor on any letter of credit, banker's acceptance or similar credit transaction (other than obligations with respect to letters of credit securing obligations (other than obligations described in (a) through (c) above) entered into in the ordinary course of business of such Person to the extent such letters of credit are not drawn upon or, if and to the extent drawn upon, such drawing is reimbursed no later than the third business day following receipt by such Person of a demand for reimbursement following payment on the letter of credit);

(e) the amount of all obligations of such Person with respect to the Repayment of any Disqualified Stock or, with respect to any Subsidiary of such Person, any Preferred Stock (but excluding, in each case, any accrued dividends);

(f) all obligations of the type referred to in clauses (a) through (e) above of other Persons and all dividends of other Persons for the payment of which, in either case, such Person is responsible or liable, directly or indirectly, as obligor, guarantor or otherwise, including by means of any Guarantee;

(g) all obligations of the type referred to in clauses (a) through (f) above of other Persons secured by any Lien on any Property of such Person (whether or not such obligation is assumed by such Person), the amount of such obligation being deemed to be the lesser of the Fair Market Value of such Property and the amount of the obligation so secured; and

(h) to the extent not otherwise included in this definition, Hedging Obligations of such Person.

The amount of Debt of any Person at any date shall be the outstanding balance, or the accreted value of such Debt in the case of Debt issued with original issue discount, at such date of all unconditional obligations as described above and the maximum liability, upon the occurrence of the contingency giving rise to the obligation, of any contingent obligations at such date. The amount of Debt represented by a Hedging Obligation shall be equal to:

(1) zero if such Hedging Obligation has been Incurred pursuant to clause (d), (e) or (f) of the second paragraph of the covenant described under Section 4.06 of this Indenture, or

(2) the notional amount of such Hedging Obligation if not Incurred pursuant to such clauses.

"Default" means any event which is, or after notice or passage of time or both would be, an Event of Default.

"Depositary" means DTC until a successor Depositary, if any, shall have become such pursuant to this Indenture, and thereafter Depositary shall mean or include each Person who is then a Depositary hereunder.

"Disqualified Stock" means any Capital Stock of a Person or any of its Restricted Subsidiaries that by its terms (or by the terms of any security into which it is convertible or for which it is exchangeable, in either case at the option of the holder thereof) or otherwise:

(a) matures or is mandatorily redeemable pursuant to a sinking fund obligation or otherwise,

(b) is or may become redeemable or repurchaseable at the option of the holder thereof, in whole or in part, or

(c) is convertible or exchangeable at the option of the holder thereof for Debt or Disqualified Stock,

on or prior to, in the case of clause (a), (b) or (c), the first anniversary of the Stated Maturity of the Notes.

"Disqualified Stock Dividends" of a Person means all dividends with respect to Disqualified Stock of such Person held by Persons other than a Wholly Owned Restricted Subsidiary of such Person. The amount of any such dividend shall be equal to the quotient of such dividend divided by the difference between one and the maximum statutory federal income tax rate (expressed as a decimal number between 1 and 0) then applicable to such Person (or if such Person is a limited liability company, the tax rate used to calculate the Tax Amount).

"Domestic Subsidiary" means any Restricted Subsidiary of Arch Western other than a Foreign Subsidiary.

"DTC" means The Depository Trust Company.

"EBITDA" of a Person means, for any period, an amount equal to, for such Person and its consolidated Restricted Subsidiaries:

(a) the sum of Consolidated Net Income for such period, plus the following to the extent reducing Consolidated Net Income for such period:

(1) the provision for taxes based on income or profits or utilized in computing net loss,

(2) Consolidated Interest Expense,

(3) depreciation,

(4) amortization of intangibles,

(5) any other non-cash items (other than any such non-cash item to the extent that it represents an accrual of, or reserve for, cash expenditures in any future period), and

(6) to the extent not included in (1) through (5) above, the portion of any of the items described in (1) through (5) above of a non-Wholly Owned Restricted Subsidiary that is not consolidated with such Person equal to the percentage of the outstanding common Capital Stock of the non-Wholly Owned Restricted Subsidiary owned by such Person and its Restricted Subsidiaries, minus

(b) all non-cash items increasing Consolidated Net Income for such period (other than any such non-cash item to the extent that it will result in the receipt of cash payments in any future period).

Notwithstanding the foregoing clause (a), the provision for taxes and the depreciation, amortization and non-cash items of a Restricted Subsidiary shall be added to Consolidated Net Income to compute EBITDA only to the extent (and in the same proportion) that the net income of such Restricted Subsidiary was included in calculating Consolidated Net Income and only if a corresponding amount would be permitted at the date of determination to be dividended to such Person by such Restricted Subsidiary without prior approval (that has not been obtained), pursuant to the terms of its charter and all agreements, instruments, judgments, decrees, orders, statutes, rules and governmental regulations applicable to such Restricted Subsidiary or its shareholders or members.

"Event of Default" has the meaning set forth under Section 6.01 of this Indenture.

"Exchange Act" means the Securities Exchange Act of 1934, as amended.

"Exchange Notes" means the notes issued in exchange for the Notes issued in this offering or any Additional Note pursuant to the Registration Rights Agreement or any similar registration rights agreement with respect to any Additional Notes.

"Exchange Offer" means the exchange offer by the Issuer and the Guarantors of the Exchange Notes for original Notes to be effected pursuant to the Registration Rights Agreement or any similar Registration Rights Agreement with respect to any Additional Notes.

"Exchange Offer Registration Statement" means the Exchange Offer Registration Statement as defined in the Registration Rights Agreement.

"Fair Market Value" means, with respect to any Property, the price that could be negotiated in an arm's-length free market transaction, for cash, between a willing seller and a willing buyer, neither of whom is under undue pressure or compulsion to complete the transaction. Fair Market Value shall be determined, except as otherwise provided,

(a) if such Property has a Fair Market Value equal to or less than $5,000,000, by any Officer, or

(b) if such Property has a Fair Market Value in excess of $5,000,000, by at least a majority of the disinterested members of the Board of Directors and evidenced by a Board Resolution, dated within 30 days of the relevant transaction, delivered to the Trustee.

"Foreign Subsidiary" means any Subsidiary of Arch Western that is not organized under the laws of the United States of America or any state thereof or the District of Columbia.

"GAAP" means United States generally accepted accounting principles as in effect on the Issue Date, including those set forth in:

(a) the opinions and pronouncements of the Accounting Principles Board of the American Institute of Certified Public Accountants,

(b) the statements and pronouncements of the Financial Accounting Standards Board,

(c) such other statements by such other entity as approved by a significant segment of the accounting profession, and

(d) the rules and regulations of the Commission governing the inclusion of financial statements (including pro forma financial statements) in periodic reports required to be filed pursuant to Section 13 of the Exchange Act, including opinions and pronouncements in staff accounting bulletins and similar written statements from the accounting staff of the Commission.

"Guarantee" means any obligation, contingent or otherwise, of any Person directly or indirectly guaranteeing any Debt of any other Person and any obligation, direct or indirect, contingent or otherwise, of such Person:

(a) to purchase or pay (or advance or supply funds for the purchase or payment of) such Debt of such other Person (whether arising by virtue of partnership arrangements, or by agreements to keep-well, to purchase assets, goods, securities or services, to take-or-pay or to maintain financial statement conditions or otherwise), or

(b) entered into for the purpose of assuring in any other manner the obligee against loss in respect thereof (in whole or in part);

provided, however, that the term "Guarantee" shall not include:

(1) endorsements for collection or deposit in the ordinary course of business, or

(2) a contractual commitment by one Person to invest in another Person for so long as such Investment is reasonably expected to constitute a Permitted Investment under clause (a), (b) or (c) of the definition of "Permitted Investment."

The term "Guarantee" used as a verb has a corresponding meaning.

"Guarantor" means each of Arch Western, the Subsidiary Guarantors and any Subsidiary of Arch Western that has issued a Guarantee in favor of the Notes.

"Hedging Obligation" of any Person means any obligation of such Person pursuant to any Interest Rate Agreement, Currency Exchange Protection Agreement, Commodity Price Protection Agreement or any other similar agreement or arrangement.

"Holder" means a Person in whose name a Note is registered in the Security Register.

"Incur" means, with respect to any Debt or other obligation of any Person, to create, issue, incur (by merger, conversion, exchange or otherwise), extend, assume, Guarantee or become liable in respect of such Debt or other obligation or the recording, as required pursuant to GAAP or otherwise, of any such Debt or obligation on the balance sheet of such Person (and "Incurrence" and "Incurred" shall have meanings correlative to the foregoing); provided, however, that any Debt or other obligations of a Person existing at the time such Person becomes a Subsidiary (whether by merger, consolidation, acquisition or otherwise) shall be deemed to be Incurred by such Subsidiary at the time it becomes a Subsidiary; and provided further, however, that solely for purposes of determining compliance with Section 4.06 of this Indenture amortization of debt discount shall not be deemed to be the Incurrence of Debt, provided that in the case of Debt sold at a discount, the amount of such Debt Incurred shall at all times be the aggregate principal amount at Stated Maturity.

"Indenture" means this instrument as originally executed or as it may from time to time be supplemented or amended by one or more indentures supplemental hereto entered into pursuant to the applicable provisions hereof, including, for all purposes of this instrument and any such supplemental indenture following the effectiveness of a registration statement under the Securities Act covering the Notes, the provisions of the TIA that are deemed to be a part of and govern this instrument, and any such supplemental indenture, respectively.

"Indenture Obligations" means the obligations of the Issuer and any other obligor under this Indenture or under the Notes, including any Guarantor, to pay principal of, premium, if any, and interest when due and payable, and all other amounts due or to become due under or in connection with this Indenture, the Notes and the performance of all other obligations to the Trustee and the Holders under this Indenture and the Notes, according to the respective terms thereof.

"Independent Financial Advisor" means an investment banking firm of national standing or any third party appraiser of national standing, provided that such firm or appraiser is not an Affiliate of Arch Western.

"Initial Purchasers" means Citigroup Global Markets Inc., J.P. Morgan Securities Inc., Morgan Stanley & Co. Incorporation, PNC Capital Markets, Inc., Merrill Lynch, Pierce, Fenner & Smith Incorporated, Credit Suisse First Boston LLC, Credit Lyonnais Securities (USA) Inc., U.S. Bancorp Piper Jaffray Inc., BNY Capital Markets, Inc. and BNP Paribas Securities Corp..

"Interest Payment Date" means January 1 and July 1 of each year to Stated Maturity.

"Interest Rate Agreement" means, for any Person, any interest rate swap agreement, interest rate cap agreement, interest rate collar agreement or other similar agreement designed to protect against fluctuations in interest rates.

"Investment" by any Person means any direct or indirect loan, advance or other extension of credit or capital contribution (by means of transfers of cash or other Property to others or payments for Property or services for the account or use of others, or otherwise) to, or Incurrence of a Guarantee of any obligation of, or purchase or acquisition of Capital Stock, bonds, notes, debentures or other securities or evidence of Debt issued by, any other Person. For purposes of the covenants described under Section 4.08 and 4.15 of this Indenture and the definition of "Restricted Payment," the term "Investment" shall include the portion (proportionate to Arch Western's or a Restricted Subsidiary's equity interest in such Subsidiary) of the Fair Market Value of the net assets of any Subsidiary of Arch Western at the time that such Subsidiary is designated an Unrestricted Subsidiary; provided, however, that upon a redesignation of such Subsidiary as a Restricted Subsidiary, Arch Western shall be deemed to continue to have a permanent "Investment" in an Unrestricted Subsidiary of an amount (if positive) equal to:

(a) Arch Western's "Investment" in such Subsidiary at the time of such redesignation, less

(b) the portion (proportionate to Arch Western's or a Restricted Subsidiary's equity interest in such Subsidiary) of the Fair Market Value of the net assets of such Subsidiary at the time of such redesignation.

In determining the amount of any Investment made by transfer of any Property other than cash, such Property shall be valued at its Fair Market Value at the time of such Investment.

"Investment Grade Rating" means a rating equal to or higher than Baa3 (or the equivalent) by Moody's and BBB- (or the equivalent) by S&P.

"Issue Date" means the date on which the Notes are initially issued.

"Issuer" means the party named as such in this Indenture until a successor replaces it and, thereafter, means the successor and, for purposes of any provision contained herein and required by the TIA, each other obligor on the Notes.

"Issuer Order" means a written order signed in the name of the Issuer by any Person authorized by a resolution of the Members of the Issuer or such other similar governing body or Person of the Issuer as set forth in the Issuer's Limited Liability Company Agreement dated June 4, 2003.

"Lien" means, with respect to any Property of any Person, any mortgage or deed of trust, pledge, hypothecation, assignment, deposit arrangement, security interest, lien, charge, easement (other than any easement not materially impairing usefulness or marketability), encumbrance, preference, priority or other security agreement or preferential arrangement of any kind or nature whatsoever on or with respect to such Property (including any Capital Lease Obligation, conditional sale or other title retention agreement having substantially the same economic effect as any of the foregoing or any Sale and Leaseback Transaction).

"LLC Agreement" means the Limited Liability Company Agreement of Arch Western Resources LLC dated as of June 1, 1998 between Arch Western Acquisition Corporation and Delta Housing, Inc.

"Maturity" means, with respect to any indebtedness, the date on which any principal of such indebtedness becomes due and payable as therein or herein provided, whether at the Stated Maturity with respect to such principal or by declaration of acceleration, call for redemption or purchase or otherwise.

"Moody's" means Moody's Investors Service, Inc. or any successor to the rating agency business thereof.

"Net Available Cash" from any Asset Sale means cash payments received therefrom (including any cash payments received by way of deferred payment of principal pursuant to a note or installment receivable or otherwise, but only as and when received, but excluding any other consideration received in the form of assumption by the acquiring Person of Debt or other obligations relating to the Property that is the subject of such Asset Sale or received in any other non-cash form), in each case net of:

(a) all legal, title and recording tax expenses, commissions and other fees and expenses incurred, and all Federal, state, provincial, foreign and local taxes required to be accrued as a liability under GAAP, as a consequence of such Asset Sale,

(b) all payments made on or in respect of any Debt that is secured by any Property subject to such Asset Sale, in accordance with the terms of any Lien upon such Property, or which must by its terms, or in order to obtain a necessary consent to such Asset Sale, or by applicable law, be repaid out of the proceeds from such Asset Sale,

(c) all distributions and other payments required to be made to minority interest Holders in Subsidiaries or joint ventures as a result of such Asset Sale, and

(d) the deduction of appropriate amounts provided by the seller as a reserve, in accordance with GAAP, against any liabilities associated with the Property disposed of in such Asset Sale and retained by Arch Western or any Restricted Subsidiary after such Asset Sale.

"Note Guarantees" means the Arch Western Guarantee and the Subsidiary Guarantees.

"Note Pledge Agreement" means the Note Pledge Agreement dated as of June 25, 2003 made by Arch Western in favor of the Trustee.

"Officer" means the Chief Executive Officer, the President, the Chief Financial Officer or any Executive Vice President of Arch Western, or, in the event no such officers exist, of Arch Coal or the Person who controls Arch Western.

"Officers' Certificate" means a certificate signed by two Officers, at least one of whom shall be the principal executive officer or principal financial officer, and delivered to the Trustee.

"Opinion of Counsel" means a written opinion from legal counsel who is acceptable to the Trustee. The counsel may be an employee of or counsel to Arch Western, the Issuer or the Trustee.

"Pari Passu Debt" means (a) with respect to the Notes, any Debt of the Issuer that ranks pari passu in right of payment to the Notes and (b) with respect to any Guarantees, Debt which ranks pari passu in right of payment to such Guarantees.

"Permitted Business" means any business that is related, ancillary or complementary to the businesses of Arch Western and its Restricted Subsidiaries on the Issue Date.

"Permitted Investments" means any Investment by Arch Western or its Restricted Subsidiary in:

(a) Arch Western or any Restricted Subsidiary,

(b) any Person that will, upon the making of such Investment, become a Restricted Subsidiary, provided that the primary business of such Restricted Subsidiary is a Permitted Business;

(c) any Person if as a result of such Investment such Person is merged or consolidated with or into, or transfers or conveys all or substantially all its Property to, Arch Western or its Restricted Subsidiary, provided that such Person's primary business is a Permitted Business;

(d) Cash Equivalents;

(e) receivables owing to Arch Western or its Restricted Subsidiary, if created or acquired in the ordinary course of business and payable or dischargeable in accordance with customary trade terms; provided, however, that such trade terms may include such concessionary trade terms as Arch Western or such Restricted Subsidiary deems reasonable under the circumstances;

(f) payroll, travel and similar advances to cover matters that are expected at the time of such advances ultimately to be treated as expenses for accounting purposes and that are made in the ordinary course of business;

(g) loans and advances to employees made in the ordinary course of business permitted by law and consistent with past practices of Arch Western or such Restricted Subsidiary, as the case may be; provided that such loans and advances do not exceed $2.5 million in the aggregate at any one time outstanding;

(h) stock, obligations or other securities received in settlement of debts created in the ordinary course of business and owing to Arch Western or a Restricted Subsidiary or in satisfaction of judgments;

(i) any Person to the extent such Investment represents the non-cash portion of the consideration received in connection with an Asset Sale consummated in compliance with the covenant described under Section 4.09 of this Indenture.

(j) Investments in Permitted Joint Ventures in an aggregate amount, together with all other Investments made pursuant to this clause (j), not to exceed 5.0% of Consolidated Net Tangible Assets; and

(k) other Investments made for Fair Market Value that do not exceed $50.0 million in the aggregate outstanding at any one time.

"Permitted Joint Ventures" means any Person which is, directly or indirectly, through its Subsidiaries or otherwise, engaged principally in a Permitted Business, and the Capital Stock (or securities convertible into Capital Stock) of which is owned by Arch Western or one or more of its Restricted Subsidiaries and one or more other Person other than Arch Coal or any of its Subsidiaries or Affiliates.

"Permitted Liens" means:

(a) Liens to secure Debt permitted to be Incurred under clause (b) of the second paragraph of the covenant described under Section 4.06 of this Indenture and other purchase money Liens to finance Property of Arch Western or any of its Restricted Subsidiaries; provided that any such Lien may not extend to any Property of Arch Western or any Restricted Subsidiary, other than the Property acquired, constructed or leased and any improvements or accessions to such Property (including, in the case of the acquisition of Capital Stock of a Person that becomes a Restricted Subsidiary, Liens on the Property of the Person whose Capital Stock was acquired);

(b) Liens for taxes, assessments or governmental charges or levies on the Property of Arch Western or any Restricted Subsidiary if the same shall not at the time be delinquent or thereafter can be paid without penalty, or are being contested in good faith and by appropriate proceedings promptly instituted and diligently concluded, provided that any reserve or other appropriate provision that shall be required in conformity with GAAP shall have been made therefore;

(c) Liens imposed by law, such as carriers', warehousemen's and mechanics' Liens and other similar Liens, on the Property of Arch Western or any Restricted Subsidiary arising in the ordinary course of business and securing payment of obligations that are not more than 60 days past due or are being contested in good faith and by appropriate proceedings;

(d) Liens on the Property of Arch Western or any Restricted Subsidiary Incurred in the ordinary course of business to secure performance of obligations with respect to statutory or regulatory requirements, performance or return-of-money bonds, surety bonds or other obligations of a like nature and Incurred in a manner consistent with industry practice, in each case which are not Incurred in connection with the borrowing of money, the obtaining of advances or credit or the payment of the deferred purchase price of Property and which do not in the aggregate impair in any material respect the use of Property in the operation of the business of Arch Western and the Restricted Subsidiaries taken as a whole;

(e) Liens on Property at the time Arch Western or any Restricted Subsidiary acquired such Property, including any acquisition by means of a merger or consolidation with or into Arch Western or any Restricted Subsidiary; provided, however, that any such Lien may not extend to any other Property of Arch Western or any Restricted Subsidiary; provided further, however, that

such Liens shall not have been Incurred in anticipation of or in connection with the transaction or series of transactions pursuant to which such Property was acquired by Arch Western or any Restricted Subsidiary;

(f) Liens on the Property of a Person at the time such Person becomes a Restricted Subsidiary; provided, however, that any such Lien may not extend to any other Property of Arch Western or any other Restricted Subsidiary that is not a direct Subsidiary of such Person; provided further, however, that any such Lien was not Incurred in anticipation of or in connection with the transaction or series of transactions pursuant to which such Person became a Restricted Subsidiary;

(g) pledges or deposits by Arch Western or any Restricted Subsidiary under workers' compensation laws, unemployment insurance laws or similar legislation, or good faith deposits in connection with bids, tenders, contracts (other than for the payment of Debt) or leases to which Arch Western or any Restricted Subsidiary is party, or deposits to secure public or statutory obligations of Arch Western, or deposits for the payment of rent, in each case Incurred in the ordinary course of business;

(h) utility easements, building restrictions and such other encumbrances or charges against real Property as are of a nature generally existing with respect to properties of a similar character;

(i) Liens existing on the Issue Date not otherwise described in clauses (a) through (h) above;

(j) Liens on the Property of Arch Western or any Restricted Subsidiary to secure any Refinancing, in whole or in part, of any Debt secured by Liens referred to in clause (a), (e), (f) or (i) above; provided, however, that any such Lien shall be limited to all or part of the same Property that secured the original Lien (together with improvements and accessions to such Property), and the aggregate principal amount of Debt that is secured by such Lien shall not be increased to an amount greater than the sum of:

(1) the outstanding principal amount, or, if greater, the committed amount, of the Debt secured by Liens described under clause (a), (e), (f) or (i) above, as the case may be, at the time the original Lien became a Permitted Lien under this Indenture, and

(2) an amount necessary to pay any fees and expenses, including premiums and defeasance costs, incurred by Arch Western or such Restricted Subsidiary in connection with such Refinancing;

(k) Liens on the Arch Coal Notes to secure Debt under a credit facility of Arch Western in an aggregate principal amount not to exceed $100,000,000 at any one time outstanding; and

(l) Liens not otherwise permitted by clauses (a) through (k) above encumbering Property having an aggregate Fair Market Value not in excess of 5.0% of Consolidated Net Tangible Assets.

"Permitted Refinancing Debt" means any Debt that Refinances any other Debt, including any successive Refinancings, so long as:

(a) such Debt is in an aggregate principal amount (or if Incurred with original issue discount, an aggregate issue price) not in excess of the sum of:

(1) the aggregate principal amount (or if Incurred with original issue discount, the aggregate accreted value) then outstanding of the Debt being Refinanced, and

(2) an amount necessary to pay any fees and expenses, including premiums and defeasance costs, related to such Refinancing,

(b) the Average Life of such Debt is equal to or greater than the Average Life of the Debt being Refinanced,

(c) the Stated Maturity of such Debt is no earlier than the Stated Maturity of the Debt being Refinanced, and

(d) the new Debt shall not be senior in right of payment to the Debt that is being Refinanced;

provided, however, that Permitted Refinancing Debt shall not include:

(x) Debt of a Subsidiary of Arch Western that is not a Subsidiary Guarantor that Refinances Debt of Arch Western or a Subsidiary Guarantor, or

(y) Debt of Arch Western or a Restricted Subsidiary that Refinances Debt of an Unrestricted Subsidiary.

"Person" means any individual, corporation, company (including any limited liability company), association, partnership, joint venture, trust, unincorporated organization, government or any agency or political subdivision thereof or any other entity.

"Possessory Collateral" means any Collateral that, under the Uniform Commercial Code of the applicable jurisdiction, may only be perfected by the secured party's taking, and maintaining, possession thereof, with or without any necessary endorsement.

"Preferred Stock" means any Capital Stock of a Person, however designated, which entitles the holder thereof to a preference with respect to the payment of dividends, or as to the distribution of assets upon any voluntary or involuntary liquidation or dissolution of such Person, over shares of any other class of Capital Stock issued by such Person.

"Preferred Stock Dividends" of a Person means all dividends with respect to Preferred Stock of Restricted Subsidiaries of such Person held by Persons other than such Person or a Wholly Owned Restricted Subsidiary of such Person. The amount of any such dividend shall be equal to the quotient of such dividend divided by the difference between one and the maximum statutory federal income rate (expressed as a decimal number between 1 and 0) then applicable to

the issuer of such Preferred Stock (or if the issuer is a limited liability company, the tax rate used to calculate the Tax Amount).

"pro forma" means, with respect to any calculation made or required to be made pursuant to the terms hereof, a calculation performed in accordance with Article 11 of Regulation S-X promulgated under the Securities Act, as interpreted in good faith by the Board of Directors after consultation with the independent certified public accountants of Arch Western, or otherwise a calculation made in good faith by the Board of Directors after consultation with the independent certified public accountants of Arch Western, as the case may be.

"Property" means, with respect to any Person, any interest of such Person in any kind of property or asset, whether real, personal or mixed, or tangible or intangible, including Capital Stock in, and other securities of, any other Person. For purposes of any calculation required pursuant to this Indenture, the value of any Property shall be its Fair Market Value.

"Public Equity Offering" means an underwritten public offering of common Capital Stock (other than Disqualified Stock) of Arch Western pursuant to an effective registration statement under the Securities Act.

"Purchase Money Debt" means Debt:

(a) consisting of the deferred purchase price of Property, conditional sale obligations, obligations under any title retention agreement, other purchase money obligations and obligations in respect of industrial revenue bonds, in each case where the maturity of such Debt does not exceed the anticipated useful life of the Property being financed, and

(b) Incurred to finance the acquisition, construction or lease by Arch Western or a Restricted Subsidiary of such Property, including additions and improvements thereto;

provided, however, that such Debt is Incurred within 180 days after the acquisition, construction or lease of such Property by Arch Western or such Restricted Subsidiary.

"Qualified Capital Stock" of any Person means any and all Capital Stock of such Person other than Redeemable Capital Stock.

"QIB" means a "Qualified Institutional Buyer" as defined under Rule 144A.

"Rating Agency" means S&P and/or Moody's.

"Record Date" for the interest payable on any Interest Payment Date means June 15 or December 15 (whether or not a Business Day), as the case may be, next preceding such Interest Payment Date.

"Redemption Date," when used with respect to any Note to be redeemed, in whole or in part, means the date fixed for such redemption by or pursuant to this Indenture.

"Redemption Price," when used with respect to any Note to be redeemed, means the price at which it is to be redeemed pursuant to this Indenture.

"Refinance" means, in respect of any Debt, to refinance, extend, renew, refund or Repay, or to issue other Debt, in exchange or replacement for, such Debt. "Refinanced" and "Refinancing" shall have correlative meanings.

"Registration Rights Agreement" means the Registration Rights Agreement relating to the Notes dated June 25, 2003, among the Issuer, Arch Coal, the Guarantors and the Initial Purchasers.

"Regulation S" means Regulation S under the Securities Act (including any successor regulation thereto), as it may be amended from time to time.

"Repay" means, in respect of any Debt, to repay, prepay, repurchase, redeem, legally defease or otherwise retire such Debt. "Repayment" and "Repaid" shall have correlative meanings. For purposes of the covenant described under Section 4.09 of this Indenture and the definition of "Consolidated Interest Coverage Ratio," Debt shall be considered to have been Repaid only to the extent the related loan commitment, if any, shall have been permanently reduced in connection therewith.

"Restricted Payment" means:

(a) any dividend or distribution (whether made in cash, securities or other Property) declared or paid on or with respect to any shares of Capital Stock of Arch Western or any Restricted Subsidiary (including any payment in connection with any merger or consolidation with or into Arch Western or any Restricted Subsidiary), except for any dividend or distribution that is made solely to Arch Western or a Restricted Subsidiary (and, if such Restricted Subsidiary is not a Wholly Owned Restricted Subsidiary, to the other shareholders or members of such Restricted Subsidiary on a pro rata basis or on a basis that results in the receipt by Arch Western or a Restricted Subsidiary of dividends or distributions of greater value than it would receive on a pro rata basis) or any dividend or distribution payable solely in shares of Capital Stock (other than Disqualified Stock) of Arch Western;

(b) the purchase, repurchase, redemption, acquisition or retirement for value of any Capital Stock of Arch Western or any Restricted Subsidiary (other than from Arch Western or a Restricted Subsidiary) or any securities exchangeable for or convertible into any such Capital Stock, including the exercise of any option to exchange any Capital Stock (other than for or into Capital Stock of Arch Western that is not Disqualified Stock);

(c) the purchase, repurchase, redemption, acquisition or retirement for value, prior to the date for any scheduled maturity, sinking fund or amortization or other installment payment, of any Subordinated Obligation (other than the purchase, repurchase or other acquisition of any Subordinated Obligation purchased in anticipation of satisfying a scheduled maturity, sinking fund or amortization or other installment obligation, in each case due within one year of the date of acquisition);

(d) any Investment (other than Permitted Investments) in any Person; or

(e) the issuance, sale or other disposition of Capital Stock of any Restricted Subsidiary to a Person other than Arch Western or another Restricted Subsidiary if the result

thereof is that such Restricted Subsidiary shall cease to be a Restricted Subsidiary, in which event the amount of such "Restricted Payment" shall be the Fair Market Value of the remaining interest, if any, in such former Restricted Subsidiary held by Arch Western and the other Restricted Subsidiaries.

"Restricted Subsidiary" means any Subsidiary of Arch Western other than an Unrestricted Subsidiary.

"Rule 144" means Rule 144 under the Securities Act (including any successor regulation thereto), as it may be amended from time to time.

"Rule 144A" means Rule 144A under the Securities Act (including any successor regulation thereto), as it may be amended from time to time.

"S&P" means Standard and Poor's Rating Services or any successor to the rating agency business thereof and its successors.

"Sale and Leaseback Transaction" means any direct or indirect arrangement relating to Property now owned or hereafter acquired whereby Arch Western or a Restricted Subsidiary transfers such Property to another Person and Arch Western or a Restricted Subsidiary leases it from such Person.

"SEC" means the United States Securities and Exchange Commission.

"Securities Act" means the U.S. Securities Act of 1933, as amended, or any successor statute, and the rules and regulations promulgated by the SEC thereunder.

"Security Documents" means the Note Pledge Agreement, any Collateral Trust Agreement and any other documents or instruments pursuant to which a Lien on the Arch Coal Notes is granted to secure the Obligations (as defined in the Note Pledge Agreement).

"Shelf Registration Statement" means the Shelf Registration Statement as defined in the Registration Rights Agreement.

"Significant Subsidiary" means any Subsidiary that would be a "significant subsidiary" of Arch Western within the meaning of Rule 1-02 under Regulation S-X promulgated by the Commission.

"Special Interest" has the meaning set forth in Exhibit A.

"Stated Maturity" means, with respect to any security, the date specified in such security as the fixed date on which the payment of principal of such security is due and payable, including pursuant to any mandatory redemption provision (but excluding any provision providing for the repurchase of such security at the option of the holder thereof upon the happening of any contingency beyond the control of the issuer unless such contingency has occurred).

"Subordinated Obligation" means any Debt of Arch Western or a Subsidiary Guarantor (whether outstanding on the Issue Date or thereafter Incurred) that is subordinate or junior in right of payment to the Note Guarantees pursuant to a written agreement to that effect.

"Subsidiary" means, in respect of any Person, any corporation, company (including any limited liability company), association, partnership, joint venture or other business entity of which at least a majority of the total voting power of the Voting Stock is at the time owned or controlled, directly or indirectly, by:

(a) such Person,

(b) such Person and one or more Subsidiaries of such Person, or

(c) one or more Subsidiaries of such Person.

"Subsidiary Guarantee" means a Guarantee by a Subsidiary Guarantor of all of the Issuer's obligations with respect to the Notes.

"Subsidiary Guarantor" means any Subsidiary of Arch Western that executes a Guarantee of the Notes pursuant to Article 10 hereof.

"Surviving Person" means the surviving Person formed by a merger, consolidation or amalgamation and, for purposes of Section 5.01 of this Indenture, a Person to whom all or substantially all of the Property of Arch Western or a Subsidiary Guarantor is sold, transferred, assigned, leased, conveyed or otherwise disposed.

"Tax Amount" means the portion of the Hypothetical Income Tax Amount (as defined in the LLC Agreement as in effect on the Issue Date) allocated to the members of Arch Western, other than Arch Coal or any of its Affiliates.

"Tax Distribution" means a distribution in respect of taxes pursuant to clause (e) of the second paragraph of Section 4.08 of this Indenture.

"TIA" means the United States Trust Indenture Act of 1939 as in effect on the date hereof; provided, however, that in the event the Trust Indenture Act of 1939 is amended after such date, "TIA" means, to the extent required by any such amendment, the Trust Indenture Act of 1939, as so amended.

"Trustee" means the party named as such in this Indenture until a successor replaces it in accordance with the provisions of this Indenture and, thereafter, means the successor.

"Trust Officer" means, when used with respect to the Trustee, any vice president, assistant vice president, assistant treasurer or trust officer within the Corporate Trust Division of the Trustee (or any successor unit, department or division of the Trustee) located at the Corporate Trust Office of the Trustee who has direct responsibility for the administration of this Indenture and, for the purposes of Sections 7.01(c)(ii) and the second sentence of Section 6.01(b) shall also include any other officer of the Trustee to whom any corporate trust matter is referred because of his or her knowledge of and familiarity with the particular subject.

"Unrestricted Subsidiary" means:

(a) any Subsidiary of Arch Western that is designated after the Issue Date as an Unrestricted Subsidiary as permitted or required pursuant to the covenant described under Section 4.15 of this Indenture and is not thereafter redesignated as a Restricted Subsidiary as permitted pursuant thereto; and

(b) any Subsidiary of an Unrestricted Subsidiary.

After the date upon which Arch Western and its Restricted Subsidiaries cease to be subject to the Specified Covenants, all Unrestricted Subsidiaries shall be Restricted Subsidiaries.

"U.S. Government Obligations" means direct obligations (or certificates representing an ownership interest in such obligations) of the United States of America (including any agency or instrumentality thereof) for the payment of which the full faith and credit of the United States of America is pledged and which are not callable or redeemable at the issuer's option.

"Voting Stock" of any Person means all classes of Capital Stock or other interests (including partnership interests) of such Person then outstanding and normally entitled (without regard to the occurrence of any contingency) to vote in the election of directors, managers or trustees thereof.

"Wholly Owned Restricted Subsidiary" of a Person means, at any time, a Restricted Subsidiary all the Voting Stock of which (except directors' qualifying shares) is at such time owned, directly or indirectly, by such Person and its other Wholly Owned Subsidiaries.

SECTION 1.02. Other Definitions.

Term	Defined in Section
"Additional Notes"	Recitals
"Affiliate Transaction"	4.10
"Allocable Excess Proceeds"	4.09
"Authorized Agent"	12.09
"Change of Control Offer"	4.11(a)
"Change of Control Purchase Price"	4.11(a)
"Defaulted Interest"	2.12
"Event of Default"	6.01(a)
"Excess Proceeds"	4.09(b)
"Exchange Global Note"	2.01(b)
"Global Notes"	2.01 (c)
"incorporated provision"	12.01
"Notes"	Recitals
"Notice of Default"	6.01(a)(iii)
"Obligations"	10.01(a)
"Original Notes"	Recitals
"Participants"	2.01 (c)
"Paying Agent"	2.03
"Permitted Debt"	4.06
"Prepayment Offer"	4.09
"Recovery Currency"	12.15
"Registrar"	2.03
"Regulation S Global Note"	2.01 (c)
"Restricted Global Note"	2.01 (c)
"Security Register"	2.03
"Transfer Agent"	2.03

SECTION 1.03. Incorporation by Reference of Trust Indenture Act. The mandatory provisions of the TIA that are required to be a part of and govern indentures qualified under the TIA are incorporated by reference in and are a part of this Indenture, whether or not this Indenture is so qualified. The following TIA terms have the following meanings as used in this Indenture:

"Commission" means the SEC.

"indenture securities" means the Notes.

"indenture securities holder" means a Holder.

"indenture to be qualified" means this Indenture.

"indenture trustee" or "institutional trustee" means the Trustee.

"obligor" on the "indenture securities" means the Issuer and the Guarantors.

All other TIA terms used in this Indenture that are defined by the TIA, defined by TIA reference to another statute or defined by SEC rule under the TIA have the meanings assigned to them by such definitions.

SECTION 1.04. Rules of Construction. Unless the context otherwise requires:

(i) a term has the meaning assigned to it;

(ii) an accounting term not otherwise defined has the meaning assigned to it in accordance with GAAP;

(iii) "or" is not exclusive;

(iv) "including" or "include" means including or include without limitation;

(v) words in the singular include the plural and words in the plural include the singular;

(vi) "interest" shall include Special Interest, if any;

(vii) unsecured or unguaranteed Debt shall not be deemed to be subordinate or junior to secured or guaranteed Debt merely by virtue of its nature as unsecured or unguaranteed Debt;

(viii) the words "herein," "hereof" and "hereunder" and other words of similar import refer to this Indenture as a whole and not to any particular Article, Section, clause or other subdivision

(ix) unless otherwise specified herein, all accounting terms used herein shall be interpreted, all accounting determinations hereunder shall be made, and all financial statements required to be delivered hereunder shall be prepared in accordance with GAAP as in effect from time to time, applied on a basis consistent with the most recent audited consolidated financial statements of the Company;

(x) "$," "U.S. Dollars" and "United States Dollars" each refer to United States dollars, or such other money of the United States that at the time of payment is legal tender for payment of public and private debts; and

(xi) whenever in this Indenture there is mentioned, in any context, principal, interest or any other amount payable under or with respect to any Note, such mention shall be deemed to include mention of the payment of Special Interest to the extent that, in such context, Special Interest is, was or would be payable in respect thereof.

ARTICLE TWO
THE NOTES

SECTION 2.01. The Notes. (a) The Trustee shall initially authenticate Notes for original issue on the Issue Date in an aggregate principal amount of $700,000,000 upon a written order of the Issuer in the form of an Officers' Certificate of the Company (other than as provided in Section 2.07). The Company may, as long as permitted under this Indenture, issue and the Trustee shall authenticate (1) the Exchange Notes and (2) Additional Notes after the Issue Date in unlimited amount for original issue upon a written order of the Company in the form of an Officers' Certificate in aggregate principal amount as specified in such order. Each such written order shall specify the amount of Notes to be authenticated and the date on which such Notes are to be authenticated.

(b) Form and Dating. The Notes and the Trustee's certificate of authentication shall be substantially in the form of Exhibit A hereto with such appropriate insertions, omissions, substitutions and other variations as are required or permitted by this Indenture. The Notes may have notations, legends or endorsements required by law, the rules of any securities exchange or usage. The Issuer shall approve the form of the Notes. Each Note shall be dated the date of its authentication. The terms and provisions contained in the form of the Notes shall constitute and are hereby expressly made a part of this Indenture. The Notes shall be issued only in registered form without coupons and only in minimum denominations of $1,000 in principal amount and any integral multiples of $1,000 in excess thereof.

(c) Global Notes. Notes offered and sold to QIBs in reliance on Rule 144A as provided in the Purchase Agreement shall be issued initially in the form of one or more Global Notes substantially in the form of Exhibit A hereto, with such applicable legends as are provided in Exhibit A hereto, except as otherwise permitted herein (the "Restricted Global Note"), which shall be deposited on behalf of the purchasers of the Notes represented thereby with the Depositary, and registered in the name of the Depositary or its nominee, as the case may be, duly executed by the Issuer and authenticated by the Trustee (or its agent in accordance with Section 2.02) as hereinafter provided. The aggregate principal amount of the Restricted Global Note may from time to time be increased or decreased by adjustments made by the Registrar on Schedule A to the Restricted Global Note and recorded in the Security Register, as hereinafter provided. Notes offered and sold in reliance on Regulation S shall be issued initially in the form of one or more Global Notes substantially in the form of Exhibit A hereto, with such applicable legends as are provided in Exhibit A hereto, except as otherwise permitted herein (the "Regulation S Global Note"), which shall be deposited on behalf of the purchasers of the Notes represented thereby with the Depositary, and registered in the name of the Depositary or its nominee, as the case may be, duly executed by the Issuer and authenticated by the Trustee (or an authenticating agent appointed by the Trustee in accordance with Section 2.02) as hereinafter provided. The aggregate principal amount of the Regulation S Global Note may from time to time be increased or decreased by adjustments made by the Registrar on Schedule A to the Regulation S Global Note and recorded in the Security Register, as hereinafter provided.

If and when issued, Exchange Notes offered to Holders, as provided in the Registration Rights Agreement, shall be issued initially in the form of one or more Global Notes substantially in the form of Exhibit A hereto, with such applicable omissions and legends as are provided in

Exhibit A hereto, except as otherwise permitted herein (the "Exchange Global Note"), which shall be deposited on behalf of the Holders of the Exchange Notes represented thereby with the Depositary, and registered in the name of the Depositary or its nominee, as the case may be, duly executed by the Issuer and authenticated by the Trustee (or an authenticating agent appointed by the Trustee in accordance with Section 2.02) as hereinafter provided. The aggregate principal amount of the Exchange Global Note may from time to time be increased or decreased by adjustments made by the Registrar on Schedule A to the Exchange Global Note and recorded in the Security Register, as hereinafter provided.

Upon the transfer, exchange or replacement of any Original Note remaining outstanding after the consummation of an Exchange Offer, the Registrar shall deliver such new Original Note only in global form, subject to Section 2.10, and such new Original Note shall continue to bear the applicable legends set forth in Exhibit A hereto. In the case of a Restricted Global Note, such legends shall include the private placement legend unless (x) the appropriate period referred to in Rule 144(k) under the Securities Act has elapsed or (y) there is delivered to the Registrar an opinion of counsel reasonably satisfactory to the Issuer and the Trustee to the effect that neither such legend nor the related restrictions on transfer are required in order to maintain compliance with the Securities Act.

Upon the transfer, exchange or replacement of any Note pursuant to a Shelf Registration Statement, the Registrar shall deliver such new Note only in global form, subject to Section 2.10, and such new Note shall continue to bear the applicable legends set forth in Exhibit A hereto; provided, however, that such new Note shall not be required to bear the private placement legend set forth in Exhibit A hereto. Beneficial interests in any such new Note shall be reflected in the Exchange Global Note.

(d) Book-Entry Provisions. This Section 2.01(d) shall apply to the Restricted Global Note, the Regulation S Global Note, and, if and when issued, the Exchange Global Note (collectively, the "Global Notes") deposited with or on behalf of the Depositary.

Members of, or participants and account holders in, DTC ("Participants") shall have no rights under this Indenture with respect to any Global Note held on their behalf by the Depositary, or by the Trustee or any custodian of the Depositary or under such Global Note, and the Depositary or its nominee may be treated by the Issuer, a Guarantor, the Trustee and any agent of the Issuer, a Guarantor or the Trustee as the sole owner of such Global Note for all purposes whatsoever. Notwithstanding the foregoing, nothing herein shall prevent the Issuer, a Guarantor, the Trustee or any agent of the Issuer, a Guarantor or the Trustee from giving effect to any written certification, proxy or other authorization furnished by the Depositary or impair, as between the Depositary and their Participants, the operation of customary practices of such persons governing the exercise of the rights of a Holder of a beneficial interest in any Global Note.

Subject to the provisions of Section 2.10(b), the registered Holder of a Global Note may grant proxies and otherwise authorize any Person, including Participants and Persons that may hold interests through Participants, to take any action that a Holder is entitled to take under this Indenture or the Notes.

Except as provided in Section 2.10, owners of a beneficial interest in Global Notes will not be entitled to receive physical delivery of certificated Notes.

SECTION 2.02. Execution and Authentication. An authorized officer shall sign the Notes for the Issuer by manual or facsimile signature.

If an authorized officer whose signature is on a Note no longer holds that office at the time the Trustee authenticates the Note, the Note shall be valid nevertheless.

A Note shall not be valid or obligatory for any purpose until an authorized signatory of the Trustee manually signs the certificate of authentication on the Note. The signature shall be conclusive evidence that the Note has been authenticated under this Indenture.

Pursuant to an Issuer Order, the Issuer shall execute and the Trustee shall authenticate (a) Original Notes for original issue up to an aggregate principal amount of $700,000,000, (b) Additional Notes subject to compliance at the time of issuance of such Additional Notes with the provisions of this Indenture in an unlimited amount and Exchange Notes for issue only in an Exchange Offer, pursuant to the Registration Rights Agreement, for Notes up to an aggregate principal amount of Original Notes and Additional Notes exchanged in such Exchange Offer.

The Trustee may appoint an authenticating agent reasonably acceptable to the Issuer to authenticate the Notes. Unless limited by the terms of such appointment, any such authenticating agent may authenticate Notes whenever the Trustee may do so. Each reference in this Indenture to authentication by the Trustee includes authentication by any such agent. An authenticating agent has the same rights as any Registrar, co-Registrar Transfer Agent or Paying Agent to deal with the Issuer or an Affiliate of the Issuer.

The Trustee shall have the right to decline to authenticate and deliver any Notes under this Section 2.02 if the Trustee, being advised by counsel, determines that such action may not lawfully be taken or if the Trustee in good faith shall determine that such action would expose the Trustee to personal liability to existing Holders.

SECTION 2.03. Registrar, Transfer Agent and Paying Agent. The Issuer shall maintain an office or agency for the registration of the Notes and of their transfer or exchange (the "Registrar"), an office or agency where Notes may be transferred or exchanged (the "Transfer Agent"), an office or agency where the Notes may be presented for payment (the "Paying Agent") and an office or agency where notices or demands to or upon the Issuer in respect of the Notes may be served. The Issuer may appoint one or more Transfer Agents, one or more co-Registrars and one or more additional Paying Agents.

The Issuer shall maintain a Transfer Agent and Paying Agent in New York, New York. The Issuer any or its Affiliates may act as Transfer Agent, Registrar, co-Registrar, Paying Agent and agent for service of notices and demands in connection with the Notes; provided, however, that neither the Issuer nor any of its Affiliates shall act as Paying Agent for the purposes of Articles Three and Eight and Sections 4.09 and 4.11.

The Issuer hereby appoints the office of The Bank of New York in the Borough of Manhattan located at the address set forth in Section 13.02(a) as Registrar and as Transfer Agent and Paying Agent.

Subject to any applicable laws and regulations, the Issuer shall cause the Registrar to keep a register (the "Security Register") at its corporate trust office in which, subject to such reasonable regulations it may prescribe, the Issuer shall provide for the registration of ownership, exchange, and transfer of the Notes. Such registration in the Security Register shall be conclusive evidence of the ownership of Notes. Included in the books and records for the Notes shall be notations as to whether such Notes have been paid, exchanged or transferred, canceled, lost, stolen, mutilated or destroyed and whether such Notes have been replaced. In the case of the replacement of any of the Notes, the Registrar shall keep a record of the Note so replaced and the Note issued in replacement thereof. In the case of the cancellation of any of the Notes, the Registrar shall keep a record of the Note so canceled and the date on which such Note was canceled.

The Issuer shall enter into an appropriate agency agreement with any Paying Agent or co-Registrar not a party to this Indenture, which, following the effectiveness of a Registration Statement pursuant to the Registration Rights Agreement, shall incorporate the terms of the TIA. The agreement shall implement the provisions of this Indenture that relate to such agent. The Issuer shall notify the Trustee of the name and address of any such agent. If the Issuer fails to maintain a Registrar or Paying Agent, the Trustee shall act as such and shall be entitled to appropriate compensation therefor pursuant to Section 7.07 of this Indenture.

SECTION 2.04. Paying Agent to Hold Money in Trust. Not later than 10:00 am (New York time) on each due date of the principal, premium, if any, and interest on any Notes, the Issuer shall deposit with the Paying Agent money in immediately available funds sufficient to pay such principal, premium, if any, and interest so becoming due on the due date for payment under the Notes. The Issuer shall require each Paying Agent other than the Trustee to agree in writing that such Paying Agent shall hold in trust for the benefit of the Holders or the Trustee all money held by the Paying Agent for the payment of principal of, premium, if any, and interest on the Notes (whether such money has been paid to it by the Issuer or any other obligor on the Notes), and such Paying Agent shall promptly notify the Trustee of any default by the Issuer (or any other obligor on the Notes) in making any such payment. The Issuer at any time may require a Paying Agent to pay all money held by it to the Trustee and account for any funds disbursed, and the Trustee may at any time during the continuance of any payment default, upon written request to a Paying Agent, require such Paying Agent to pay all money held by it to the Trustee and to account for any funds disbursed. Upon doing so, the Paying Agent shall have no further liability for the money so paid over to the Trustee. If the Issuer or any Affiliate of the Issuer acts as Paying Agent, it will, on or before each due date of any principal, premium, if any, or interest on the Notes, segregate and hold in a separate trust fund for the benefit of the Holders a sum of money sufficient to pay such principal, premium, if any, or interest so becoming due until such sum of money shall be paid to such Holders or otherwise disposed of as provided in this Indenture, and will promptly notify the Trustee of its action or failure to act.

SECTION 2.05. Holder Lists and Registration Rights Agreements. (a) The Registrar shall preserve in as current a form as is reasonably practicable the most recent list

available to it of the names and addresses of Holders and shall otherwise comply with TIA Section 312(a). If the Trustee is not the Registrar, the Issuer shall furnish to the Trustee, in writing no later than the Record Date for each Interest Payment Date and at such other times as the Trustee may request in writing, a list in such form and as of such Record Date as the Trustee may reasonably require of the names and addresses of Holders, including the aggregate principal amount of Notes held by each Holder.

(b) The Trustee shall maintain copies of the Registration Rights Agreement available for inspection by Holders during normal business hours at its Corporate Trust Office for so long as there are Notes outstanding that are subject to registration under the Registration Rights Agreement.

SECTION 2.06. Transfer and Exchange. (a) Where Notes are presented to the Registrar or a co-Registrar with a request to register a transfer or to exchange them for an equal principal amount of Notes of other denominations, the Registrar shall register the transfer or make the exchange in accordance with the requirements of this Section 2.06. To permit registrations of transfers and exchanges, the Issuer shall execute and the Trustee shall authenticate and deliver, in the name of the designated transferee or transferees, one or more new Notes, of any authorized denominations and of a like aggregate principal amount, at the Registrar's request. No service charge shall be made for any registration of transfer or exchange of Notes (except as otherwise expressly permitted herein), but the Issuer may require payment of a sum sufficient to cover any agency fee or similar charge payable in connection with any such registration of transfer or exchange of Notes (other than any agency fee or similar charge payable upon exchanges pursuant to Sections 2.10, 3.08 or 9.05) or in accordance with an Excess Proceeds Offer pursuant to Section 4.09 or Change of Control Offer pursuant to Section 4.11, not involving a transfer.

Upon presentation for exchange or transfer of any Note as permitted by the terms of this Indenture and by any legend appearing on such Note, such Note shall be exchanged or transferred upon the Security Register and one or more new Notes shall be authenticated and issued in the name of the Holder (in the case of exchanges only) or the transferee, as the case may be. No exchange or transfer of a Note shall be effective under this Indenture unless and until such Note has been registered in the name of such Person in the Security Register. Furthermore, the exchange or transfer of any Note shall not be effective under this Indenture unless the request for such exchange or transfer is made by the Holder or by a duly authorized attorney-in-fact at the office of the Registrar.

Every Note presented or surrendered for registration of transfer or for exchange shall (if so required by the Issuer or the Registrar) be duly endorsed, or be accompanied by a written instrument or transfer, in form satisfactory to the Issuer and the Registrar, duly executed by the Holder thereof or his attorney duly authorized in writing.

All Notes issued upon any registration of transfer or exchange of Notes shall be the valid obligations of the Issuer evidencing the same indebtedness, and entitled to the same benefits under this Indenture, as the Notes surrendered upon such registration of transfer or exchange.

In the event that the Issuer delivers to the Trustee a copy of an Officers' Certificate certifying that a registration statement under the Securities Act with respect to the Exchange Offer, or a Shelf Registration Statement, as the case may be, has been declared effective by the SEC, and that the Issuer has offered Exchange Notes to the Holders in accordance with the Exchange Offer or that Notes have been offered pursuant to such Shelf Registration Statement, the Trustee shall exchange or issue upon transfer, as the case may be, upon request of any Holder, such Holder's Notes for (i) in the case of an Exchange Offer, Exchange Notes upon the terms set forth in the Exchange Offer or (ii) in the case of a transfer pursuant to a Shelf Registration Statement, Notes that comply with the requirements applicable following such a transfer as set forth in Section 2.01(c).

The Issuer shall not be required (i) to issue, register the transfer of, or exchange any Note during a period beginning at the opening of 15 Business Days before the day of the mailing of a notice of redemption of Notes selected for redemption under Section 3.02 and ending at the close of business on the day of such mailing, or (ii) to register the transfer of or exchange any Note so selected for redemption in whole or in part, except the unredeemed portion of any Note being redeemed in part.

(b) Notwithstanding any provision to the contrary herein, so long as a Global Note remains outstanding and is held by or on behalf of the Depositary, transfers of a Global Note, in whole or in part, or of any beneficial interest therein, shall only be made in accordance with Section 2.01(d), Section 2.06(a) and this Section 2.06(b); provided, however, that a beneficial interest in a Global Note may be transferred to Persons who take delivery thereof in the form of a beneficial interest in the same Global Note in accordance with the transfer restrictions set forth in the restricted Note legend on the Note, if any.

(i) Except for transfers or exchanges made in accordance with any of clauses (ii), (iii), (iv) or (v) of this Section 2.06(b), transfers of a Global Note shall be limited to transfers of such Global Note in whole, but not in part, to nominees of the Depositary or to a successor of the Depositary or such successor's nominee.

(ii) Restricted Global Note to Regulation S Global Note. If the Holder of a beneficial interest in the Restricted Global Note at any time wishes to exchange its interest in such Restricted Global Note for an interest in the Regulation S Global Note, or to transfer its interest in such Restricted Global Note to a Person who wishes to take delivery thereof in the form of a beneficial interest in the Regulation S Global Note, such transfer or exchange may be effected, only in accordance with this clause (ii) and the rules and procedures of the Depositary. Upon receipt by the Registrar from the Transfer Agent of (A) instructions directing the Registrar to credit or cause to be credited an interest in the Regulation S Global Note in a specified principal amount and to cause to be debited an interest in the Restricted Global Note in such specified principal amount, and (B) a certificate in the form of Exhibit B attached hereto given by the Holder of such beneficial interest stating that the transfer of such interest has been made in compliance with the transfer restrictions applicable to the Global Notes and (x) pursuant to and in accordance with Regulation S or (y) that the Note being transferred is being transferred in a transaction permitted by Rule 144, then the Registrar shall instruct the Depositary to reduce or cause to be reduced the principal amount of the Restricted Global Note and to

increase or cause to be increased the principal amount of the Regulation S Global Note by the aggregate principal amount of the interest in the Restricted Global Note to be exchanged.

(iii) Regulation S Global Note to Restricted Global Note. If the Holder of a beneficial interest in the Regulation S Global Note at any time wishes to transfer such interest to a Person who wishes to take delivery thereof in the form of a beneficial interest in the Restricted Global Note, such transfer may be effected only in accordance with this clause (iii) and the rules and procedures of the Depositary. Upon receipt by the Registrar from the Transfer Agent of (A) instructions directing the Registrar to credit or cause to be credited an interest in the Restricted Global Note in a specified principal amount and to cause to be debited an interest in the Regulation S Global Note in such specified principal amount, and (B) a certificate in the form of Exhibit C attached hereto given by the Holder of such beneficial interest stating that the transfer of such interest has been made in compliance with the transfer restrictions applicable to the Global Notes and stating that (x) the Person transferring such Interest reasonably believes that the Person acquiring such interest is a QIB and is obtaining such interest in a transaction meeting the requirements of Rule 144A and any applicable securities laws of any state of the United States or (y) that the Person transferring such interest is relying on an exemption other than Rule 144A from the registration requirements of the Securities Act and, in such circumstances, such Opinion of Counsel as the Issuer or the Trustee may reasonably request to ensure that the requested transfer or exchange is being made pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act, then the Registrar shall instruct the Depositary to reduce or cause to be reduced the principal amount of the Regulation S Global Note and to increase or cause to be increased the principal amount of the Restricted Global Note by the aggregate principal amount of the interest in the Regulation S Global Note to be exchanged or transferred.

(iv) Restricted Global Note to Exchange Global Note. Following the earlier of the consummation of the Exchange Offer or the transfer of a Note pursuant to a Shelf Registration Statement that results in beneficial interests in such Note being reflected in the Exchange Global Note, if the Holder of a beneficial interest in the Restricted Global Note at any time wishes to exchange its interest in such Restricted Global Note for an interest in the Exchange Global Note, or to transfer its interest in such Restricted Global Note to a Person who wishes to take delivery thereof in the form of a beneficial interest in the Regulation S Global Note, such transfer or exchange, if not effected pursuant to Section 2.06(a) may be effected only in accordance with this clause (iv) and the rules and procedures of the Depositary. Upon receipt by the Registrar from the Transfer Agent of (A) instructions directing the Registrar to credit or cause to be credited an interest in the Exchange Global Note in a specified principal amount and to cause to be debited an interest in the Restricted Global Note in such specified principal amount, and (B) a certificate in the form of Exhibit B attached hereto given by the Holder of such beneficial interest stating that the transfer of such interest has been made in compliance with the transfer restrictions applicable to the Global Notes and (x) pursuant to and in accordance with Regulation S or (y) that the Note being transferred is being transferred in a transaction permitted by Rule 144, then the Registrar shall instruct the Depositary to

reduce or cause to be reduced the principal amount of the Restricted Global Note and to increase or cause to be increased the principal amount of the Regulation S Global Note by the aggregate principal amount of the interest in the Restricted Global Note to be exchanged or transferred.

(v) Regulation S Global Note to Exchange Global Note. Following the earlier of the consummation of the Exchange Offer or the transfer of a Note pursuant to a Shelf Registration Statement that results in beneficial interests in such Note being reflected in the Exchange Global Note, if the Holder of a beneficial interest in the Regulation S Global Note at any time wishes to exchange its interest in such Regulation S Global Note for an interest in the Exchange Global Note, or to transfer its interest in such Regulation S Global Note to a Person who wishes to take delivery thereof in the form of a beneficial interest in the Exchange Global Note, such transfer or exchange, if not effected pursuant to an Exchange Offer or a Shelf Registration Statement in accordance with Section 2.06(a) may be effected only in accordance with this clause (v) and the rules and procedures of the Depositary. Upon receipt by the Registrar from the Transfer Agent of instructions directing the Registrar to credit or cause to be credited an interest in the Exchange Global Note in a specified principal amount and to cause to be debited an interest in the Regulation S Global Note in such specified principal amount, then the Registrar shall instruct the Depositary to reduce or cause to be reduced the principal amount of the Regulation S Global Note and to increase or cause to be increased the principal amount of the Exchange Global Note by the aggregate principal amount of the interest in the Regulation S Global Note to be exchanged or transferred.

(vi) Global Notes to Certificated Notes. In the event that a Global Note is exchanged for Notes in certificated, registered form pursuant to Section 2.10, the effectiveness of a Shelf Registration Statement with respect to such Notes, such Notes may be exchanged only in accordance with such procedures as are substantially consistent with the provisions of clauses (ii) and (iii) above (including the certification requirements intended to ensure that such transfers comply with Rule 144A or Regulation S under the Securities Act, as the case may be) and such other procedures as may from time to time be adopted by the Issuer and the Trustee.

(c) Except in connection with an Exchange Offer or a Shelf Registration Statement contemplated by and in accordance with the terms of the Registration Rights Agreement, if Notes are issued upon the transfer, exchange or replacement of Notes bearing the restricted Notes legends set forth in Exhibit A hereto, the Notes so issued shall bear the restricted Notes legends, and a request to remove such restricted Notes legends from Notes will not be honored unless there is delivered to the Issuer such satisfactory evidence, which may include an Opinion of Counsel licensed to practice law in the State of New York, as may be reasonably required by the Issuer, that neither the legend nor the restrictions on transfer set forth therein are required to ensure that transfers thereof comply with the provisions of Rule 144A or Rule 144(k) under the Securities Act. Upon provision of such satisfactory evidence, the Trustee, at the direction of the Issuer, shall authenticate and deliver Notes that do not bear the legend.

(d) The Trustee shall have no responsibility for any actions taken or not taken by the Depositary, for any Depositary records or beneficial ownership interests or for any transactions

between the Depositary and any Agent Member or between or among the Depositary, a participant and/or any holder or owner of a beneficial interest in a Global Note.

(e) The Trustee shall have no obligation or duty to monitor, determine or inquire as to compliance with any restrictions on transfer imposed under this Indenture or under applicable law with respect to any transfer of any interest in any Notes (including any transfers between or among the Depositary's participants or beneficial owners of interests in any Global Note) other than to require delivery of such certificates and other documentation, including delivery of Opinions of Counsel, as is expressly required by, and to do so if and when expressly required by, the terms of this Indenture and to examine the same to determine substantial compliance as to form with the express requirements hereof.

SECTION 2.07. Replacement Notes. If a mutilated certificated Note is surrendered to the Registrar or if the Holder claims that the Note has been lost, destroyed or wrongfully taken, the Issuer shall issue and the Trustee shall authenticate a replacement Note in such form as the Note mutilated, lost, destroyed or wrongfully taken if the Holder satisfies any other reasonable requirements of the Trustee or the Issuer. If required by the Trustee or the Issuer, such Holder shall furnish an indemnity or indemnity bond sufficient in the judgment of the Issuer and the Trustee to protect the Issuer, the Trustee, the Paying Agent, the Transfer Agent, the Registrar and any co-Registrar, and any authenticating agent from any loss that any of them may suffer if a Note is replaced. The Issuer and the Trustee may charge the Holder for their expenses in replacing a Note.

Every replacement Note shall be an additional obligation of the Issuer.

SECTION 2.08. Outstanding Notes. Notes outstanding at any time are all Notes authenticated by the Trustee except for those cancelled by it, those delivered to it for cancellation and those described in this Section 2.08 as not outstanding. A Note does not cease to be outstanding because the Issuer or an Affiliate of the Issuer holds the Note.

If a Note is replaced pursuant to Section 2.07, it ceases to be outstanding unless the Trustee and the Issuer receive proof satisfactory to them that the Note which has been replaced is held by a bona fide purchaser.

If the Paying Agent segregates and holds in trust, in accordance with this Indenture, on a Redemption Date or maturity date money sufficient to pay all principal, premium, if any, interest payable on that date with respect to the Notes (or portions thereof) to be redeemed or maturing, as the case may be, and the Paying Agent is not prohibited from paying such money to the Holders on that date pursuant to the terms of this Indenture, then on and after that date such Notes (or portions thereof) cease to be outstanding and interest on them ceases to accrue.

SECTION 2.09. Notes Held by Issuer. In determining whether the Holders of the required principal amount of Notes have concurred in any direction or consent or any amendment, modification or other change to this Indenture, Notes owned by the Issuer or by an Affiliate of the Issuer shall be disregarded and treated as if they were not outstanding, except that for the purposes of determining whether the Trustee shall be protected in relying on any such direction, waiver or consent or any amendment, modification or other change to this Indenture,

only Notes which a Trust Officer of the Trustee actually knows are so owned shall be so disregarded. Notes so owned which have been pledged in good faith shall not be disregarded if the pledgee establishes to the satisfaction of the Trustee the pledgee's right so to act with respect to the Notes and that the pledgee is not the Issuer or an Affiliate of the Issuer.

SECTION 2.10. Certificated Notes. (a) A Global Note deposited with the Depositary or other custodian for the Depositary pursuant to Section 2.01 shall be transferred to the beneficial owners thereof in the form of certificated Notes only if such transfer complies with Section 2.06 and (i) the Depositary notifies the Issuer that it is unwilling or unable to continue as the Depositary for such Global Note, or if at any time the Depositary ceases to be a "clearing agency" registered under the Exchange Act and a successor depositary is not appointed by the Issuer within 90 days of such notice, or (ii) the Issuer, at its option, executes and delivers to the Trustee a notice that such Global Note be so transferable, registrable and exchangeable, or (iii) an Event of Default, or an event which after notice or lapse of time or both would be an Event of Default, has occurred and is continuing with respect to the Notes or (iv) the issuance of such certificated Notes is necessary in order for a Holder or beneficial owner to present its Note or Notes to a Paying Agent in order to avoid any tax that is imposed on or with respect to a payment made to such Holder or beneficial owner. Notice of any such transfer shall be given by the Issuer in accordance with the provisions of Section 12.02(a).

(b) Any Global Note that is transferable to the beneficial owners thereof in the form of certificated Notes pursuant to this Section 2.10 shall be surrendered by the Depositary to the Transfer Agent, to be so transferred, in whole or from time to time in part, without charge, and the Trustee shall authenticate and deliver, upon such transfer of each portion of such Global Note, an equal aggregate principal amount at maturity of Notes of authorized denominations in the form of certificated Notes. Any portion of a Global Note transferred or exchanged pursuant to this Section 2.10 shall be executed, authenticated and delivered only in registered form in denominations of $1,000 and any integral multiple thereof and registered in such names as the Depositary shall direct. Subject to the foregoing, a Global Note is not exchangeable except for a Global Note of like denomination to be registered in the name of the Depositary or its nominee. In the event that a Global Note becomes exchangeable for certificated Notes, payment of principal, premium, if any, and interest on the certificated Notes will be payable, and the transfer of the certificated Notes will be registrable, at the office or agency of the Issuer maintained for such purposes in accordance with Section 2.03. Such certificated Notes shall bear the applicable legends set forth in Exhibit A hereto.

(c) In the event of the occurrence of any of the events specified in Section 2.10(a), the Issuer will promptly make available to the Trustee a reasonable supply of certificated Notes in definitive, fully registered form without interest coupons.

SECTION 2.11. Cancellation. The Issuer at any time may deliver Notes to the Trustee for cancellation. The Registrar and the Paying Agent shall forward to the Trustee any Notes surrendered to them for registration of transfer, exchange or payment. The Trustee, in accordance with its customary procedures, and no one else shall cancel (subject to the record retention requirements of the Exchange Act and the Trustee's retention policy) all Notes surrendered for registration of transfer, exchange, payment or cancellation and dispose of such cancelled Notes in its customary manner. Except as otherwise provided in this Indenture the

Issuer may not issue new Notes to replace Notes it has redeemed, paid or delivered to the Trustee for cancellation.

SECTION 2.12. Defaulted Interest. Any interest on any Note that is payable, but is not punctually paid or duly provided for, on the dates and in the manner provided in the Notes and this Indenture (all such interest herein called "Defaulted Interest") shall forthwith cease to be payable to the Holder on the relevant Record Date by virtue of having been such Holder, and such Defaulted Interest may be paid by the Issuer, at its election in each case, as provided in clause (a) or (b) below:

(a) The Issuer may elect to make payment of any Defaulted Interest to the Persons in whose names the Notes are registered at the close of business on a special Record Date for the payment of such Defaulted Interest, which shall be fixed in the following manner. The Issuer shall notify the Trustee in writing of the amount of Defaulted Interest proposed to be paid on each Note and the date of the proposed payment, and at the same time the Issuer may deposit with the Trustee an amount of money equal to the aggregate amount proposed to be paid in respect of such Defaulted Interest; or shall make arrangements satisfactory to the Trustee for such deposit prior to the date of the proposed payment, such money when deposited to be held in trust for the benefit of the Persons entitled to such Defaulted Interest as in this clause provided. In addition, the Issuer shall fix a special Record Date for the payment of such Defaulted Interest, such date to be not more than 15 days and not less than 10 days prior to the proposed payment date and not less than 15 days after the receipt by the Trustee of the notice of the proposed payment date. The Issuer shall promptly but, in any event, not less than 15 days prior to the special Record Date, notify the Trustee of such special Record Date and, in the name and at the expense of the Issuer, the Trustee shall cause notice of the proposed payment date of such Defaulted Interest and the special Record Date therefor to be mailed first-class, postage prepaid to each Holder as such Holder's address appears in the Security Register, not less than 10 days prior to such special Record Date. Notice of the proposed payment date of such Defaulted Interest and the special Record Date therefor having been so mailed, such Defaulted Interest shall be paid to the Persons in whose names the Notes are registered at the close of business on such special Record Date and shall no longer be payable pursuant to clause (b) below.

(b) The Issuer may make payment of any Defaulted Interest on the Notes in any other lawful manner not inconsistent with the requirements of any securities exchange on which the Notes may be listed, and upon such notice as may be required by such exchange, if, after notice given by the Issuer to the Trustee of the proposed payment date pursuant to this clause, such manner of payment shall be deemed reasonably practicable.

Subject to the foregoing provisions of this Section 2.12, each Note delivered under this Indenture upon registration of transfer of or in exchange for or in lieu of any other Note shall carry the rights to interest accrued and unpaid, and to accrue, which were carried by such other Note.

SECTION 2.13. Computation of Interest. Interest on the Notes shall be computed on the basis of a 360-day year of twelve 30-day months.

SECTION 2.14. CUSIP, ISIN and Common Code Numbers. The Issuer in issuing the Notes may use CUSIP, ISIN and Common Code numbers (if then generally in use), and, if so, the Trustee shall use CUSIP, ISIN and Common Code numbers, as appropriate, in notices of redemption as a convenience to Holders; provided, however, that any such notice may state that no representation is made as to the correctness of such numbers or codes either as printed on the Notes or as contained in any notice of a redemption and that reliance may be placed only on the other identification numbers printed on the Notes, and any such redemption shall not be affected by any defect in or omission of such numbers. The Issuer will promptly notify the Trustee of any change in the CUSIP, ISIN or Common Code numbers.

SECTION 2.15. Issuance of Additional Notes and Exchange Notes. The Issuer may, subject to Section 4.06 of this Indenture, issue Additional Notes under this Indenture in accordance with the procedures of Section 2.02. The Original Notes issued on the date of this Indenture and any Additional Notes subsequently issued shall be treated as a single class for all purposes under this Indenture.

ARTICLE THREE
REDEMPTION; OFFERS TO PURCHASE

SECTION 3.01. Optional Redemption. Except as set forth in the next paragraph, the Notes will not be redeemable at the option of the Issuer prior to July 1, 2008. Starting on that date, the Issuer may redeem all or any portion of the Notes, at once or over time, after giving the required notice under this Indenture. The Notes may be redeemed at the redemption prices set forth below, plus accrued and unpaid interest to the redemption date (subject to the right of Holders of record on the relevant Record Date to receive interest due on the relevant interest payment date). The following prices are for Notes redeemed during the 12-month period commencing on July 1, 2008 of the years set forth below, and are expressed as percentages of principal amount:

YEAR	REDEMPTION PRICE
2008	103.375%
2009	102.250%
2010	101.125%
2011 and thereafter	100.000%

In addition, at any time and from time to time, prior to July 1, 2006, the Issuer may redeem up to a maximum of 35% of the original aggregate principal amount of the Notes (calculated giving effect to any issuance of Additional Notes) with the proceeds of one or more Public Equity Offerings, at a redemption price equal to 106.750% of the principal amount thereof, plus accrued and unpaid interest to the redemption date (subject to the right of Holders of record on the relevant Record Date to receive interest due on the relevant interest payment date); provided, however, that after giving effect to any such redemption, at least 65% of the original aggregate principal amount of the Notes (calculated giving effect to any issuance of Additional Notes) remains outstanding (excluding Notes held by Arch Coal or any of its Subsidiaries). Any such redemption shall be made within 75 days of such Public Equity Offering upon not less than 30 nor more than 60 days' prior notice.

Any redemption pursuant to this Section 3.01 shall be made pursuant to the provisions of this Article Three.

SECTION 3.02. Notices to Trustee. If the Issuer elects to redeem Notes pursuant to Section 3.01, it shall notify the Trustee in writing of the Redemption Date, the principal amount of Notes to be redeemed and the paragraph of the Notes pursuant to which the redemption will occur.

The Issuer shall give each notice to the Trustee provided for in this Section 3.02 in writing at least 45 days before the date notice is mailed to the Holders pursuant to Section 3.04 unless the Trustee consents to a shorter period. Such notice shall be accompanied by an Officers' Certificate from the Issuer to the effect that such redemption will comply with the conditions herein. If fewer than all the Notes are to be redeemed, the Record Date relating to such redemption shall be selected by the Issuer and given to the Trustee, which Record Date shall be not less than 15 days after the date of notice to the Trustee.

Except as otherwise provided herein, no notice or communication to the Trustee shall be deemed effectively given unless it is actually received by a Trust Officer at its Corporate Trust Office.

SECTION 3.03. Selection of Notes to be Redeemed. If less than all of the Notes are to be redeemed, the Trustee shall select the Notes to be redeemed in compliance with the requirements, as certified to it by the Issuer, of the principal national securities exchange or automated quotation system, if any, on which the Notes are listed or, if the Notes are not listed on a national securities exchange or automated quotation system, by lot or by such other method as the Trustee in its sole discretion shall deem fair and appropriate; provided, however, that no such partial redemption shall reduce the portion of the principal amount of a Note not redeemed to less than $1,000.

The Trustee shall make the selection from the Notes outstanding and not previously called for redemption. The Trustee may select for redemption portions equal to $1,000 in principal amount or any integral multiple thereof. Provisions of this Indenture that apply to Notes called for redemption also apply to portions of Notes called for redemption. The Trustee shall notify the Issuer and the Registrar promptly in writing of the Notes or portions of Notes to be called for redemption.

SECTION 3.04. Notice of Redemption. (a) At least 30 days but not more than 60 days before a date for redemption of Notes, the Issuer shall mail a notice of redemption by first-class mail to each Holder to be redeemed and shall comply with the provisions of Section 13.02(b).

(b) The notice shall identify the Notes to be redeemed (including CUSIP, ISIN and Common Code numbers) and shall state:

(i) the Redemption Date;

(ii) the Redemption Price and the amount of accrued interest, if any to be paid;

(iii) the name and address of the Paying Agent;

(iv) that Notes called for redemption must be surrendered to the Paying Agent to collect the Redemption Price plus accrued interest, if any;

(v) that, if any Note is being redeemed in part, the portion of the principal amount (equal to $1,000 in principal amount or any integral multiple thereof) of such Note to be redeemed and that, on and after the Redemption Date, upon surrender of such Note, a new Note or Notes in principal amount equal to the unredeemed portion thereof will be reissued;

(vi) that, if any Note contains a CUSIP, ISIN or Common Code number, no representation is being made as to the correctness of such CUSIP, ISIN or Common Code number either as printed on the Notes or as contained in the notice of redemption and that reliance may be placed only on the other identification numbers printed on the Notes;

(vii) that, unless the Issuer defaults in making such redemption payment, interest on the Notes (or portion thereof) called for redemption shall cease to accrue on and after the Redemption Date; and

(viii) the paragraph of the Notes pursuant to which the Notes called for redemption are being redeemed.

At the Issuer's written request, the Trustee shall give a notice of redemption in the Issuer's name and at the Issuer's expense. In such event, the Issuer shall provide the Trustee with the notice and the other information required by this Section 3.04.

SECTION 3.05. Effect of Notice of Redemption. Once a notice of redemption is mailed, Notes called for redemption become due and payable on the Redemption Date and at the Redemption Price stated in the notice. Upon surrender of any Notes to the Paying Agent, such Notes shall be paid at the Redemption Price stated in the notice, plus accrued interest, if any, to the Redemption Date. In any event, failure to give such notice, or any defect therein, shall not effect the validity of the proceedings for the redemption of Notes held by Holders to whom such notice was properly given.

Notice of redemption shall be deemed to be given when mailed, whether or not the Holder receives the notice. In any event, failure to give such notice, or any defect therein, shall not affect the validity of the proceedings for the redemption of Notes held by Holders to whom such notice was properly given.

SECTION 3.06. Deposit of Redemption Price. On or prior to any Redemption Date, the Issuer shall deposit or cause to be deposited with the Paying Agent a sum in same day funds sufficient to pay the Redemption Price of and accrued interest on all Notes to be redeemed on that date other than Notes or portions of Notes called for redemption that have previously been delivered by the Issuer to the Trustee for cancellation. The Paying Agent shall return to the Issuer any money so deposited that is not required for that purpose.

SECTION 3.07. Payment of Notes Called for Redemption. If notice of redemption has been given in the manner provided above, the Notes or portion of Notes specified in such notice to be redeemed shall become due and payable on the Redemption Date at the Redemption Price stated therein, together with accrued interest to such Redemption Date, and on and after such date (unless the Issuer shall default in the payment of such Notes at the Redemption Price and accrued interest to the Redemption Date, in which case the principal, until paid, shall bear interest from the Redemption Date at the rate prescribed in the Notes), such Notes shall cease to accrue interest. Upon surrender of any Note for redemption in accordance with a notice of redemption, such Note shall be paid and redeemed by the Issuer at the Redemption Price, together with accrued interest, if any, to the Redemption Date; provided, however, that installments of interest whose Stated Maturity is on or prior to the Redemption Date shall be payable to the Holders registered as such at the close of business on the relevant Record Date.

SECTION 3.08. Notes Redeemed in Part. (a) Upon surrender of a Global Note that is redeemed in part, the Paying Agent shall forward such Global Note to the Trustee who shall make a notation on the Security Register to reduce the principal amount of such Global Note to an amount equal to the unredeemed portion of the Global Note surrendered; provided, however, that each such Global Note shall be in a principal amount at final Stated Maturity of $1,000 or an integral multiple thereof.

(b) Upon surrender and cancellation of a certificated Note that is redeemed in part, the Issuer shall execute and the Trustee shall authenticate for the Holder (at the Issuer's expense) a new Note equal in principal amount to the unredeemed portion of the Note surrendered and canceled; provided, however, that each such certificated Note shall be in a principal amount at final Stated Maturity of $1,000 or an integral multiple thereof.

ARTICLE FOUR
COVENANTS

SECTION 4.01. Payment of Notes. Each of the Issuer and the Guarantors covenants and agrees for the benefit of the Holders that it shall duly and punctually pay the principal of, premium, if any, and interest on the Notes on the dates and in the manner provided in the Notes and in this Indenture. Principal, premium, if any, and interest shall be considered paid on the date due if on such date the Trustee or the Paying Agent (other than the Issuer or any of its Affiliates) holds, in accordance with this Indenture, money sufficient to pay all principal, premium, if any, and interest then due. If the Issuer or any of its Affiliates acts as Paying Agent, principal, premium, if any, and interest shall be considered paid on the due date if the entity acting as Paying Agent complies with Section 2.04.

Each of the Issuer or the Guarantors shall pay interest on overdue principal at the rate specified therefor in the Notes. The Issuer or the Guarantors shall pay interest on overdue installments of interest at the same rate to the extent lawful.

SECTION 4.02. Corporate Existence. Subject to Article Five, the Issuer and each Restricted Subsidiary shall do or cause to be done all things necessary to preserve and keep in full force and effect their corporate, partnership, limited liability company or other

existence and the rights (charter and statutory), licenses and franchises of Arch Western and each Restricted Subsidiary; provided, however, that Arch Western shall not be required to preserve any such right, licence or franchise if the Board of Directors of Arch Western shall determine that the preservation thereof is no longer desirable in the conduct of the business of the Issuer and the Restricted Subsidiaries as a whole and that the loss thereof is not disadvantageous in any material respect to the Holders.

SECTION 4.03. Maintenance of Properties. Arch Western shall cause all properties owned by it or any of its Subsidiaries or used or held for use in the conduct of its business or the business of Arch Western or any of its Subsidiaries to be maintained and kept in good condition, repair and working order and supplied with all necessary equipment and shall cause to be made all necessary repairs, renewals, replacements, betterments and improvements thereof, all as, in the judgment of Arch Western, may be necessary so that the business carried on in connection therewith may be properly and advantageously conducted at all times; provided, however, that nothing in this Section 4.03 shall prevent Arch Western from discontinuing the maintenance of any such properties if such discontinuance is, in the judgment of Arch Western, desirable in the conduct of the business of Arch Western and its Subsidiaries as a whole and not disadvantageous in any material respect to the Holders.

SECTION 4.04. Insurance. Arch Western shall maintain, and shall cause its Subsidiaries to maintain, insurance with carriers believed by Arch Western to be responsible, against such risks and in such amounts, and with such deductibles, retentions, self-insured amounts and coinsurance provisions, as Arch Western believes are customarily carried by businesses similarly situated and owning like properties, including as appropriate general liability, property and casualty loss and interruption of business insurance.

SECTION 4.05. Statement as to Compliance. (a) The Issuer shall deliver to the Trustee, within 90 days after the end of each fiscal year, an Officers' Certificate stating that in the course of the performance by the signer of its duties as an officer of the Issuer he would normally have knowledge of any Default and whether or not the signer knows of any Default that occurred during such period and if any specifying such Default, its status and what action the Issuer is taking or proposed to take with respect thereto. For purposes of this Section 4.05(a), such compliance shall be determined without regard to any period of grace or requirement of notice under this Indenture.

The Issuer shall comply with TIA Section 314(a)(4) The Issuer's delivery to the Trustee of the reports, information and documents required by said Section 314(a)(4) is for informational purposes only and the Trustee's receipt of such shall not constitute constructive notice of any information contained therein or determinable from information contained therein, including the Issuer's compliance with any of its covenants hereunder (as to which the Trustee is entitled to rely exclusively on Officers' Certificates)..

(b) When any Default has occurred and is continuing under this Indenture, or if the trustee of, or the holder of, any other evidence of Debt of Arch Western or any Subsidiary outstanding in a principal amount of $25,000,000 or more gives any notice stating that it is a Notice of Default or takes any other action to accelerate such Debt or enforce any Note therefor, the Issuer shall deliver to the Trustee within five Business Days by registered or certified mail or

facsimile transmission an Officers' Certificate specifying such event, notice or other action, its status and what action the Issuer is taking or proposes to take with respect thereto.

SECTION 4.06. Limitation on Debt. The Issuer shall not Incur any Debt other than the Notes and any Additional Notes. Arch Western shall not, and shall not permit any Restricted Subsidiary to, Incur, directly or indirectly, any Debt unless, after giving effect to the application of the proceeds thereof, no Default or Event of Default would occur as a consequence of such Incurrence or be continuing following such Incurrence and either:

(1) such Debt is Debt of Arch Western or a Subsidiary Guarantor and, after giving effect to the Incurrence of such Debt and the application of the proceeds thereof, Consolidated Interest Coverage Ratio of Arch Western would be at least 2.0 to 1.0, or

(2) such Debt is Permitted Debt.

The term "Permitted Debt" is defined to include the following:

(a) Debt of the Issuer evidenced by the Notes (not including any Additional Notes) issued in this offering and the Exchange Notes issued in exchange for such Notes and the Note Guarantees thereof;

(b) Debt of Arch Western or a Restricted Subsidiary in respect of Capital Lease Obligations and Purchase Money Debt; provided that:

(i) the aggregate principal amount of such Debt does not exceed the Fair Market Value (on the date of the Incurrence thereof) of the Property acquired, constructed or leased, and

(ii) the aggregate principal amount of all Debt Incurred and then outstanding pursuant to this clause (b) (together with all Permitted Refinancing Debt Incurred and then outstanding in respect of Debt previously Incurred pursuant to this clause (b)) does not exceed, at any one time outstanding, 5% of Consolidated Net Tangible Assets;

(c) Debt of Arch Western owing to and held by any Restricted Subsidiary and Debt of a Restricted Subsidiary owing to and held by Arch Western or any Restricted Subsidiary; provided, however, that (1) any subsequent issue or transfer of Capital Stock or other event that results in any such Restricted Subsidiary ceasing to be a Restricted Subsidiary or any subsequent transfer of any such Debt (except to Arch Western or a Restricted Subsidiary) shall be deemed, in each case, to constitute the Incurrence of such Debt by the issuer thereof and (2) if a Guarantor is the obligor on such Debt, such Debt is subordinated in right of payment to the Note Guarantee of such Guarantor;

(d) Debt under Interest Rate Agreements entered into by Arch Western or a Restricted Subsidiary for the purpose of managing interest rate risk in the ordinary course of the financial management of Arch Western or such Restricted Subsidiary and not for speculative purposes, provided that the obligations under such agreements are directly related to payment obligations on Debt otherwise permitted by the terms of this covenant;

(e) Debt under Currency Exchange Protection Agreements entered into by Arch Western or a Restricted Subsidiary for the purpose of managing currency exchange rate risks directly related to transactions entered into by Arch Western or such Restricted Subsidiary in the ordinary course of business and not for speculative purposes;

(f) Debt under Commodity Price Protection Agreements entered into by Arch Western or a Restricted Subsidiary in the ordinary course of the financial management of Arch Western or such Restricted Subsidiary and not for speculative purposes;

(g) Debt in connection with one or more standby letters of credit or performance or surety bonds or completion guarantees issued by Arch Western or a Restricted Subsidiary in the ordinary course of business or pursuant to self-insurance obligations and not in connection with the borrowing of money or the obtaining of advances or credit;

(h) Debt of Arch Western or a Restricted Subsidiary outstanding on the Issue Date not otherwise described in clauses (a) through (g) above;

(i) other Debt of Arch Western or any Subsidiary Guarantor in an aggregate principal amount outstanding at any one time not to exceed $100,000,000;

(j) Permitted Refinancing Debt Incurred in respect of Debt Incurred pursuant to clause (1) of the first paragraph of this Section 4.06 and clauses (b) and (h) above; and

(k) Debt consisting of installment payment obligations to the federal government in connection with the acquisition of coal leases in the ordinary course of business and consistent with past practices.

Notwithstanding anything to the contrary contained in this Section 4.06;

(i) Arch Western shall not permit any Restricted Subsidiary that is not a Guarantor to Incur any Debt pursuant to this Section 4.06 if the proceeds thereof are used, directly or indirectly, to Refinance any Debt of any Guarantor; and

(ii) accrual of interest, accretion or amortization of original issue discount and the payment of interest or dividends in the form of additional Debt, will be deemed not to be an Incurrence of Debt for purposes of this covenant.

For purposes of determining compliance with this Section 4.06 in the event that an item of Debt meets the criteria of more than one of the categories of Permitted Debt described in clauses (a) through (j) above or is entitled to be incurred pursuant to clause (1) of the first paragraph of this Section 4.06, Arch Western shall, in its sole discretion, classify such item of Debt in any manner that complies with this Section 4.06.

SECTION 4.07. Limitation on Liens. Arch Western shall not, and shall not permit any Restricted Subsidiary to, directly or indirectly, Incur or suffer to exist, any Lien on the Arch Coal Notes, except for the Liens securing the Notes and Additional Notes and Liens described in clause (k) of the definition of Permitted Liens.

Arch Western shall not, and shall not permit any Restricted Subsidiary to, directly or indirectly, Incur or suffer to exist, any Lien (other than Permitted Liens) upon any of its Property (including Capital Stock of a Restricted Subsidiary), whether owned at the Issue Date or thereafter acquired, or any interest therein or any income or profits therefrom, unless it has made or will make effective provision whereby the Notes or any Note Guarantee will be secured by such Lien equally and ratably with (or, if such other Debt constitutes Subordinated Obligations, prior to) all other Debt of Arch Western or any Restricted Subsidiary secured by such Lien for so long as such other Debt is secured by such Lien.

SECTION 4.08. Limitation on Restricted Payments. Arch Western shall not make, and shall not permit any Restricted Subsidiary to make, directly or indirectly, any Restricted Payment if at the time of, and after giving effect to, such proposed Restricted Payment,

(a) a Default or Event of Default shall have occurred and be continuing,

(b) Arch Western could not Incur at least $1.00 of additional Debt pursuant to clause (1) of the first paragraph of Section 4.06 of this Indenture,

(c) the aggregate amount of such Restricted Payment and all other Restricted Payments declared or made since the Issue Date (the amount of any Restricted Payment, if made other than in cash, to be based upon Fair Market Value at the time of such Restricted Payment) would exceed an amount equal to the sum of:

(i) 50% of the aggregate amount of Consolidated Net Income of Arch Western accrued during the period (treated as one accounting period) from the beginning of the fiscal quarter during which the Issue Date occurs to the end of the most recent fiscal quarter ending at least 45 days prior to the date of such Restricted Payment (or if the aggregate amount of Consolidated Net Income of Arch Western for such period shall be a deficit, minus 100% of such deficit), plus

(ii) 100% of the Capital Stock Sale Proceeds, plus

(iii) the sum of:

(1) the aggregate net cash proceeds received by Arch Western or any Restricted Subsidiary from the issuance or sale after the Issue Date of convertible or exchangeable Debt that has been converted into or exchanged for Capital Stock (other than Disqualified Stock) of Arch Western, and

(2) the aggregate amount by which Debt (other than Subordinated Obligations) of Arch Western or any Restricted Subsidiary is reduced on Arch Western's consolidated balance sheet on or after the Issue Date upon the conversion or exchange of any Debt issued or sold on or prior to the Issue Date that is convertible or exchangeable for Capital Stock (other than Disqualified Stock) of Arch Western,

excluding, in the case of clause (1) or (2):

(x) any such Debt issued or sold to Arch Western or a Subsidiary of Arch Western or an employee stock ownership plan or trust established by Arch Coal or any such Subsidiary for the benefit of their employees, and

(y) the aggregate amount of any cash or other Property distributed by Arch Western or any Restricted Subsidiary upon any such conversion or exchange;

plus

(iv) an amount equal to the sum of:

(B) the net reduction in Investments in any Person other than Arch Western or a Restricted Subsidiary resulting from dividends, repayments of loans or advances or other transfers of Property, in each case to Arch Western or any Restricted Subsidiary from such Person, and

(C) the portion (proportionate to Arch Western's equity interest in such Unrestricted Subsidiary) of the Fair Market Value of the net assets of an Unrestricted Subsidiary of Arch Western at the time such Unrestricted Subsidiary is designated a Restricted Subsidiary;

provided, however, that the foregoing sum shall not exceed, in the case of any Person, the amount of Investments previously made (and treated as a Restricted Payment) by Arch Western or any Restricted Subsidiary in such Person.

Notwithstanding the foregoing limitation, Arch Western may:

(a) pay dividends on its Capital Stock within 60 days of the declaration thereof if, on the declaration date, such dividends could have been paid in compliance with this Indenture; provided, however, that such dividend shall be included in the calculation of the amount of Restricted Payments;

(b) purchase, repurchase, redeem, legally defease, acquire or retire for value Capital Stock of Arch Western or Subordinated Obligations in exchange for, or out of the proceeds of the substantially concurrent sale of, Capital Stock of Arch Western (other than Disqualified Stock and other than Capital Stock issued or sold to a Subsidiary of Arch Coal or an employee stock ownership plan or trust established by Arch Coal or any such Subsidiary for the benefit of their employees); provided, however, that

(i) such purchase, repurchase, redemption, legal defeasance, acquisition or retirement shall be excluded in the calculation of the amount of Restricted Payments and

(ii) the Capital Stock Sale Proceeds from such exchange or sale shall be excluded from the calculation pursuant to clause (c)(ii) above;

(c) purchase, repurchase, redeem, legally defease, acquire or retire for value any Subordinated Obligations in exchange for, or out of the proceeds of the substantially concurrent sale of, Permitted Refinancing Debt; provided, however, that such purchase, repurchase, redemption, legal defeasance, acquisition or retirement shall be excluded in the calculation of the amount of Restricted Payments;

(d) repurchase shares of, or options to purchase shares of, common stock of Arch Western or any of its Subsidiaries from current or former officers, directors or employees of Arch Western or any of its Subsidiaries (or permitted transferees of such current or former officers, directors or employees), pursuant to the terms of agreements (including employment agreements) or plans (or amendments thereto) approved by the Board of Directors under which such individuals purchase or sell, or are granted the option to purchase or sell, shares of such common stock; provided, however, that: (1) the aggregate amount of such repurchases shall not exceed $2,500,000 in any calendar year and (2) at the time of such repurchase, no other Default or Event of Default shall have occurred and be continuing (or result therefrom); provided further, however, that such repurchases shall be included in the calculation of the amount of Restricted Payments;

(e) so long as no Default or Event of Default has occurred and is continuing and Arch Western is a limited liability company, make distributions to the ARCO Member (as defined in the LLC Agreement), with respect to any period after March 31, 2003, not to exceed the Tax Amount allocated to such member under the LLC Agreement for such period; provided, however, that such distributions shall be included in the calculation of the amount of Restricted Payments;

(f) so long as no Default or Event of Default has occurred and is continuing, make distributions of the Preferred Return (as defined in the LLC Agreement) to the ARCO Member (as defined in the LLC Agreement) pursuant to the LLC Agreement in effect on the Issue Date; provided, however, that such distribution shall be included in the calculation of the amount of Restricted Payments; and

(g) so long as (i) no Default or Event of Default has occurred and is continuing and (ii) Arch Western could incur at least $1.00 of additional Debt pursuant to clause (l) of the first paragraph of Section 4.06 of this Indenture make loans or advances in cash to Arch Coal out of Available Cash as of the date of such loan or advance; provided, however, that such loans or advances shall be included in the calculation of the amount of Restricted Payments.

Notwithstanding the prior two paragraphs, any Restricted Payment to, or Permitted Investments in, Arch Coal or any of its Affiliates (other than Arch Western or a Restricted Subsidiary) shall be in the form of a loan for cash which shall be evidenced by Arch Coal Notes that are immediately pledged to the Trustee on behalf of the Holders.

SECTION 4.09. Limitation on Asset Sales. Arch Western shall not, and shall not permit any Restricted Subsidiary, to, directly or indirectly, sell, transfer or otherwise dispose of (including by means of a merger, consolidation or similar transaction) any shares of Capital Stock of the Issuer, Arch Western Notes or the Arch Coal Notes. Arch Western shall

not, and shall not permit any Restricted Subsidiary to, directly or indirectly, consummate any Asset Sale unless:

(a) Arch Western or such Restricted Subsidiary receives consideration at the time of such Asset Sale at least equal to the Fair Market Value of the Property subject to such Asset Sale;

(b) at least 75% of the consideration paid to Arch Western or such Restricted Subsidiary in connection with such Asset Sale is in the form of cash or Cash Equivalents or the assumption by the purchaser of liabilities of Arch Western or any Restricted Subsidiary (other than contingent liabilities or liabilities that are by their terms subordinated to the Notes) as a result of which Arch Western and the Restricted Subsidiaries are no longer obligated with respect to such liabilities; and

(c) Arch Western delivers an Officers' Certificate to the Trustee certifying that such Asset Sale complies with the foregoing clauses (a) and (b).

The Net Available Cash (or any portion thereof) from Asset Sales may be applied by Arch Western or a Restricted Subsidiary to the extent Arch Western or such Restricted Subsidiary elects (or is required by the terms of any Debt) to:

(a) Repay any Debt of Arch Western or such Restricted Subsidiary (other than Subordinated Obligations); or

(b) reinvest in Additional Assets (including by means of an Investment in Additional Assets by a Restricted Subsidiary with Net Available Cash received by Arch Western or another Restricted Subsidiary).

Any Net Available Cash from an Asset Sale (other than an Asset Sale consisting of all of the Capital Stock of Canyon Fuel or Mountain Coal Company, L.L.C.) not applied in accordance with the preceding paragraph within 365 days from the date of the receipt of such Net Available Cash or that is not segregated from the general funds of Arch Western for investment in identified Additional Assets in respect of a project that shall have been commenced, and for which binding contractual commitments have been entered into, prior to the end of such 365-day period and that shall not have been completed or abandoned shall constitute "Excess Proceeds;" provided, however, that the amount of any Net Available Cash that ceases to be so segregated as contemplated above and any Net Available Cash that is segregated in respect of a project that is abandoned or completed shall also constitute "Excess Proceeds" at the time any such Net Available Cash ceases to be so segregated or at the time the relevant project is so abandoned or completed, as applicable; provided further, however, that the amount of any Net Available Cash that continues to be segregated for investment and that is not actually reinvested within twenty-four months from the date of the receipt of such Net Available Cash shall also constitute "Excess Proceeds." Any Net Available Cash from an Asset Sale consisting of all of the Capital Stock of Canyon Fuel or Mountain Coal Company, L.L.C. not applied in accordance with the preceding paragraph within 365 days from the date of the receipt of such Net Available Cash shall be segregated from the general funds of Arch Western and invested in cash or Cash Equivalents pending application in accordance with the preceding paragraph.

When the aggregate amount of Excess Proceeds (including income earned on such Excess Proceeds) exceeds $20,000,000, the Issuer will be required to make an offer to repurchase (the "Prepayment Offer") the Notes, which offer shall be in the amount of the Allocable Excess Proceeds (rounded to the nearest $1,000), on a pro rata basis according to principal amount, at a purchase price equal to 100% of the principal amount thereof, plus accrued and unpaid interest to the repurchase date (subject to the right of Holders of record on the relevant Record Date to receive interest due on the relevant interest payment date), in accordance with the procedures (including prorating in the event of oversubscription) set forth in this Indenture. To the extent that any portion of the amount of Net Available Cash remains after compliance with the preceding sentence and provided that all Holders of Notes have been given the opportunity to tender their Notes for repurchase in accordance with this Indenture, Arch Western or such Restricted Subsidiary may use such remaining amount for any purpose permitted by this Indenture, and the amount of Excess Proceeds will be reset to zero.

The term "Allocable Excess Proceeds" shall mean the product of:

(a) the Excess Proceeds and

(b) a fraction,

(i) the numerator of which is the aggregate principal amount of the Notes outstanding on the date of the Prepayment Offer, and

(ii) the denominator of which is the sum of the aggregate principal amount of the Notes outstanding on the date of the Prepayment Offer and the aggregate principal amount of other Debt of Arch Western outstanding on the date of the Prepayment Offer that is pari passu in right of payment with the Arch Western Guarantee and subject to terms and conditions in respect of Asset Sales similar in all material respects to this covenant and requiring Arch Western to make an offer to repurchase such Debt at substantially the same time as the Prepayment Offer.

Within five business days after the Issuer is obligated to make a Prepayment Offer as described in the preceding paragraph, the Issuer shall send a written notice, by first-class mail, to the Holders of Notes, accompanied by such information regarding Arch Western and its Subsidiaries as the Issuer in good faith believes will enable such Holders to make an informed decision with respect to such Prepayment Offer. Such notice shall state, among other things, the purchase price and the repurchase date, which shall be, subject to any contrary requirements of applicable law, a business day no earlier than 30 days nor later than 60 days from the date such notice is mailed.

The Issuer will comply, to the extent applicable, with the requirements of Section 14(e) of the Exchange Act and any other securities laws or regulations in connection with the repurchase of Notes pursuant to this covenant. To the extent that the provisions of any securities laws or regulations conflict with provisions of this covenant, the Issuer will comply with the applicable securities laws and regulations and will not be deemed to have breached its obligations under this covenant by virtue thereof.

SECTION 4.10. Limitation on Transactions with Affiliates. Arch Western shall not, and shall not permit any Restricted Subsidiary to, directly or indirectly, conduct any business or enter into or suffer to exist any transaction or series of transactions (including the purchase, sale, transfer, assignment, lease, conveyance or exchange of any Property or the rendering of any service) with, or for the benefit of, any Affiliate of Arch Western (an "Affiliate Transaction"), unless:

(a) the terms of such Affiliate Transaction are:

(1) set forth in writing,

(2) in the best interest of Arch Western or such Restricted Subsidiary, as the case may be, and

(3) no less favorable to Arch Western or such Restricted Subsidiary, as the case may be, than those that could be obtained in a comparable arm's-length transaction with a Person that is not an Affiliate of Arch Western,

(b) if such Affiliate Transaction involves aggregate payments or value in excess of $5,000,000, the Board of Directors (including at least a majority of the disinterested members of the Board of Directors) approves such Affiliate Transaction and, in its good faith judgment, believes that such Affiliate Transaction complies with clauses (a)(2) and (3) of this paragraph as evidenced by a Board Resolution promptly delivered to the Trustee; provided, however, if there are no disinterested members of the Board of Directors, Arch Western shall receive a written opinion from an Independent Financial Advisor described in clause (c) below, and

(c) if such Affiliate Transaction involves aggregate payments or value in excess of $25,000,000, Arch Western obtains a written opinion from an Independent Financial Advisor to the effect that the consideration to be paid or received in connection with such Affiliate Transaction is fair, from a financial point of view, to Arch Western and its Restricted Subsidiaries.

Notwithstanding the foregoing limitation, Arch Western or any Restricted Subsidiary may enter into or suffer to exist the following:

(a) any transaction or series of transactions between Arch Western and one or more Restricted Subsidiaries or between two or more Restricted Subsidiaries in the ordinary course of business, provided that no more than 5% of the total voting power of the Voting Stock (on a fully diluted basis) of any such Restricted Subsidiary is owned by an Affiliate of Arch Western (other than a Restricted Subsidiary);

(b) any Restricted Payment (other than an Investment) permitted to be made pursuant to the first paragraph of Section 4.08 of this Indenture;

(c) the payment of compensation (including amounts paid pursuant to employee benefit plans) for the personal services of officers, directors and employees of Arch Western or any of its Restricted Subsidiaries, so long as the Board of Directors in good faith shall have

approved the terms thereof and deemed the services theretofore or thereafter to be performed for such compensation to be fair consideration therefor;

(d) loans and advances to employees made in the ordinary course of business permitted by law and consistent with the past practices of Arch Western or such Restricted Subsidiary, as the case may be, provided that such loans and advances do not exceed $2,500,000 in the aggregate at any one time outstanding;

(e) agreements in effect on the Issue Date and described in the offering memorandum dated June 19, 2003, and any modifications, extensions or renewals thereto that are no less favorable to Arch Western or any Restricted Subsidiary than such agreements as in effect on the Issue Date; and

(f) the Arch Coal Notes.

SECTION 4.11. Change of Control. Upon the occurrence of a Change of Control, each holder of Notes shall have the right to require the Issuer to repurchase all or any part of such holder's Notes pursuant to the offer described below (the "Change of Control Offer") at a purchase price (the "Change of Control Purchase Price") equal to 101% of the principal amount thereof, plus accrued and unpaid interest to the repurchase date (subject to the right of Holders of record on the relevant Record Date to receive interest due on the relevant interest payment date). If the repurchase date is after a Record Date and on or before the relevant interest payment date, the accrued and unpaid interest, if any, will be paid to the person or entity in whose name the Note is registered at the close of business on that Record Date, and no additional interest will be payable to Holders whose Notes shall be subject to redemption.

Within 30 days following any Change of Control, the Issuer shall:

(a) cause a notice of the Change of Control Offer to be sent at least once to the Dow Jones News Service or similar business news service in the United States; and

(b) send, by first-class mail, with a copy to the Trustee, to each holder of Notes, at such holder's address appearing in the Security Register, a notice stating:

(i) that a Change of Control has occurred and a Change of Control Offer is being made pursuant to this Section 4.11 of the Indenture and that all Notes timely tendered will be accepted for payment;

(ii) the Change of Control Purchase Price and the repurchase date, which shall be, subject to any contrary requirements of applicable law, a business day no earlier than 30 days nor later than 60 days from the date such notice is mailed;

(iii) the circumstances and relevant facts regarding the Change of Control (including information with respect to pro forma historical income, cash flow and capitalization after giving effect to the Change of Control); and

(iv) the procedures that Holders of Notes must follow in order to tender their Notes (or portions thereof) for payment, and the procedures that Holders of Notes must follow in order to withdraw an election to tender Notes (or portions thereof) for payment.

The Issuer will not be required to make a Change of Control Offer following a Change of Control if a third party makes the Change of Control Offer in the manner, at the times and otherwise in compliance with the requirements set forth in this Indenture applicable to a Change of Control Offer made by the Issuer and purchases all Notes validly tendered and not withdrawn under such Change of Control Offer.

The Issuer shall comply, to the extent applicable, with the requirements of Section 14(e) of the Exchange Act and any other securities laws or regulations in connection with the repurchase of Notes pursuant to a Change of Control Offer. To the extent that the provisions of any securities laws or regulations conflict with the provisions of this covenant, the Issuer will comply with the applicable securities laws and regulations and will not be deemed to have breached its obligations under this covenant by virtue of such compliance.

SECTION 4.12. Limitation on Sale and Leaseback Transactions. Arch Western shall not, and shall not permit any of its Restricted Subsidies to, enter into any Sale and Leaseback Transaction with respect to any Property unless:

(a) Arch Western or such Restricted Subsidiary would be entitled to:

(i) Incur Debt in an amount equal to the Attributable Debt with respect to such Sale and Leaseback Transaction pursuant to Section 4.06 of this Indenture and

(ii) create a Lien on such Property securing such Attributable Debt without also securing the Notes or the applicable Note Guarantee pursuant to Section 4.07 of this Indenture and

(b) such Sale and Leaseback Transaction is effected in compliance with Section 4.09 of this Indenture.

SECTION 4.13. Guarantees by Restricted Subsidiaries. If the Company acquires or creates another Domestic Subsidiary after the Issue Date, then that newly acquired or created Subsidiary will become a Subsidiary Guarantor and execute a supplemental indenture within 10 days of the date on which it was created or acquired or became a Subsidiary; provided, however, that all Subsidiaries that have been properly designated as Unrestricted Subsidiaries in accordance with this Indenture for so long as they continue to constitute Unrestricted Subsidiaries will not have to become a Subsidiary Guarantor pursuant to this Section 4.13. In addition, Arch Western shall not permit any Restricted Subsidiary that is not a Guarantor, directly or indirectly, to Guarantee or secure the payment of any other Debt of Arch Western or any of its Restricted Subsidiaries unless such Restricted Subsidiary simultaneously executes and delivers a supplemental indenture to the Indenture providing for a Subsidiary Guarantee of the payment of the Notes by such Restricted Subsidiary; provided that this paragraph shall not be applicable to:

(i) any Guarantee of any Restricted Subsidiary that existed at the time such Person became a Restricted Subsidiary and was not incurred in connection with, or in contemplation of, such Person becoming a Restricted Subsidiary;

(ii) any Guarantee arising under or in connection with performance bonds, indemnity bonds, surety bonds or letters of credit or bankers' acceptances; or

(iii) Permitted Liens.

If the Guaranteed Debt is a Subordinated Obligation, the Guarantee of such Guaranteed Debt must be subordinated in right of payment to the Subsidiary Guarantee to at least the extent that the Guaranteed Debt is subordinated to the Notes, or the applicable Subsidiary Guarantee.

SECTION 4.14. Limitation on Restrictions on Distributions from Restricted Subsidiaries. Arch Western shall not, and shall not permit any Restricted Subsidiary to, directly or indirectly, create or otherwise cause or suffer to exist any consensual restriction on the right of any Restricted Subsidiary to:

(a) pay dividends, in cash or otherwise, or make any other distributions on or in respect of its Capital Stock, or pay any Debt or other obligation owed, to Arch Western or any other Restricted Subsidiary,

(b) make any loans or advances to Arch Western or any other Restricted Subsidiary, or

(c) transfer any of its Property to Arch Western or any other Restricted Subsidiary.

(d) The foregoing limitations will not apply:

(i) with respect to clauses (a), (b) and (c), to restrictions:

(1) in effect on the Issue Date (including, without limitation, restrictions pursuant to the Notes and the Indenture);

(2) relating to Debt of a Restricted Subsidiary of Arch Western and existing at the time it became a Restricted Subsidiary if such restriction was not created in connection with or in anticipation of the transaction or series of transactions pursuant to which such Restricted Subsidiary became a Restricted Subsidiary or was acquired by Arch Western, or

(3) that result from any amendment, restatement, renewal or replacement of an agreement referred to in clause (1)(A) or (B) above or in clause (2)(A) or (B) below, provided such restrictions are not less favorable, taken as a whole, to the Holders of Notes than those under the agreement evidencing the Debt so Refinanced, and

(ii) with respect to clause (c) only, to restrictions:

(1) relating to Debt that is permitted to be Incurred and secured without also securing the Notes pursuant to Section 4.06 and 4.07 of this Indenture that limit the right of the debtor to dispose of the Property securing such Debt,

(2) encumbering Property at the time such Property was acquired by Arch Western or any of its Restricted Subsidiaries, so long as such restrictions relate solely to the Property so acquired and were not created in connection with or in anticipation of such acquisition,

(3) resulting from customary provisions restricting subletting or assignment of leases or customary provisions in other agreements that restrict assignment of such agreements or rights thereunder, or

(4) customary restrictions contained in asset sale agreements limiting the transfer of such Property pending the closing of such sale.

SECTION 4.15. Designation of Unrestricted and Restricted Subsidiaries. The Board of Directors of the Issuer may designate any Restricted Subsidiary (other than the Issuer) to be an Unrestricted Subsidiary if that designation (which would constitute an Investment in such Subsidiary) would not result in a breach of Section 4.08 of this Indenture or otherwise cause a Default. If a Restricted Subsidiary is designated as an Unrestricted Subsidiary, the aggregate Fair Market Value of all outstanding Investments owned by Arch Western and its Restricted Subsidiaries in the Subsidiary properly designated will be deemed to be an Investment made as of the time of the designation as set forth under the definition of "Investment" and will reduce the amount available for Restricted Payments under the first paragraph of Section 4.08 of this Indenture or Permitted Investments, as determined by Arch Western. That designation will only be permitted if the Investment would be permitted at that time and if the Restricted Subsidiary otherwise meets the definition of an Unrestricted Subsidiary.

The Board of Directors may also designate any Subsidiary of Arch Western to be an Unrestricted Subsidiary if:

(a) the Subsidiary to be so designated does not own any Capital Stock or Debt of, or own or hold any Lien on any Property of, Arch Western or any other Restricted Subsidiary and is not required to be a Guarantor pursuant to this Indenture, and

(b) either:

(i) the Subsidiary to be so designated has total assets of $1,000 or less, or

(ii) such designation is effective immediately upon such entity becoming a Subsidiary of Arch Western.

Unless so designated as an Unrestricted Subsidiary, any Person that becomes a Subsidiary of Arch Western will be classified as a Restricted Subsidiary; provided, however, that such Subsidiary shall not be designated a Restricted Subsidiary and shall be automatically classified as an Unrestricted Subsidiary if either of the requirements set forth in clauses (x)

and (y) of the second immediately following paragraph will not be satisfied after giving pro forma effect to such classification or if such Person is a Subsidiary of an Unrestricted Subsidiary.

In addition, neither Arch Western nor any of its Restricted Subsidiaries shall at any time be directly or indirectly liable for any Debt that provides that the holder thereof may (with the passage of time or notice or both) declare a default thereon or cause the payment thereof to be accelerated or payable prior to its Stated Maturity upon the occurrence of a default with respect to any Debt, Lien or other obligation of any Unrestricted Subsidiary (including any right to take enforcement action against such Unrestricted Subsidiary).

The Board of Directors may designate any Unrestricted Subsidiary to be a Restricted Subsidiary if, immediately after giving pro forma effect to such designation,

(x) Arch Western could Incur at least $1.00 of additional Debt pursuant to clause (1) of the first paragraph of Section 4.06 of this Indenture and

(y) no Default or Event of Default shall have occurred and be continuing or would result therefrom.

Any such designation or redesignation by the Board of Directors will be evidenced by filing with the Trustee a Board Resolution giving effect to such designation or redesignation and an Officers' Certificate that:

(a) certifies that such designation or redesignation complies with the foregoing provisions, and

(b) gives the effective date of such designation or redesignation,

such filing with the Trustee to occur within 45 days after the end of the fiscal quarter of Arch Western in which such designation or redesignation is made (or, in the case of a designation or redesignation made during the last fiscal quarter of Arch Western's fiscal year, within 90 days after the end of such fiscal year).

SECTION 4.16. Payment of Taxes and Other Claims. Arch Western and the Issuer will pay or discharge and shall cause each of the Subsidiaries to pay or discharge, or cause to be paid or discharged, before the same shall become delinquent (a) all material taxes, assessments and governmental charges levied or imposed upon (i) Arch Western, the Issuer or any such Subsidiary, (ii) the income or profits of any such Subsidiary which is a corporation or (iii) the property of Arch Western, the Issuer or any such Subsidiary and (b) all material lawful claims for labor, materials and supplies that, if unpaid, might by law become a Lien upon the property of the Issuer or any such Subsidiary; provided, however, that Arch Western and the Issuer shall not be required to pay or discharge, or cause to be paid or discharged, any such tax, assessment, charge or claim the amount, applicability or validity of which is being contested in good faith by appropriate proceedings and for which adequate reserves have been established.

SECTION 4.17. Reports to Holders. Notwithstanding that Arch Coal or Arch Western may not be subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act, Arch Coal and Arch Western shall file with the Commission and provide the

Trustee and Holders of Notes with such annual reports and such information, documents and other reports as are specified in Sections 13 and 15(d) of the Exchange Act and applicable to a U.S. corporation subject to such Sections, such information, documents and reports to be so filed with the Commission and provided at the times specified for the filing of such information, documents and reports under such Sections; provided, however, that Arch Coal and Arch Western shall not be so obligated to file such information, documents and reports with the Commission if the Commission does not permit such filings; provided further, however, that Arch Coal and Arch Western will be required to provide to the Trustee and the Holders of Notes any such information, documents or reports that are not are so filed.

SECTION 4.18. Legal Existence. Subject to Article Five, Arch Western shall do or cause to be done all things necessary to preserve and keep in full force and effect its corporate existence, and the corporate, partnership or other existence of each Restricted Subsidiary, in accordance with the respective organizational documents (as the same may be amended from time to time) of each Restricted Subsidiary and the material rights (charter and statutory) and franchises of Arch Western and the Restricted Subsidiaries; provided that Arch Western shall not be required to preserve any such right, franchise, or the corporate, partnership or other existence of any of its Restricted Subsidiaries if the preservation thereof is no longer desirable in the conduct of the business of Arch Western and its Restricted Subsidiaries taken as a whole and that the loss thereof is not adverse in any material respect to the Holders.

SECTION 4.19. Waiver of Stay, Extension or Usury Laws. Arch Western, the Issuer and each of the Subsidiary Guarantors covenants (to the extent that it may lawfully do so) that it shall not at any time insist upon, or plead (as a defense or otherwise) or in any manner whatsoever claim or take the benefit or advantage of, any stay or extension law or any usury law or other law which would prohibit or forgive any of Arch Western, the Issuer and the Subsidiary Guarantors from paying all or any portion of the principal of, premium, if any, and/or interest on the Notes or the Note Guarantees as contemplated herein, wherever enacted, now or at any time hereafter in force, or which may affect the covenants or the performance of this Indenture; and (to the extent that they may lawfully do so) each of Arch Western, the Issuer and the Subsidiary Guarantors hereby expressly waives all benefit or advantage of any such law, and covenants that it will not hinder, delay or impede the execution of any power herein granted to the Trustee, but will suffer and permit the execution of every such power as though no such law had been enacted.

SECTION 4.20. Further Instruments and Acts. Upon request of the Trustee (but without imposing any duty or obligation of any kind on the Trustee to make any such request), the Issuer and the Subsidiary Guarantors shall execute and deliver such further instruments and do such further acts as may be reasonably necessary or proper to carry out more effectively the purpose of this Indenture.

SECTION 4.21. Covenant Termination. Upon and after the first date that (a) the Notes have Investment Grade Ratings from both Ratings Agencies and (b) no Default has occurred and is continuing hereunder, Arch Western and its Restricted Subsidiaries will not be subject to the provisions of this Indenture described under Sections 4.06, 4.08, 4.09, 4.10, clause (a)(i) and (b) of Section 4.12, 4.14, 4.15 and clause (b)(iv) of Section 5.01 hereof.

ARTICLE FIVE
CONSOLIDATION, MERGER OR SALE OF ASSETS

SECTION 5.01. Consolidation, Merger or Sale of Assets. (a) The Issuer shall not merge, consolidate or amalgamate with or into any other Person. Arch Western shall not:

(i) consolidate with or merge with or into any Person (other than a merger of a Wholly Restricted Subsidiary of Arch Western into Arch Western); or

(ii) in a single transaction or through a series of transactions, sell, assign, convey, transfer, lease or otherwise dispose of all or substantially all of its properties and assets to any Person or Persons, if such transaction or series of transactions, in the aggregate, would result in the sale, assignment, conveyance, transfer, lease or other disposition of all or substantially all of the Property of Arch Western to any other Person or Persons.

(b) Section (a) above shall not apply to Arch Western if:

(i) at the time and immediately after giving effect to any such consolidation, merger, transaction or series of transactions, either Arch Western shall be the Surviving Person or the Person (if other than Arch Western) formed by such consolidation or into which Arch Western is merged or the Person that acquires by sale, assignment, conveyance, transfer, lease or other disposition all or substantially all of Arch Western's Property:

(1) shall be a limited liability company or a corporation duly organized and validly existing under the laws of the United States of America, any state thereof or the District of Columbia; and

(2) expressly assumes (if other than Arch Western), by a supplemental indenture in form satisfactory to the Trustee, Arch Western's obligations under the Notes, this Indenture, the Arch Western Guarantee, the Security Documents and the Registration Rights Agreement, and the Notes, this Indenture, the Arch Western Guarantee, the Security Documents and the Registration Rights Agreement remain in full force and effect as so supplemented;

(ii) in the case of a sale, transfer, assignment, lease, conveyance or other disposition of all or substantially all the Property, such Property shall have been transferred as an entirety or virtually as an entirety to one Person;

(iii) immediately before and after giving effect to such transaction or series of transactions on a pro forma basis treating any Debt that becomes, or is anticipated to become, an obligation of the Surviving Person or any Restricted Subsidiary as a result of such transaction or series of transactions as having been Incurred by the Surviving Person or such Restricted Subsidiary at the time of such transaction or series of transactions), no Default or Event of Default shall have occurred and be continuing;

(iv) immediately after giving effect to any such consolidation, merger, transaction or series of transactions on a pro forma basis (on the assumption that the transaction or series of transactions occurred on the first day of the four-quarter period immediately prior to the consummation of such transaction or series of transactions with the appropriate adjustments with respect to the transaction or series of transactions being included in such pro forma calculation), the Surviving Person could incur at least $1.00 of additional Debt (other than Permitted Debt) in accordance with Section 4.06 hereto;

(v) at the time of and immediately after giving effect to any such consolidation, merger, transaction or series of transactions, Arch Western is able to make payments on the Notes without being obligated to deduct or withhold any taxes or duties of whatever nature levied by any jurisdiction in which Arch Western, any Guarantor, any Subsidiary or any Surviving Person is organized, engaged in business, resident for tax purposes or generally subject to tax on a net income basis or from or through which payment is made;

(vi) at the time of any such consolidation, merger, transaction or series of transactions, Arch Western or the Surviving Person shall have delivered to the Trustee, in form and substance satisfactory to the Trustee, an Officers' Certificate (attaching the authentic computations to demonstrate compliance with clause (iv) above) and an Opinion of Counsel, each stating that such consolidation, merger, sale, assignment, conveyance, transfer, lease or other disposition, and if a supplemental indenture is required in connection with such transaction, such supplemental indenture, comply with the requirements of this Indenture and that all conditions precedent therein relating to such transaction have been complied with and that this Indenture and the Guarantees constitute legal, valid and binding obligations of the continuing person, enforceable in accordance with their terms; and

(vii) Arch Western shall have delivered to the Trustee an Opinion of Counsel to the effect that the Holders will not recognize income, gain or loss for Federal income tax purposes as a result of such transaction and will be subject to Federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such consolidation, merger, transaction or series of transactions had not occurred.

(c) Arch Western shall not permit any Subsidiary Guarantor to consolidate with or merge with or into any Person or sell, assign, transfer, convey or otherwise dispose of, all or substantially all of its Property, in one or more related transactions, to any Person unless Arch Western has delivered to the Trustee an Officers' Certificate and Opinion of Counsel stating that such consolidation, merger, transaction or series of transactions complies with the following conditions and each of the following conditions is satisfied:

(i) the other Person is Arch Western or any Wholly Owned Restricted Subsidiary that is a Subsidiary Guarantor or becomes a Subsidiary Guarantor concurrently with the transaction; or

(ii) (1) either (x) the Subsidiary Guarantor shall be the Surviving Person or (y) the entity formed by such consolidation or into which the Subsidiary Guarantor is

merged, expressly assumes, by a Guarantee or a supplemental indenture in form satisfactory to the Trustee, executed and delivered to the Trustee by such surviving Person the due and punctual performance and observance of all the obligations of such Subsidiary Guarantor under the Subsidiary Guarantee; and

(2) the Surviving Person, if other than the Subsidiary Guarantor, is a corporation or limited liability company organized under the laws of the United States, any state thereof or the District of Columbia and immediately after giving effect to the transaction and any related Incurrence of Debt of, no Default or Event of Default shall have occurred and be continuing; or

(iii) the transaction constitutes a sale or other disposition (including by way of consolidation or merger) of the Subsidiary Guarantor or the sale or disposition of all or substantially all the assets of the Subsidiary Guarantor (in each case other than to another Subsidiary Guarantor) and at the time of such transaction after giving pro forma effect thereto, the provisions of clause (6)(iv) of this covenant would be satisfied, the transaction is otherwise permitted by this Indenture and the Subsidiary Guarantor is released from its Subsidiary Guarantee at the time of such transaction in accordance with this Indenture.

SECTION 5.02. Successor Substituted. Upon any consolidation or merger, or any sale, conveyance, transfer, lease or other disposition of all or substantially all of the property and assets of Arch Western in accordance with Section 5.01 of this Indenture, any Surviving Person formed by such consolidation or into which Arch Western is merged or to which such sale, conveyance, transfer, lease or other disposition is made shall succeed to, and be substituted for, and may exercise every right and power of, Arch Western under this Indenture (or of the Subsidiary Guarantor under the Subsidiary Guarantee, as the case may be) with the same effect as if such Surviving Person had been named as Arch Western (or such Subsidiary Guarantor) herein; provided, however, that Arch Western shall not be released from its obligation or covenants under this Indenture in the case of a sale, transfer, assignment, conveyance or other disposition (unless such sale, transfer, assignment, conveyance or other disposition is of all the assets of Arch Western as an or virtually as an entirety) or a lease.

ARTICLE SIX
DEFAULTS AND REMEDIES

SECTION 6.01. Events of Default. (a) "Event of Default", wherever used herein, means any one of the following events (whatever the reason for such Event of Default and whether it shall be voluntary or involuntary or be effected by operation of law or pursuant to any judgment, decree or order of any court or any order, rule or regulation of any administrative or governmental body):

(i) a default in the payment of any interest on any Note when it becomes due and payable, and such default shall continue for a period of 30 days; or

(ii) a default in the payment of the principal of (or premium, if any, on) any Note at its Stated Maturity, upon acceleration, redemption, optional redemption, required repurchase or otherwise; or

(iii) a default in the performance, or breach, of any covenant or agreement of Arch Western, the Issuer or any Guarantor under Sections 4.09 or 4.11 or Article Five; or

(iv) (A) a default in the performance, or breach, of any covenant or agreement of Arch Western, the Issuer or any Guarantor under this Indenture, the Note Guarantees or the Security Documents (other than a default in the performance, or breach, of a covenant or agreement which is specifically dealt with elsewhere in this Section 6.01) and such default or breach shall continue for a period of 60 days after written notice (the "Notice of Default") has been given, by registered or certified mail, (x) to Arch Western or the Issuer by the Trustee or (y) to Arch Western or the Issuer and the Trustee by the Holders of at least 25% in aggregate principal amount of the outstanding Notes; Arch Western shall deliver to the Trustee, within 30 days after the occurrence thereof, written notice in the form of an Officers' Certificate of any event that with the giving of notice or the lapse of time or both would become an Event of Default, its status and what action is being taken or proposed to be taken with respect thereto; or

(v) a default under any Debt by Arch Western or any Restricted Subsidiary that results in acceleration of the maturity of such debt, or failure to pay any such Debt at maturity, in an aggregate amount greater than $25,000,000 or its foreign currency equivalent at the time; or

(vi) any judgment or judgments for the payment of money in an aggregate amount in excess of $25,000,000 (or its foreign currency equivalent at the time) that shall be rendered against Arch Western or any Restricted Subsidiary and that shall not be waived, satisfied or discharged for any period of 30 consecutive days during which a stay of enforcement shall not be in effect; or

(vii) the entry by a court of competent jurisdiction of (A) a decree or order for relief in respect of Arch Coal, Arch Western, the Issuer, any Guarantor or any other Significant Subsidiary in an involuntary case or proceeding under any applicable Bankruptcy Law or (B) a decree or order adjudging Arch Coal, Arch Western, the Issuer, any Guarantor or any other Significant Subsidiary bankrupt or insolvent, or seeking reorganization, arrangement, adjustment or composition of or in respect of Arch Coal, Arch Western, the Issuer, any Guarantor or any other Significant Subsidiary under any applicable law, or appointing a custodian, receiver, liquidator, assignee, trustee, sequestrator (or other similar official) of Arch Coal, Arch Western, the Issuer, any Guarantor or any other Significant Subsidiary or of any substantial part of their respective properties or ordering the winding up or liquidation of their affairs, and any such decree, order or appointment pursuant to any Bankruptcy Law for relief shall continue to be in effect, or any such other decree, appointment or order shall be unstayed and in effect, for a period of 60 consecutive days; or

(viii) (A) Arch Coal, Arch Western, the Issuer, any Guarantor or any other Significant Subsidiary (x) commences a voluntary case or proceeding under any applicable Bankruptcy Law or any other case or proceeding to be adjudicated bankrupt or insolvent or (y) consents to the filing of a petition, application, answer or consent seeking reorganization or relief under any applicable Bankruptcy Law, (B) Arch Coal, Arch Western, the Issuer, any Guarantor or any other Significant Subsidiary consents to the entry of a decree or order for relief in respect of Arch Coal, Arch Western, the Issuer, any Guarantor or any other Significant Subsidiary in an involuntary case or proceeding under any applicable Bankruptcy Law or to the commencement of any bankruptcy or insolvency case or proceeding against it or, (C) Arch Coal, Arch Western, the Issuer, any Guarantor or any other Significant Subsidiary (x) consents to the appointment of, or taking possession by, a custodian, receiver, liquidator, administrator, supervisor, assignee, trustee, sequestrator or similar official of Arch Coal, Arch Western, the Issuer, any Guarantor or any other Significant Subsidiary or of any substantial part of their respective properties, (y) makes an assignment for the benefit of creditors or (z) admits in writing its inability to pay its debts generally as they become due; or

(ix) any Note Guarantee shall be held in any judicial proceeding to be unenforceable or invalid or shall cease for any reason to be in full force and effect or any Guarantor, or any Person acting on behalf of any Guarantor, shall deny or disaffirm its obligations under any Note Guarantee; or

(x) the legal impairment of the security interests under the Security Documents for any reason other than the satisfaction in full of all obligations under this Indenture and discharge of the Security Documents or any security interest created thereunder shall be declared invalid or unenforceable or Arch Western or any of its Subsidiaries asserting, in any pleading in any court of competent jurisdiction, that any such security interest is invalid or unenforceable.

(b) If a Default or an Event of Default occurs and is continuing and is known to a Trust Officer of the Trustee, the Trustee shall mail to each Holder notice of the Default or Event of Default within five business days after its occurrence. Except in the case of a Default or an Event of Default in payment of principal of, premium, if any, on the Notes or interest, if any, on any Note, the Trustee may withhold the notice to the Holders if and so long as a committee of its Trust Officers in good faith determines that withholding the notice is in the interests of the Holders. The Issuer shall also notify the Trustee within five Business Days of the occurrence of any Event of Default.

SECTION 6.02. Acceleration. (a) If an Event of Default with respect to the Notes (other than an Event of Default specified in Section 6.01(a)(vii) or (viii) above) occurs and is continuing, then and in every such case the Trustee or the Holders of not less than 25% in aggregate principal amount of the Notes then outstanding by written notice to Arch Western or the Issuer (and to the Trustee if such notice is given by the Holders) may and the Trustee, upon the written request of such Holders shall, declare the principal amount of all of the outstanding Notes immediately due and payable, and upon any such declaration such principal amount in respect of the Notes shall become immediately due and payable.

(b) If an Event of Default specified in Section 6.01(a)(vii) or (viii) above occurs and is continuing, then the principal amount of all of the outstanding Notes shall ipso facto become and be immediately due and payable without any declaration or other act on the part of the Trustee or any Holder.

(c) At any time after a declaration of acceleration under this Indenture, but before a judgment or decree for payment of the money due has been obtained by the Trustee, the Holders of a majority in aggregate principal amount of the outstanding Notes, by written notice to Arch Western or the Issuer and the Trustee, may waive all past Defaults and rescind and annul such declaration of acceleration and its consequences if:

(i) The Issuer or the Guarantors have paid or deposited with the Trustee a sum sufficient to pay:

(1) all overdue interest, if any, on all Notes then outstanding;

(2) all unpaid principal of and premium, if any, on any outstanding Notes that has become due otherwise than by such declaration of acceleration and interest thereon at the rate borne by the Notes;

(3) to the extent that payment of such interest is lawful, interest upon overdue interest, if any, at the rate borne by the Notes; and

(4) all sums paid or advanced by the Trustee under this Indenture and the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel;

(ii) the rescission would not conflict with any judgment or decree of a court of competent jurisdiction; and

(iii) all Events of Default, other than the non-payment of amounts of principal of, premium, if any, and interest, if any, on the Notes that has become due solely by such declaration of acceleration, have been cured or waived as provided in Section 6.04.

No such rescission shall affect any subsequent default or impair any right consequent thereon.

(d) Notwithstanding Section 6.02(c) above, in the event of a declaration of acceleration in respect of the Notes because of an Event of Default specified in Section 6.01(a)(v) shall have occurred and be continuing, such declaration of acceleration shall be automatically annulled if the Indebtedness that is the subject of such Event of Default has been discharged or the Holders thereof have rescinded their declaration of acceleration in respect of such Indebtedness, and written notice of such discharge or rescission, as the case may be, shall have been given to the Trustee by the Issuer and countersigned by the Holders of such Indebtedness or a trustee, fiduciary or agent for such Holders, within 30 days after such declaration of acceleration in respect of the Notes, and no other Event of Default has occurred during such 30-day period which has not been cured or waived during such period.

(e) Subject to the Article Seven this Indenture relating to the duties of the Trustee, in case an Event of Default shall occur and be continuing, the Trustee will be under no obligation to exercise any of its rights or powers under this Indenture at the request or direction of any of the Holders, unless such Holders shall have offered to the Trustee reasonable indemnity. Subject to such provisions for the indemnification of the Trustee, the Holders of at least a majority in aggregate principal amount of the Notes then outstanding will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the Trustee or exercising any trust or power conferred on the Trustee with respect to the Notes.

No holder of Notes will have any right to institute any proceeding with respect to this Indenture, or for the appointment of a receiver or trustee, or for any remedy thereunder, unless:

(i) such holder has previously given to the Trustee written notice of a continuing Event of Default;

(ii) the registered Holders of at least 25% in aggregate principal amount of the Notes then outstanding have made a written request and offered reasonable indemnity to the Trustee to institute such proceeding as Trustee; and

(iii) the Trustee shall not have received from the registered Holders of at least a majority in aggregate principal amount of the Notes then outstanding a direction inconsistent with such request and shall have failed to institute such proceeding within 60 days.

However, such limitations do not apply to a suit instituted by a holder of any Note for enforcement of payment of the principal of, and premium, if any, or interest on, such Note on or after the respective due dates expressed in such Note.

SECTION 6.03. Other Remedies. If an Event of Default occurs and is continuing, the Trustee may in its discretion proceed to protect and enforce its rights and the rights of the Holders by such appropriate judicial proceedings as the Trustee shall deem most effectual to protect and enforce any such rights, whether for the specific enforcement of any covenant or agreement in this Indenture or in aid of the exercise of any power granted herein, or to enforce any other proper remedy.

All rights of action and claims under this Indenture or the Notes may be prosecuted and enforced by the Trustee without the possession of any of the Notes or the production thereof in any proceeding relating thereto, and any such proceeding instituted by the Trustee shall be brought in its own name and as trustee of an express trust, and any recovery of judgment shall, after provision for the payment of the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel, be for the ratable benefit of the Holders in respect of which such judgment has been recovered.

SECTION 6.04. Waiver of Past Defaults. The Holders of not less than a majority in principal amount of the outstanding Notes may on behalf of the Holders of all the Notes waive any past Default hereunder and its consequences, except a Default:

(a) in respect of the payment of the principal of (or premium, if any), or interest on, any Note, or

(b) in respect of a covenant or provision hereof which under Article Nine cannot be modified or amended without the consent of the Holder of each outstanding Note affected.

Upon any such waiver, such Default shall cease to exist, and any Event of Default arising therefrom shall be deemed to have been cured, for every purpose of this Indenture; but no such waiver shall extend to any subsequent or other Default or Event of Default or impair any right consequent thereon.

SECTION 6.05. Control by Majority. The Holders of not less than a majority in aggregate principal amount of the Notes may direct the time, method and place of conducting any proceeding for any remedy available to the Trustee or of exercising any trust or power conferred on the Trustee under this Indenture; provided that:

(a) the Trustee may refuse to follow any direction that conflicts with law, this Indenture or that the Trustee determines in good faith may be unduly prejudicial to the rights of Holders not joining in the giving of such direction;

(b) the Trustee may refuse to follow any direction that the Trustee determines is unduly prejudicial to the rights of other Holders or would involve the Trustee in personal liability; and

(c) the Trustee may take any other action deemed proper by the Trustee that is not inconsistent with such direction.

Prior to taking or not taking any action hereunder, the Trustee shall be entitled to indemnification satisfactory to it in its sole discretion against all losses and expenses caused by taking or not taking such action.

SECTION 6.06. Limitation on Suits. A Holder may not pursue any remedy with respect to this Indenture or the Notes unless:

(a) the Holder has previously given the Trustee written notice of a continuing Event of Default;

(b) the Holders of at least 25% in aggregate principal amount of outstanding Notes shall have made a written request to the Trustee to pursue such remedy;

(c) such Holder or Holders offer the Trustee indemnity reasonably satisfactory to the Trustee against any costs, liability or expense;

(d) the Trustee does not comply with the request within 60 days after receipt of the request and the offer of indemnity; and

(e) during such 60-day period, the Holders of a majority in aggregate principal amount of the outstanding Notes do not give the Trustee a direction that is inconsistent with the request.

The limitations in the foregoing provisions of this Section 6.06, however, do not apply to a suit instituted by a Holder for the enforcement of the payment of the principal of, premium, if any, or interest, if any, on such Note on or after the respective due dates expressed in such Note.

A Holder may not use this Indenture to prejudice the rights of any other Holder or to obtain a preference or priority over another Holder.

SECTION 6.07. Unconditional Right of Holders to Receive Payment. Notwithstanding any other provision of this Indenture, the right of any Holder to receive payment of principal of, premium, if any, and interest, if any, on the Notes held by such Holder, on or after the respective due dates expressed in the Notes, or to bring suit for the enforcement of any such payment on or after such respective dates, shall not be impaired or affected without the consent of such Holder.

SECTION 6.08. Collection Suit by Trustee. The Issuer covenants that if default is made in the payment of:

(a) any installment of interest on any Note when such interest becomes due and payable and such default continues for a period of 30 days, or

(b) the principal of (or premium, if any, on) any Note at the Maturity thereof,

the Issuer shall, upon demand of the Trustee, pay to the Trustee for the benefit of the Holders of such Notes, the whole amount then due and payable on such Notes for principal (and premium, if any), and interest, and interest on any overdue principal (and premium, if any) and, to the extent that payment of such interest shall be legally enforceable, upon any overdue installment of interest, at the rate borne by the Notes, and, in addition thereto, such further amount as shall be sufficient to cover the amounts provided for in Section 7.07 and such further amount as shall be sufficient to cover the costs and expenses of collection, including the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel.

(c) If the Issuer fails to pay such amounts forthwith upon such demand, the Trustee, in its own name as trustee of an express trust, may institute a judicial proceeding for the collection of the sums so due and unpaid, may prosecute such proceeding to judgment or final decree and may enforce the same against the Issuer or any other obligor upon the Notes and collect the moneys adjudged or decreed to be payable in the manner provided by law out of the property of the Issuer or any other obligor upon the Notes, wherever situated.

SECTION 6.09. Trustee May File Proofs of Claim. The Trustee may file such proofs of claim and other papers or documents as may be necessary or advisable in order to have the claims of the Trustee (including any claim for the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel, and any other amounts due the Trustee under Section 7.07) and the Holders allowed in any judicial proceedings relative to the Issuer or any Guarantor, their creditors or their property and, unless prohibited by law or

applicable regulations, may vote on behalf of the Holders at their direction in any election of a trustee in bankruptcy or other Person performing similar functions, and any Custodian in any such judicial proceeding is hereby authorized by each Holder to make payments to the Trustee and, in the event that the Trustee shall consent to the making of such payments directly to the Holders, to pay to the Trustee any amount due it for the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and its counsel, and any other amounts due the Trustee under Section 7.07.

Nothing herein contained shall be deemed to empower the Trustee to authorize or consent to, or accept or adopt on behalf of any Holder, any plan of reorganization, arrangement, adjustment or composition affecting the Notes or the rights of any Holder thereof, or to authorize the Trustee to vote in respect of the claim of any Holder in any such proceeding.

SECTION 6.10. Application of Money Collected. If the Trustee collects any money or other property (or the same is distributed) pursuant to this Article Six, it shall pay out the money or property in the following order:

FIRST: to the Trustee (including any predecessor Trustee)for amounts due under Section 7.07;

SECOND: to Holders for amounts due and unpaid on the Notes for principal of, premium, if any, and interest, if any, ratably, without preference or priority of any kind, according to the amounts due and payable on the Notes for principal, premium, if any, and interest, if any, respectively; and

THIRD: to the Issuer, any Guarantor or any other obligors of the Notes, as their interests may appear, or as a court of competent jurisdiction may direct.

The Trustee may fix a Record Date and payment date for any payment to Holders pursuant to this Section 6.10. At least 15 days before such Record Date, the Issuer shall mail to each Holder and the Trustee a notice that states the Record Date, the payment date and amount to be paid.

SECTION 6.11. Undertaking for Costs. A court may in its discretion require, in any suit for the enforcement of any right or remedy under this Indenture or in any suit against the Trustee for any action taken or omitted by it as Trustee, the filing by any party litigant in the suit of an undertaking to pay the costs of such suit, and such court may in its discretion assess reasonable costs, including reasonable attorneys' fees, against any party litigant in such suit, having due regard to the merits and good faith of the claims or defenses made by the party litigant. This Section 6.11 does not apply to a suit by the Trustee, a suit by Holders of more than 10% in aggregate principal amount of the outstanding Notes or to any suit by any Holder pursuant to Section 6.07.

SECTION 6.12. Restoration of Rights and Remedies. If the Trustee or any Holder has instituted any proceeding to enforce any right or remedy under this Indenture and such proceeding has been discontinued or abandoned for any reason, or has been determined adversely to the Trustee or to such Holder, then and in every such case, subject to any determination in such proceeding, the Issuer, any Guarantor, the Trustee and the Holders shall be

restored severally and respectively to their former positions hereunder and thereafter all rights and remedies of the Trustee and the Holders shall continue as though no such proceeding had been instituted.

SECTION 6.13. Rights and Remedies Cumulative. Except as otherwise provided with respect to the replacement or payment of mutilated, destroyed, lost or stolen Notes in Section 2.07, no right or remedy herein conferred upon or reserved to the Trustee or to the Holders is intended to be exclusive of any other right or remedy, and every right and remedy shall, to the extent permitted by law, be cumulative and in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or otherwise. The assertion of any right or remedy hereunder, or otherwise, shall not prevent the concurrent assertion or employment of any other appropriate right or remedy.

SECTION 6.14. Delay or Omission Not Waiver. No delay or omission of the Trustee or of any Holder of any Note to exercise any right or remedy accruing upon any Event of Default shall impair any such right or remedy or constitute a waiver of any such Event of Default or an acquiescence therein. Every right and remedy given by this Article Six or by law to the Trustee or to the Holders may be exercised from time to time, and as often as may be deemed expedient, by the Trustee or by the Holders, as the case may be.

SECTION 6.15. Record Date. The Issuer may set a Record Date for purposes of determining the identity of Holders entitled to vote or to consent to any action by vote or consent authorized or permitted by Sections 6.04, 6.05 and 12.04. Unless this Indenture provides otherwise, such Record Date shall be the later of 30 days prior to the first solicitation of such consent or the date of the most recent list of Holders furnished to the Trustee pursuant to Section 2.05 prior to such solicitation.

SECTION 6.16. Waiver of Stay or Extension Laws. The Issuer covenants (to the extent that it may lawfully do so) that it shall not at any time insist upon, or plead, or in any manner whatsoever claim or take the benefit or advantage of, any stay or extension law wherever enacted, now or at any time hereafter in force, which may affect the covenants or the performance of this Indenture; and the Issuer (to the extent that it may lawfully do so) hereby expressly waives all benefit or advantage of any such law and covenants that it shall not hinder, delay or impede the execution of any power herein granted to the Trustee, but shall suffer and permit the execution of every such power as though no such law had been enacted.

ARTICLE SEVEN
TRUSTEE

SECTION 7.01. Duties of Trustee. (a) if an Event of Default has occurred and is continuing of which a Trust Officer of the Trustee has actual knowledge, the Trustee shall exercise such of the rights and powers vested in it by this Indenture, and use the same degree of care and skill in their exercise as a prudent person would exercise or use under the circumstances in the conduct of such person's own affairs;

(b) except during the continuance of an Event of Default of which a Trust Officer of the Trustee has actual knowledge: (i) the Trustee undertakes to perform such duties and only

such duties as are specifically set forth in this Indenture and no others and no implied covenants or obligations shall be read into this Indenture against the Trustee; and (ii) in the absence of bad faith on its part, the Trustee may conclusively rely, as to the truth of the statements and the correctness of the opinions expressed therein, upon certificates or opinions furnished to the Trustee and conforming to the requirements of this Indenture. In the case of any such certificates or opinions which by any provisions hereof are specifically required to be furnished to the Trustee, the Trustee shall examine same to determine whether they conform to the requirements of this Indenture (but need not confirm or investigate the accuracy of mathematical calculations or other facts stated therein);

(c) the Trustee shall not be relieved from liability for its own negligent action, its own negligent failure to act or its own willful misconduct, except that:

(i) this paragraph does not limit the effect of paragraph (b) of this Section 7.01;

(ii) the Trustee shall not be liable for any error of judgment made in good faith by a Trust Officer unless it is proved that the Trustee was negligent in ascertaining the pertinent facts; and

(iii) the Trustee shall not be liable with respect to any action it takes or omits to take in good faith in accordance with a direction received by it pursuant to Section 6.05;

(d) the Trustee shall not be liable for interest on any money received by it except as the Trustee may agree in writing with the Issuer or any Guarantor. Money held in trust by the Trustee need not be segregated from other funds except to the extent required by law;

(e) no provision of this Indenture shall require the Trustee to expend or risk its own funds or otherwise incur financial liability in the performance of any of its duties hereunder or in the exercise of any of its rights or powers, if it shall have reasonable grounds to believe that repayment of such funds or adequate indemnity against such risk or liability is not reasonably assured to it; and

(f) whether or not therein expressly so provided, every provision of this Indenture relating to the conduct or affecting the liability of or affording protection to the Trustee shall be subject to the provisions of this Section 7.01 and to the provisions of the TIA.

SECTION 7.02. Certain Rights of Trustee. (a) Subject to Section 7.01:

(i) the Trustee may rely, and shall be protected in acting or refraining from acting, upon any resolution, certificate, statement, instrument, opinion, report, notice, request, direction, consent, order, bond, debenture, note, other evidence of indebtedness or other paper or document believed by it to be genuine and to have been signed or presented by the proper person;

(ii) before the Trustee acts or refrains from acting, it may require an Officers' Certificate or an Opinion of Counsel, which shall conform to Section 13.05. The Trustee

shall not be liable for any action it takes or omits to take in good faith in reliance on such certificate or opinion;

(iii) the Trustee may act through its attorneys and agents and shall not be responsible for the misconduct or negligence of any attorney or agent appointed with due care by it hereunder;

(iv) the Trustee shall be under no obligation to exercise any of the rights or powers vested in it by this Indenture at the request or direction of any of the Holders, unless such Holders shall have offered to the Trustee reasonable security or indemnity against the costs, expenses and liabilities that might be incurred by it in compliance with such request or direction;

(v) the Trustee shall not be liable for any action it takes or omits to take in good faith that it believes to be authorized or within its rights or powers, provided that the Trustee's conduct does not constitute negligence or bad faith;

(vi) whenever in the administration of this Indenture the Trustee shall deem it desirable that a matter be proved or established prior to taking, suffering or omitting any action hereunder, the Trustee (unless other evidence be herein specifically prescribed) may, in the absence of bad faith on its part, rely upon an Officers' Certificate; and

(vii) the Trustee shall not be bound to make any investigation into the facts or matters stated in any resolution, certificate, statement, instrument, opinion, report, notice, request, direction, consent, order, bond, debenture, note, other evidence of indebtedness or other paper or document, but the Trustee, in its discretion, may make such further inquiry or investigation into such facts or matters as it may see fit, and, if the Trustee shall determine to make such further inquiry or investigation, it shall be entitled to examine the books, records and premises of the Issuer personally or by agent or attorney.

(viii) the rights, privileges, protections, immunities and benefits given to the Trustee, including, without limitation, its right to be indemnified, are extended to, and shall be enforceable by, the Trustee in each of its capacities hereunder (including its capacity under the Note Pledge Agreement), and each agent, custodian and other Person employed to act hereunder and under the Note Pledge Agreement; and the permissive right of the Trustee to take any action under this Indenture or under any other agreement in connection herewith shall not be construed as a duty;

(ix) each Guarantor shall pay on demand to the Trustee any and all costs, fees and expenses (including without limitation, reasonable legal fees of counsel) incurred by the Trustee in enforcing any rights under any Guarantee;

(x) the Trustee shall not be deemed to have notice of any Default or Event of Default unless a Trust Officer of the Trustee has actual knowledge thereof or unless written notice of any event which is in fact such a default is received by the Trustee at the Corporate Trust Office of the Trustee, and such notice references the Notes and this Indenture;

(xi) the permissive right of the Trustee to take any action under this Indenture or under any other agreement in connection herewith shall not be construed as a duty;

(xii) unless otherwise specifically provided in this Indenture, any demand, request, direction or notice from the Issuer shall be sufficient if signed by an Officer of the Issuer; and

(xiii) the trustee may consult with counsel and the advice of such counsel or any Opinion of Counsel shall be full and complete authorization and protection from liability in respect of any action taken, suffered or omitted by it hereunder in good faith and in reliance thereon.

(b) The Trustee may request that the Issuer deliver an Officers' Certificate setting forth the names of the individuals and/or titles of officers authorized at such time to take specified actions pursuant to this Indenture, which Officers' Certificate may be signed by any person authorized to sign an Officers' Certificate, including any person specified as so authorized in any such certificate previously delivered and not superseded.

SECTION 7.03. Individual Rights of Trustee. The Trustee, any Paying Agent, any Registrar or any other agent of the Issuer or of the Trustee, in its individual or any other capacity, may become the owner or pledgee of Notes and, subject to TIA Sections 310(b) and 311, may otherwise deal with the Issuer with the same rights it would have if it were not Trustee, Paying Agent, Registrar or such other agent.

SECTION 7.04. Trustee's Disclaimer. The recitals contained herein and in the Notes, except for the Trustees certificates of authentication, shall be taken as the statements of the Issuer, and the Trustee assumes no responsibility for their correctness. The Trustee makes no representations as to the validity or sufficiency of this Indenture or of the Notes, except that the Trustee represents that it is duly authorized to execute and deliver this Indenture, authenticate the Notes and perform its obligations hereunder and agrees that the statements made by it in a Statement of Eligibility on Form T-1 supplied to the Issuer will be true and accurate, subject to the qualifications set forth therein. The Trustee shall not be accountable for the use or application by the Issuer of Notes or the proceeds thereof. It shall not be responsible for the use or application of any money received by any Paying Agent other than the Trustee, and it shall not be responsible for any statement or recital herein or any statement in the Notes or any other document in connection with the issuance or sale of the Notes or pursuant to this Indenture other than its certificate of authentication.

Beyond the exercise of reasonable care in the custody thereof, the Trustee shall have no duty as to any Collateral in its possession or control or in the possession or control of any agent or bailee or any income thereon or as to preservation of rights against prior parties or any other rights pertaining thereto and the Trustee shall not be responsible for filing any financing or continuation statements or recording any documents or instruments in any public office at any time or times or otherwise perfecting or maintaining the perfection of any security interest in the Collateral. The Trustee shall be deemed to have exercised reasonable care in the custody of the Collateral in its possession if the Collateral is accorded treatment substantially equal to that which it accords its own property and shall not be liable or responsible for any loss or diminution

in the value of any of the Collateral, by reason of the act or omission of any carrier, forwarding agency or other agent or bailee selected by the Trustee in good faith.

The Trustee shall not be responsible for the existence, genuineness or value of any of the Collateral or for the validity, perfection, priority or enforceability of the Liens in any of the Collateral, whether impaired by operation of law or by reason of any action or omission to act on its part hereunder, except to the extent such action or omission constitutes gross negligence or willful misconduct on the part of the Trustee, for the validity or sufficiency of the Collateral or any agreement or assignment contained therein, for the validity of the title of the Company to the Collateral, for insuring the Collateral or for the payment of taxes, charges, assessments or Liens upon the Collateral or otherwise as to the maintenance of the Collateral. The Trustee shall have no duty to ascertain or inquire as to the performance or observance of any of the terms of this Indenture, the Collateral Agency Agreement or the Security Documents by the Issuer, any secured creditors or secured creditors' representatives, or the Collateral Trustee or any collateral agent.

SECTION 7.05. Notice of Defaults. If any Default or any Event of Default occurs and is continuing and if such Default or Event of Default is known to the Trustee, the Trustee shall mail to each Holder in the manner and to the extent provided in TIA Section 313(c) notice of the Default or Event of Default within 45 days after it occurs, unless such Default or Event of Default has been cured; provided, however, that, except in the case of a default in the payment of the principal of, premium, if any, or interest on any Note, the Trustee shall be protected in withholding such notice if and so long as a committee of its Trust Officers in good faith determine that the withholding of such notice is in the interest of the Holders.

The Trustee shall not be deemed to have knowledge of a Default unless a Trust Officer has actual knowledge of such Default or written notice of such Default has been received by the Trustee at its Corporate Trust Office in New York, New York, and such notice references the Notes and this Indenture

SECTION 7.06. Reports by Trustee to Holders. Within 60 days after January 1 of each year commencing with the first January 1 after the Issue Date, the Trustee shall transmit to the Holders, in the manner and to the extent provided in TIA Section 313(c), a brief report dated as of such date that complies with TIA Section 313(a). The Trustee also shall comply with TIA Section 313(b) and (c).

The Issuer shall promptly notify the Trustee whenever the Notes become listed on any securities exchange and of any delisting thereof and the Trustee shall comply with TIA Section 313(d).

SECTION 7.07. Compensation and Indemnity. The Issuer, failing which each Guarantor, shall pay to the Trustee such compensation as shall be agreed in writing for its services hereunder. The Trustee's compensation shall not be limited by any law on compensation of a trustee of an express trust. The Issuer, failing which each Guarantor, shall reimburse the Trustee upon request for all reasonable out-of-pocket expenses incurred or made by it, including costs of collection, in addition to the compensation for its services. Such expenses shall include the reasonable compensation and out-of-pocket expenses of the Trustee's agents and counsel.

The Issuer, failing which each Guarantor, shall indemnify the Trustee (in any of its capacities in connection with any of the transactions contemplated hereby, including, without limitation, under this Indenture or under the Note Pledge Agreement) and its officers, directors, employees and agents for, and hold it and them harmless from and against any and all loss, liability or expense (including attorneys' fees and expenses) incurred by it or any of them without willful misconduct or negligence on its part arising out of or in connection with the administration of this trust and the performance of its duties hereunder (including the costs and expenses of enforcing this Indenture including this Section 7.07 and of defending itself against any claim, whether asserted by the Issuer, the Guarantors, any Holder or any other Person). The Trustee shall notify the Issuer promptly of any claim for which it may seek indemnity. Failure by the Trustee to so notify the Issuer shall not relieve the Issuer or the Guarantors of their obligations hereunder or under the Note Pledge Agreement. The Issuer shall defend the claim and the Trustee shall cooperate in such defense. The Trustee may have separate counsel and the Issuer shall pay the fees and expenses of such counsel. The Issuer need not pay for any settlement made without its consent, which consent may not be unreasonably withheld. The Issuer shall not reimburse any expense or indemnify against any loss, liability or expense incurred by the Trustee through the Trustee's own willful misconduct or negligence.

To secure the Issuer's and each of the Guarantor's payment obligations in this Section 7.07, the Trustee shall have a Lien prior to the Notes upon the Collateral and on all money or property held or collected by the Trustee, hereunder or under the Note Pledge Agreement, in its capacity as Trustee, except money or property held in trust to pay principal of, premium, if any, and interest on particular Notes.

When the Trustee incurs expenses after the occurrence of a Default specified in Section 6.01(a)(vii) or (viii) with respect to the Issuer, the Guarantors, or any Restricted Subsidiary, the expenses are intended to constitute expenses of administration under Bankruptcy Law.

The Issuer's and each of the Guarantor's obligations under this Section 7.07, including the Lien and claim of the Trustee, and any claim arising hereunder shall survive the resignation or removal of any Trustee, the satisfaction and discharge of the Issuer's or Guarantor's obligations pursuant to Article Eight and any rejection or termination under any Bankruptcy Law, and the termination of this Indenture for any reason, and shall apply with equal force and effect to the Trustee in each of its capacities hereunder and each agent, custodian and other Person employed to act hereunder.

"Trustee" for purposes of this Section 7.07 shall include any predecessor Trustee; provided, however, that the negligence or willful misconduct of any Trustee hereunder shall not affect the rights of any other Trustee hereunder.

SECTION 7.08. Replacement of Trustee. A resignation or removal of the Trustee and appointment of a successor Trustee shall become effective only upon the successor Trustee's acceptance of appointment as provided in this Section 7.08.

The Trustee may resign at any time by so notifying the Issuer. The Holders of a majority in outstanding principal amount of the outstanding Notes may remove the Trustee by so notifying the Trustee and the Issuer. The Issuer shall remove the Trustee if:

(a) the Trustee fails to comply with Section 7.10;

(b) the Trustee is adjudged bankrupt or insolvent;

(c) a receiver or other public officer takes charge of the Trustee or its property; or

(d) the Trustee otherwise becomes incapable of acting.

If the Trustee resigns or is removed, or if a vacancy exists in the office of Trustee for any reason, the Issuer shall promptly appoint a successor Trustee. Within one year after the successor Trustee takes office, the Holders of a majority in principal amount of the outstanding Notes may appoint a successor Trustee to replace the successor Trustee appointed by the Issuer. If the successor Trustee does not deliver its written acceptance required by the next succeeding paragraph of this Section 7.08 within 30 days after the retiring Trustee resigns or is removed, the retiring Trustee, the Issuer or the Holders of a majority in principal amount of the outstanding Notes may, at the expense of the Issuer, petition any court of competent jurisdiction for the appointment of a successor Trustee.

A successor Trustee shall deliver a written acceptance of its appointment to the retiring Trustee and to the Issuer. Thereupon the resignation or removal of the retiring Trustee shall become effective, and the successor Trustee shall have all the rights, powers and duties of the Trustee under this Indenture. The successor Trustee shall mail a notice of its succession to Holders. The retiring Trustee shall promptly transfer all property held by it as Trustee to the successor Trustee.

If a successor Trustee does not take office within 60 days after the retiring Trustee resigns or is removed, the retiring Trustee, the Issuer or the Holders of at least 25% in outstanding principal amount of the Notes may, at the Issuer's expense, petition any court of competent jurisdiction for the appointment of a successor Trustee at the expense of the Issuer.

If the Trustee fails to comply with Section 7.10, any Holder may petition any court of competent jurisdiction for the removal of the Trustee and the appointment of a successor Trustee.

The retiring Trustee shall promptly transfer all property held by it as Trustee to the successor Trustee, provided that all sums owing to the retiring Trustee hereunder have been paid and subject to the lien provided for in Section 7.07. Notwithstanding the replacement of the Trustee pursuant to this Section 7.08, the Issuer's and the Guarantors' obligations under Section 7.07 shall continue for the benefit of the retiring Trustee.

SECTION 7.09. Successor Trustee by Merger. Any corporation into which the Trustee may be merged or converted or with which it may be consolidated, or any corporation resulting from any merger, conversion or consolidation to which the Trustee shall be a party, or any corporation succeeding to all or substantially all of the corporate trust business of the Trustee, shall be the successor of the Trustee hereunder, provided such corporation shall be

otherwise qualified and eligible under this Article Seven, without the execution or filing of any paper or any further act on the part of any of the parties hereto. In case any Notes shall have been authenticated, but not delivered, by the Trustee then in office, any successor by merger, conversion or consolidation to such authenticating Trustee may adopt such authentication and deliver the Notes so authenticated with the same effect as if such successor Trustee had itself authenticated such Notes. In case at that time any of the Notes shall not have been authenticated, any successor Trustee may authenticate such Notes either in the name of any predecessor hereunder or in the name of the successor Trustee. In all such cases such certificates shall have the full force and effect which this Indenture provides for the certificate of authentication of the Trustee shall have; provided, however, that the right to adopt the certificate of authentication of any predecessor Trustee or to authenticate Notes in the name of any predecessor Trustee shall apply only to its successor or successors by merger, conversion or consolidation.

SECTION 7.10. Eligibility: Disqualification. The Trustee shall at all times satisfy the requirements of TIA Section 310(a)(1) and (5). The Trustee shall have a combined capital and surplus of at least $50,000,000 as set forth in its most recent published annual report of condition. No obligor upon the Notes or Person directly controlling, controlled by, or under common control with such obligor shall serve as trustee upon the Notes. The Trustee shall comply with TIA Section 310(b); provided, however, that there shall be excluded from the operation of TIA Section 310(b)(1) any indenture or indentures under which other securities or certificates of interest or participation in other notes of the Issuer are outstanding if the requirements for such exclusion set forth in TIA Section 310(b)(1) are met.

For purposes of Section 310(b)(1) of the TIA and to the extent permitted thereby, the Trustee, in its capacity as trustee in respect of the Securities of any series, shall not be deemed to have a conflict of interest arising from its capacity as trustee in respect of the Securities of any other series.

Nothing herein shall prevent the Trustee from filing with the Commission the application referred to in the second to last paragraph of Section 310(b) of the TIA.

If the Trustee has or shall acquire a conflicting interest within the meaning of the TIA, the Trustee shall either eliminate such interest or resign, to the extent and in the manner provided by, and subject to the provisions of, the Trust Indenture Act and this Indenture.]

SECTION 7.11. Preferential Collection of Claims Against Issuer. The Trustee shall comply with TIA Section 311(a), excluding any creditor relationship listed in TIA Section 311(b). A Trustee who has resigned or been removed shall be subject to TIA Section 311(a) to the extent indicated therein.

SECTION 7.12. Appointment of Co-Trustee. (a) It is the purpose of this Indenture that there shall be no violation of any law of any jurisdiction denying or restricting the right of banking corporations or associations to transact business as trustee in such jurisdiction. It is recognized that in case of litigation under this Indenture or the Agreement, and in particular in case of the enforcement thereof on default, or in the case the Trustee deems that by reason of any present or future law of any jurisdiction it may not exercise any of the powers, rights or remedies herein granted to the Trustee or hold title to the properties, in trust, as herein granted or take any

action which may be desirable or necessary in connection therewith, it may be necessary that the Trustee appoint an individual or institution as a separate or co-trustee. The following provisions of this Section 7.12 are adopted to these ends.

(b) In the event that the Trustee appoints an additional individual or institution as a separate or co-trustee, each and every remedy, power, right, claim, demand, cause of action, immunity, estate, title, interest and Lien expressed or intended by this Indenture to be exercised by or vested in or conveyed to the Trustee with respect thereto shall be exercisable by and vest in such separate or co-trustee but only to the extent necessary to enable such separate or co-trustee to exercise such powers, rights and remedies, and only to the extent that the Trustee by the laws of any jurisdiction is incapable of exercising such powers, rights and remedies, and every covenant and obligation necessary to the exercise thereof by such separate or co-trustee shall run to and be enforceable by either of them.

(c) Should any instrument in writing from the Issuer be required by the separate or co-trustee so appointed by the Trustee for more fully and certainly vesting in and confirming to him or it such properties, rights, powers, trusts, duties and obligations, any and all such instruments in writing shall, on request, be executed, acknowledged and delivered by the Issuer; provided, however, that if an Event of Default shall have occurred and be continuing, if the Issuer does not execute any such instrument within 15 days after request therefor, the Trustees shall be empowered as an attorney-in-fact for the Issuer to execute any such instrument in the Issuer's name and stead. In case any separate or co-trustee or a successor to either shall die, become incapable or acting, resign or be removed, all the estates, properties, rights, powers, trusts, duties and obligations of such separate or co-trustee, so far as permitted by law, shall vest in and be exercised by the Trustee until the appointment of a new trustee or successor to such separate or co-trustee.

(d) Each separate trustee and co-trustee shall, to the extent permitted by law, be appointed and act subject to the following provisions and conditions:

(i) all rights and powers, conferred or imposed upon the Trustee shall be conferred or imposed upon and may be exercised or performed by such separate trustee or co-trustee; and

(ii) no trustee hereunder shall be personally liable by reason of any act or omission of any other trustee hereunder.

(e) Any notice, request or other writing given to the Trustee shall be deemed to have been given to each of the then separate trustees and co-trustees, as effectively as if given to each of them. Every instrument appointing any separate trustee or co-trustee shall refer to this Indenture and the conditions of this Article Seven.

(f) Any separate trustee or co-trustee may at any time appoint the Trustee as its agent or attorney-in-fact with full power and authority, to the extent not prohibited by law, to do any lawful act under or in respect of this Indenture on its behalf and in its name. If any separate trustee or co-trustee shall die, become incapable of acting, resign or be removed, all of its estates,

properties, rights, remedies and trusts shall vest in and be exercised by the Trustee, to the extent permitted by law, without the appointment of a new or successors trustee.

ARTICLE EIGHT
DEFEASANCE; SATISFACTION AND DISCHARGE

SECTION 8.01. Arch Western and the Issuer's Option to Effect Defeasance or Covenant Defeasance. Arch Western and the Issuer may, at their option by a resolution of the Boards of Directors, at any time, with respect to the Notes, elect to have either Section 8.02 or Section 8.03 be applied to all outstanding Notes upon compliance with the conditions set forth below in this Article Eight.

SECTION 8.02. Defeasance and Discharge. Upon Arch Western's and the Issuer's exercise under Section 8.01 of the option applicable to this Section 8.02, Arch Western and the Issuer shall be deemed to have been discharged from its obligations with respect to the Notes on the date the conditions set forth in Section 8.04 are satisfied (hereinafter, "legal defeasance"). For this purpose, such legal defeasance means that Arch Western and the Issuer shall be deemed to have paid and discharged the entire indebtedness represented by the Notes and to have satisfied all its other obligations under the Notes and this Indenture (and the Trustee, at the expense of Arch Western and the Issuer, shall execute proper instruments acknowledging the same), except for the following which shall survive until otherwise terminated or discharged hereunder: (a) the rights of Holders of Notes to receive, solely from the trust fund described in Section 8.08 and as more fully set forth in such Section, payments in respect of the principal of (and premium, if any, on) and interest on such Notes when such payments are due, (b) the provisions set forth at Section 8.06 below and (c) the rights, powers, trusts, duties and immunities of the Trustee hereunder. Subject to compliance with this Article Eight, Arch Western and the Issuer may exercise its option under this Section 8.02 notwithstanding the prior exercise of its option under Section 8.03 below with respect to the Notes. If Arch Western and the Issuer exercise their legal defeasance option, payment of the Notes may not be accelerated because of an Event of Default.

SECTION 8.03. Covenant Defeasance. Upon Arch Western's and the Issuer's exercise under Section 8.01 of the option applicable to this Section 8.03, Arch Western and the Issuer shall be released from their respective obligations under any covenant contained in Sections 4.04 through 4.15, 4.17 (other than the covenant to comply with TIA Section 314(a) to the extent that such obligations thereunder cannot be terminated), 5.01(b)(iv) and 6.01((iv),(v),(vi) and (vii) (only with respect to Significant Subsidiaries)) with respect to the Notes on and after the date the conditions set forth below are satisfied (hereinafter, "covenant defeasance"). For this purpose, such covenant defeasance means that, the Issuer may omit to comply with and shall have no liability in respect of any term, condition or limitation set forth in any such covenant, whether directly or indirectly, by reason of any reference elsewhere herein to any such covenant or by reason of any reference in any such covenant to any other provision herein or in any other document and such omission to comply shall not constitute a Default or an Event of Default, but, except as specified above, the remainder of this Indenture and such Notes shall be unaffected thereby.

SECTION 8.04. Conditions to Defeasance. The legal defeasance option or the covenant defeasance option may be exercised only if:

(a) Arch Western or the Issuer irrevocably deposit in trust with the Trustee money or U.S. Government Obligations for the payment of principal of, premium, if any, and interest on the Notes to maturity or redemption, as the case may be;

(b) Arch Western or the Issuer delivers to the Trustee a certificate from a nationally recognized firm of independent certified public accountants expressing their opinion that the payments of principal, premium, if any, and interest when due and without reinvestment on the deposited U.S. Government Obligations plus any deposited money without investment will provide cash at such times and in such amounts as will be sufficient to pay principal, premium, if any, and interest when due on all the Notes to be defeased to maturity or redemption, as the case may be;

(c) 123 days pass after the deposit is made, and during the 123-day period, no Default described in Section 6.01(vii) and (viii) occurs with respect to Arch Western or the Issuer or any other Person making such deposit which is continuing at the end of the period;

(d) no Default or Event of Default has occurred and is continuing on the date of such deposit and after giving effect thereto;

(e) such deposit does not constitute a default under any other agreement or instrument binding on Arch Western or any of its Restricted Subsidiaries;

(f) Arch Western or the Issuer delivers to the Trustee an Opinion of Counsel to the effect that the trust resulting from the deposit does not constitute, or is qualified as, a regulated investment company under the Investment Company Act of 1940;

(g) in the case of the legal defeasance option, Arch Western or the Issuer delivers to the Trustee an Opinion of Counsel stating that:

(i) Arch Western or the Issuer has received from the Internal Revenue Service a ruling, or

(ii) since the date of this Indenture there has been a change in the applicable Federal income tax law, to the effect that, and based thereon such Opinion of Counsel shall confirm that, the Holders will not recognize income, gain or loss for Federal income tax purposes as a result of such defeasance and will be subject to Federal income tax on the same amounts, in the same manner and at the same time as would have been the case if such defeasance has not occurred;

(h) in the case of the covenant defeasance option, Arch Western or the Issuer delivers to the Trustee an Opinion of Counsel to the effect that the Holders will not recognize income, gain or loss for Federal income tax purposes as a result of such covenant defeasance and will be subject to Federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such covenant defeasance had not occurred; and

(i) Arch Western or the Issuer delivers to the Trustee an Officers' Certificate and an Opinion of Counsel, each stating that all conditions precedent to the defeasance and discharge of the Notes have been complied with as required by this Article Eight.

SECTION 8.05. Satisfaction and Discharge of Indenture. This Indenture shall be discharged and shall cease to be of further effect as to all Notes issued thereunder when either:

(a) all such Notes previously authenticated and delivered (other than lost, stolen or destroyed Notes that have been replaced or paid and Notes for whose payment money or securities has theretofore been deposited in trust and thereafter repaid to the Issuer, as provided in Section 8.07) have been delivered to the Trustee for cancellation; or

(b) (i) all such Notes not theretofore delivered to the Trustee for cancellation (A) have become due and payable by reason of the making of a notice of redemption or otherwise or (B) will become due and payable within one year, (ii) the Issuer has irrevocably deposited or caused to be deposited with the Trustee as trust funds in trust for such purpose an amount of U.S. Dollars or U.S. Government Obligations sufficient (in the opinion of a nationally recognized firm of independent public accountants expressed in a written certification thereof delivered to the Trustee), without consideration of any reinvestment of any interest thereon, to pay and discharge the entire indebtedness on such Notes not theretofore delivered to the Trustee for cancellation for principal, premium, if any, and accrued and unpaid interest, to the date of Stated Maturity or redemption, as the case may be and (iii) the Issuer has delivered an Officers' Certificate and an Opinion of Counsel to the Trustee stating that all conditions precedent to satisfaction and discharge have been complied with.

SECTION 8.06. Survival of Certain Obligations. Notwithstanding Sections 8.01 and 8.03, any obligations of the Issuer and the Guarantors in Sections 2.02 through 2.14, 6.07, 7.07, 7.08, and 8.07 through 8.09 shall survive until the Notes have been paid in full. Thereafter, any obligations of the Issuer and the Guarantors in Sections 7.07, 8.07 and 8.08 shall survive such satisfaction and discharge. Nothing contained in this Article Eight shall abrogate any of the obligations or duties of the Trustee under this Indenture.

SECTION 8.07. Acknowledgment of Discharge by Trustee. Subject to Section 8.09, after the conditions of Section 8.02 or 8.03 have been satisfied, the Trustee upon written request shall acknowledge in writing the discharge of all of the Issuer's obligations under this Indenture except for those surviving obligations specified in this Article Eight.

SECTION 8.08. Application of Trust Money. Subject to Section 8.09, the Trustee shall hold in trust cash in U.S. Dollars or U.S. Government Obligations deposited with it pursuant to this Article Eight. It shall apply the deposited cash or U.S. Dollars or U.S. Government Obligations through the Paying Agent and in accordance with this Indenture to the payment of principal of, premium, if any, interest, on the Notes; but such money need not be segregated from other funds except to the extent required by law.

SECTION 8.09. Repayment to Issuer. Subject to Sections 7.07, and 8.01 through 8.04, the Trustee and the Paying Agent shall promptly pay to the Issuer upon request set

forth in an Officers' Certificate any excess money held by them at any time and thereupon shall be relieved from all liability with respect to such money. The Trustee and the Paying Agent shall pay to the Issuer upon request any money held by them for the payment of principal, premium, if any, that remains unclaimed for two years; provided that the Trustee or Paying Agent before being required to make any payment may cause to be published (a) in The Wall Street Journal or another leading newspaper in New York, New York, (b) through the newswire service of Bloomberg or, if Bloomberg does not then operate, any similar agency or mail to each Holder entitled to such money at such Holder's address (as set forth in the Security Register) notice that such money remains unclaimed and that after a date specified therein (which shall be at least 30 days from the date of such publication or mailing) any unclaimed balance of such money then remaining will be repaid to the Issuer. After payment to the Issuer, Holders entitled to such money must look to the Issuer for payment as general creditors unless an applicable law designates another Person, and all liability of the Trustee and such Paying Agent with respect to such money shall cease.

SECTION 8.10. Indemnity for Government Securities. The Issuer shall pay and shall indemnify the Trustee against any tax, fee or other charge imposed on or assessed against deposited U.S. Government Obligations or the principal, premium, if any, interest, if any, received on such U.S. Government Obligations.

SECTION 8.11. Reinstatement. If the Trustee or Paying Agent is unable to apply cash in U.S. Dollars or U.S. Government Obligations in accordance with this Article Eight by reason of any legal proceeding or by reason of any order or judgment of any court or governmental authority enjoining, restraining or otherwise prohibiting such application, the Issuer's and the Guarantors' obligations under this Indenture and the Notes shall be revived and reinstated as though no deposit had occurred pursuant to this Article Eight until such time as the Trustee or any such Paying Agent is permitted to apply all such U.S. Government Obligations in accordance with this Article Eight; provided, however, that, if the Issuer has made any payment of principal of, premium, if any, and interest, if any, on any Notes because of the reinstatement of its obligations, the Issuer shall be subrogated to the rights of the Holders of such Notes to receive such payment from the cash in U.S. Dollars or U.S. Government Obligations held by the Trustee or Paying Agent.

ARTICLE NINE
AMENDMENTS AND WAIVERS

SECTION 9.01. Without Consent of Holders. Arch Western and the Issuer, when authorized by a resolution of the Board of Directors (as evidenced by the delivery of such resolution to the Trustee), any Guarantor and the Trustee may modify, amend or supplement this Indenture, any Guarantee or the Notes without notice to or consent of any Holder to:

(a) cure any ambiguity, omission, defect or inconsistency in any manner that is not adverse in any material respect to any holder of the Notes,

(b) provide for the assumption by a Surviving Person of the obligations of Arch Western under this Indenture,

(c) provide for uncertificated Notes in addition to or in place of certificated Notes (provided that the uncertificated Notes are issued in registered form for purposes of Section 163(f) of the Code, or in a manner such that the uncertificated Notes are described in Section 163(f)(2)(B) of the Code),

(d) add Note Guarantees with respect to the Notes or confirm and evidence the release, termination or discharge of any security or Note Guarantee when such release, termination or discharge is permitted by this Indenture,

(e) secure the Notes, add to the covenants of the Issuer or Arch Western for the benefit of the Holders or surrender any right or power conferred upon the Issuer,

(f) make any change that does not adversely affect the rights of any holder of the Notes,

(g) comply with any requirement of the Commission in connection with the qualification of this Indenture under the Trust Indenture Act, or

(h) provide for the issuance of Additional Notes in accordance with this Indenture.

SECTION 9.02. With Consent of Holders. (a) Except as provided in Section 9.02(b) below and Section 6.04 and without prejudice to Section 9.01, Arch Western, the Issuer and the Trustee may:

(i) amend this Indenture or the Notes, the Note Guarantees or the Security Documents, or

(ii) waive compliance by Arch Western and the Issuer with any provision of this Indenture or the Notes,

with the written consent of the Holders of at least a majority in aggregate principal amount of the Notes then outstanding including consents obtained in connection with a tender offer or in exchange for the Notes.

(b) Without the consent of each Holder affected thereby, no amendment, modification, supplement or waiver, including a waiver pursuant to Section 6.04 and an amendment, modification or supplement pursuant to Section 9.01, may:

(i) reduce the amount of Notes whose Holders must consent to an amendment or waiver,

(ii) reduce the rate of, or extend the time for payment of, interest on any Note,

(iii) reduce the principal of, or extend the Stated Maturity of, any Note,

(iv) make any Note payable in money other than that stated in the Note,

(v) impair the right of any Holder to receive payment of principal of, premium, if any, and interest, on, such holder's Notes on or after the due dates therefor or to institute suit for the enforcement of any payment on or with respect to such Holder's Notes,

(vi) release any security interest that may have been granted in favor of the Holders other than pursuant to the terms of such security interest,

(vii) reduce the premium payable upon the redemption of any Note or change the time at which any Note may be redeemed, pursuant to Section 3.01 of this Indenture

(viii) reduce the premium payable upon a Change of Control or, at any time after a Change of Control has occurred, change the time at which the Change of Control Offer relating thereto must be made or at which the Notes must be repurchased pursuant to such Change of Control Offer,

(ix) at any time after the Issuer is obligated to make a Prepayment Offer with the Excess Proceeds from Asset Sales, change the time at which such Prepayment Offer must be made or at which the Notes must be repurchased pursuant thereto,

(x) modify or change any provision of this Indenture affecting the ranking of the Notes or the Note Guarantees in a manner adverse to the Trustee or the Holders (it being understood that amendments or waivers of Security Documents or releases of Liens on the Arch Coal Notes do not relate to ranking), or

(xi) release any Guarantor from any of its obligations under its Note Guarantee or this Indenture other than in accordance with the provisions of this Indenture, or amend or modify any provision relating to such release.

The consent of the Holders is not necessary to approve the particular form of any proposed amendment. It is sufficient if such consent approves the substance of the proposed amendment. After an amendment becomes effective, the Issuer shall mail to each registered holder of the Notes at such holder's address appearing in the Security Register a notice briefly describing such amendment. However, the failure to give such notice to all Holders, or any defect therein, will not impair or affect the validity of the amendment.

SECTION 9.03. Compliance with Trust Indenture Act. Every amendment, modification or supplement to this Indenture or the Notes shall be set forth in a supplemental indenture that complies with the TIA as then in effect.

SECTION 9.04. Effect of Supplemental Indentures. Upon the execution of any supplemental indenture under this Article Nine, this Indenture shall be modified in accordance therewith, and such supplemental indenture shall form a part of this Indenture for all purposes; and every Holder theretofore or thereafter authenticated and delivered hereunder shall be bound thereby.

SECTION 9.05. Notation on or Exchange of Notes. If an amendment, modification or supplement changes the terms of a Note, the Issuer or Trustee may require the

Holder to deliver it to the Trustee. The Trustee may place an appropriate notation on the Note and on any Note subsequently authenticated regarding the changed terms and return it to the Holder. Alternatively, if the Issuer so determines, the Issuer in exchange for the Note shall issue and the Trustee shall authenticate a new Note that reflects the changed terms. Failure to make the appropriate notation or to issue a new Note shall not affect the validity of such amendment, modification or supplement.

SECTION 9.06. Payment for Consent. Arch Western will not, and will not permit any of its Subsidiaries to, directly or indirectly, pay or cause to be paid any consideration, whether by way of interest, fee or otherwise, to any holder of any Notes for or as an inducement to any consent, waiver or amendment of any of the terms or provisions of this Indenture or the Notes unless such consideration is offered to be paid or is paid to all Holders that consent, waive or agree to amend in the time frame set forth in the solicitation documents relating to such consent, waiver or agreement.

SECTION 9.07. Notice of Amendment or Waiver. Promptly after the execution by Arch Western, the Issuer and the Trustee of any supplemental indenture or waiver pursuant to the provisions of Section 9.02, Arch Western and the Issuer shall give notice thereof to the Holders of each outstanding Note affected, in the manner provided for in Section 13.02(b), setting forth in general terms the substance of such supplemental indenture or waiver.

SECTION 9.08. Trustee to Sign Supplemental Indentures. In executing any supplemental indenture, the Trustee shall be entitled to receive indemnity reasonably satisfactory to it and to receive and shall be fully protected in relying upon, in addition to the documents required by Section 13.04, an Officers' Certificate and an Opinion of Counsel stating that such supplemental indenture is authorized or permitted by this Indenture and that all conditions precedent to the execution, delivery and performance of such supplemental indenture have been satisfied.

The Trustee shall sign all supplemental indentures that comply with the requirements of this Indenture, except that the Trustee may, but need not, sign any supplemental indenture that adversely affects its rights.

ARTICLE TEN
GUARANTEE

SECTION 10.01. Note Guarantee. (a) Each Guarantor hereby fully and unconditionally guarantees, on an unsecured, senior, joint and several basis with each other Note Guarantee, to each Holder and to the Trustee and its successors and assigns on behalf of each Holder, the full payment of principal of, premium, if any, interest, if any, and all other monetary obligations of the Issuer under this Indenture and the Notes (including obligations to the Trustee) with respect to each Note authenticated and delivered by the Trustee or its agent pursuant to and in accordance with this Indenture, in accordance with the terms of this Indenture (all the foregoing being hereinafter collectively called the "Obligations"). Each Guarantor further agrees that the Obligations may be extended or renewed, in whole or in part, without notice or further assent from such Guarantor and that such Guarantor will remain bound under this Article Ten

notwithstanding any extension or renewal of any Obligation. All payments under such Guarantee will be made in U.S. Dollars.

(b) Each Guarantor hereby agrees that its obligations hereunder shall be as if they were the principal debtor and not merely surety, unaffected by, and irrespective of, any validity, irregularity or unenforceability of any Note or this Indenture, any failure to enforce the provisions of any Note or this Indenture, any waiver, modification or indulgence granted to the Issuer with respect thereto by the Holders or the Trustee, or any other circumstance which may otherwise constitute a legal or equitable discharge of a surety or guarantor (except payment in full); provided, however, that, notwithstanding the foregoing, no such waiver, modification, indulgence or circumstance shall without the written consent of the Guarantor increase the principal amount of a Note or the interest rate thereon or change the currency of payment with respect to any Note, or alter the Stated Maturity thereof. Each Guarantor hereby waives diligence, presentment, demand of payment, filing of claims with a court in the event of merger or bankruptcy of the Issuer, any right to require that the Trustee pursue or exhaust its legal or equitable remedies against the Issuer prior to exercising its rights under the Guarantee (including, for the avoidance of doubt, any right which the Guarantor may have to require the seizure and sale of the assets of the Issuer to satisfy the outstanding principal of, interest on or any other amount payable under each Note prior to recourse against the Guarantor or its assets), protest or notice with respect to any Note or the Debt evidenced thereby and all demands whatsoever, and covenants that the Guarantee will not be discharged with respect to any Note except by payment in full of the principal thereof and interest thereon or as otherwise provided in this Indenture, including Section 10.03. If at any time any payment of principal of, premium, if any, and interest, if any, on such Note is rescinded or must be otherwise restored or returned upon the insolvency, bankruptcy or reorganization of the Issuer, the Guarantor's obligations hereunder with respect to such payment shall be reinstated as of the date of such rescission, restoration or returns as though such payment had become due but had not been made at such times.

(c) The Guarantor also agrees to pay any and all costs and expenses (including reasonable attorneys' fees) incurred by the Trustee or any Holder in enforcing any rights under this Section 10.01.

SECTION 10.02. Subrogation. (a) The Guarantor shall be subrogated to all rights of the Holders against the Issuer in respect of any amounts paid to such Holders by the Guarantor pursuant to the provisions of its Guarantee.

(b) The Guarantor agrees that it shall not be entitled to any right of subrogation in relation to the Holders in respect of any Obligations guaranteed hereby until payment in full of all Obligations. The Guarantor further agrees that, as between themselves, on the one hand, and the Holders and the Trustee, on the other hand, (x) the maturity of the Obligations guaranteed hereby may be accelerated as provided in Section 6.02 for the purposes of their Guarantee herein, notwithstanding any stay, injunction or other prohibition preventing such acceleration in respect of the Obligations guaranteed hereby, and (y) in the event of any declaration of acceleration of such obligations as provided in Section 6.02, such Obligations (whether or not due and payable) shall forthwith become due and payable by the Guarantor for the purposes of this Section 10.02 subject to Section 10.01(c) above.

SECTION 10.03. Release of Subsidiary Guarantors. The Guarantee of any Subsidiary Guarantor will be automatically and unconditionally released and discharged upon any of the following:

(a) in the event of a sale or other disposition, by way of merger, consolidation or otherwise, of all the Capital Stock of any Subsidiary Guarantor to any Person that is not an Affiliate of Arch Western, such Subsidiary Guarantor will be released and relieved of any obligations under its Subsidiary Guarantee; provided that the Net Available Cash from such sale or other disposition is applied in accordance with the applicable provisions of Section 4.09 of this Indenture;

(b) upon the release or discharge of another Guarantee of a Subsidiary Guarantor that resulted in the creation of the Subsidiary Guarantee of such Subsidiary Guarantor, except a discharge or release by or as a result of payment under such other Guarantee pursuant to Section 4.13, such Subsidiary Guarantor will be released and relieved of any obligations under its Subsidiary Guarantee; or

(c) upon the designation of any Subsidiary Guarantor as an Unrestricted Subsidiary in accordance with the terms of this Indenture, such Subsidiary Guarantor will be released and relieved of any obligations under its Subsidiary Guarantee;

and in each such case, prior to release and discharge or such Guarantee, Arch Western will have delivered to the Trustee an Officers' Certificate and an Opinion of Counsel, each stating that all conditions precedent herein provided for relating to such transactions have been complied with and that such release is authorized and permitted hereunder.

The Trustee shall execute any documents reasonably requested by either Arch Western or a Subsidiary Guarantor in order to evidence the release of such Subsidiary Guarantor from its obligations under its Subsidiary Guarantee endorsed on the Notes and under this Article Ten.

SECTION 10.04. Additional Guarantors. Arch Western covenants and agrees that it shall cause any Person which becomes obligated to Guarantee the Notes, pursuant to the terms of Section 4.13, to execute a supplemental indenture and any other documentation requested by the Trustee satisfactory in form and substance to the Trustee in accordance with Section 4.13 pursuant to which such Restricted Subsidiary shall Guarantee the obligations of Arch Western under the Notes and this Indenture in accordance with this Article Ten with the same effect and to the same extent as if such Person had been named herein as a Subsidiary Guarantor.

SECTION 10.05. Limitation of Guarantee. The Guarantee is limited in an amount not to exceed the maximum amount that can be guaranteed by the Guarantor without rendering such Guarantee, as it relates to the Guarantor, voidable under applicable law relating to fraudulent conveyance or fraudulent transfer of similar laws affecting the rights of the creditors generally.

SECTION 10.06. Notation Not Required. Neither the Issuer nor the Guarantor shall be required to make a notation on the Notes to reflect any Guarantee or any release, termination or discharge thereof.

SECTION 10.07. Successors and Assigns. This Article Ten shall be binding upon the Guarantor and each of their successors and assigns and shall inure to the benefit of the successors and assigns of the Trustee and the Holders and, in the event of any transfer or assignment of rights by any Holder or the Trustee, the rights and privileges conferred upon that party in this Indenture and in the Notes shall automatically extend to and be vested in such transferee or assigns, all subject to the terms and conditions of this Indenture.

SECTION 10.08. No Waiver. Neither a failure nor a delay on the part of either the Trustee or the Holders in exercising any right, power or privilege under this Article Ten shall operate as a waiver thereof, nor shall a single or partial exercise thereof preclude any other or further exercise of any right, power or privilege. The rights, remedies and benefits of the Trustee and the Holders herein expressly specified are cumulative and are not exclusive of any other rights, remedies or benefits which either may have under this Article Ten at law, in equity, by statute or otherwise.

SECTION 10.09. Modification. No modification, amendment or waiver of any provision of this Article Ten, nor the consent to any departure by the Guarantor therefrom, shall in any event be effective unless the same shall be in writing and signed by the Trustee, and then such waiver or consent shall be effective only in the specific instance and for the purpose for which given. No notice to or demand on the Guarantor in any case shall entitle the Guarantor to any other or further notice or demand in the same, similar or other circumstance.

ARTICLE ELEVEN
SECURITY DOCUMENTS

SECTION 11.01. Security Documents. The due and punctual payment of the principal of and interest on the Notes when and as the same shall be due and payable, whether on an Interest Payment Date, at maturity, by acceleration, repurchase, redemption, special redemption or otherwise, and interest on the overdue principal of and interest on the Notes and performance of all other obligations of the Issuer and the Guarantors to the Holders or the Trustee under this Indenture and the Notes and the Subsidiary Guarantees, according to the terms hereunder or thereunder, shall be secured as provided in the Security Documents. Each Holder, by its acceptance of the Notes and the Note Guarantees, consents and agrees to the terms of the Security Documents (including, without limitation, the provisions for foreclosure and release of Collateral) as the same may be in effect or may be amended from time to time in accordance with their terms and authorizes and directs the Trustee (and, if the Trustee is not the Collateral Trustee, the Collateral Trustee) to enter into such Security Documents and to perform its obligations and exercise its rights thereunder in accordance therewith. Arch Western shall do or cause to be done all such acts and things as may be necessary or proper, or as may be required by the provisions of the Security Documents, to assure and confirm to the Trustee and any Collateral Trustee the security interest in the Collateral contemplated hereby, by the Security Documents or any part thereof, as from time to time constituted, so as to render the same available for the security and benefit of this Indenture and of the Notes and the Subsidiary Guarantees secured thereby, according to the intent and purposes herein and therein expressed. Arch Western shall take, and shall cause the Issuer and the Subsidiary Guarantors to take, any and all actions reasonably required to cause the Security Documents to create and maintain, as security for the obligations of the Issuer and the Guarantors hereunder, (x) a valid and

enforceable Lien on and security interest in all the Collateral in favor of the Trustee for the benefit of itself and of the Holders, and (y) such Lien as a perfected Lien. Each of Arch Western and the Subsidiary Guarantors covenants and agrees that it shall execute, acknowledge and deliver to the Trustee (and, if the Trustee is not the Collateral Trustee, the Collateral Trustee) such further assignments, transfers, assurances or other instruments and shall do or cause to be done all such acts and things as may be necessary or proper to assure and confirm to the Trustee (and, if the Trustee is not the Collateral Trustee, the Collateral Trustee) its interest in the Collateral, or any part thereof, as from time to time constituted, and the right, title and interest in and to the Security Documents so as to render the same available for the security and benefit of this Indenture and of the Notes.

SECTION 11.02. Recording and Opinions. (a) Arch Western and, if applicable, the Issuer and the Subsidiary Guarantors shall take or cause to be taken all action required to perfect, maintain, preserve and protect the Lien on and security interest in the Collateral granted by the Security Documents (subject only to Liens permitted by the applicable Security Documents), including, without limitation, the filing of financing statements, continuation statements, mortgages and any instruments of further assurance, in such manner and in such places as may be required by law fully to preserve and protect the rights of the Holders, the Trustee (and, if the Trustee is not the Collateral Trustee, the Collateral Trustee) under this Indenture and the Security Documents to all property comprising the Collateral. The Issuer and the Guarantors shall from time to time promptly pay all financing, continuation statement and mortgage recording, registration and/or filing fees, charges and taxes relating to this Indenture and the Security Documents, any amendments thereto and any other instruments of further assurance required hereunder or pursuant to the Security Documents. The Trustee shall have no obligation to, nor shall it be responsible for any failure to, so register, file or record or otherwise perfect.

(b) Arch Western shall at all times comply with the provisions of Section 314(b) of the TIA (including with respect to the Security Documents), whether or not the TIA is then applicable to the obligations of Arch Western and, if applicable, the Issuer and the Subsidiary Guarantors under this Indenture.

SECTION 11.03. Release of Collateral. (a) Collateral may (and, as applicable, shall) be released or substituted only in accordance with the terms of the Security Documents.

(b) The release of any Collateral from the terms of this Indenture and the Security Documents shall not be deemed to impair the security under this Indenture in contravention of the provisions hereof if and to the extent the Collateral is released pursuant to the terms of the Security Documents.

SECTION 11.04. Authorization of Actions To Be Taken by the Collateral Trustee Under the Security Documents. Subject to the provisions of Sections 7.01 and 7.02, the Trustee (and, if the Trustee is not the Collateral Trustee, the Collateral Trustee) may, in its sole discretion and without the consent of the Holders, on behalf of the Trustee and the Holders, take all actions it deems necessary or appropriate, and, if the Trustee is not the Collateral Trustee, the Trustee may, in its sole discretion and without the consent of the Holders, direct, on behalf of

itself and the Holders, the Collateral Trustee to take all actions it deems necessary or appropriate, in order to, (a) enforce any of the terms of the Security Documents and (b) collect and receive any and all amounts payable in respect of the Obligations (as defined in the Note Pledge Agreement). Subject to the terms and conditions of the Security Documents, the Trustee (and, if the Trustee is not the Collateral Trustee, the Collateral Trustee) shall have power to institute and maintain such suits and proceedings as it may deem expedient to prevent any impairment of the Collateral by any acts that may be unlawful or in violation of the Security Documents or this Indenture, and such suits and proceedings as the Trustee (and, if the Trustee is not the Collateral Trustee, the Collateral Trustee) may deem expedient to preserve or protect its interests and the interests of the Holders in the Collateral (including power to institute and maintain suits or proceedings to restrain the enforcement of or compliance with any legislative or other governmental enactment, rule or order that may be unconstitutional or otherwise invalid if the enforcement of, or compliance with, such enactment, rule or order would impair the security interest hereunder or be prejudicial to the interests of the Holders or to the Trustee or Collateral Trustee).

SECTION 11.05. Authorization of Receipt of Funds and Possessory Collateral Under the Security Documents. The Collateral Trustee is authorized to take custody of any instruments, including, without limitation, the Arch Coal Notes and other Possessory Collateral and to receive any funds for the benefit of the Holders distributed under the Security Documents, and to make further distributions of such funds to the Holders according to the provisions of this Indenture and the Security Documents.

SECTION 11.06. Termination of Security Interest. Upon the payment in full of all obligations of the Issuer under this Indenture, the Notes and the Security Documents, or upon legal or covenant defeasance, if the Trustee is not the Collateral Trustee, the Trustee shall, at the request of the Issuer, deliver a certificate to the Collateral Trustee stating that such obligations have been paid in full.

SECTION 11.07. Limitation on Duty of Trustee in respect of Collateral. Beyond the exercise of reasonable care in the custody thereof, the Trustee shall have no duty as to any Collateral in its possession or control or in the possession or control of any agent or bailee or any income thereon or as to preservation of rights against prior parties or any other rights pertaining thereto and the Trustee shall not be responsible for recording or filing or re-recording or re-filing any mortgage or financing or continuation statements or recording or re-recording any documents or instruments in any public office at any time or times or otherwise perfecting or maintaining the perfection of any Lien or security interest in any of the Collateral. The Trustee shall be deemed to have exercised reasonable care in the custody of the Collateral in its possession if the Collateral is accorded treatment substantially equal to that which it accords its own property and shall not be liable or responsible for any loss or diminution in the value of any of the Collateral by reason of the act or omission of any carrier, forwarding agency or other agent or bailee selected by the Trustee in good faith.

The Trustee makes no representations as to and shall not be responsible for the existence, genuineness, value or condition of any of the Collateral or as to the security afforded or intended to be afforded thereby, hereby or by any security agreement, or for the validity, perfection, priority or enforceability of the Liens or security interests in any of the Collateral created or

intended to be created by any of the security agreements, whether impaired by operation of law or by reason of any action or omission to act on its part hereunder, except to the extent such action or omission constitutes gross negligence or willful misconduct on the part of the Trustee, for the validity or sufficiency of the Collateral, any security agreement or any agreement or assignment contained in any thereof, for the validity of the title of the Issuer or any of the Subsidiaries to the Collateral, for insuring the Collateral or for the payment of taxes, charges, assessments or Liens upon the Collateral or otherwise as to the maintenance of the Collateral. The Trustee shall have no duty to ascertain or inquire as to the performance or observance of any of the terms of this Indenture or the Note Pledge Agreement.

ARTICLE TWELVE
HOLDERS' MEETINGS

SECTION 12.01. Purposes of Meetings. A meeting of the Holders may be called at any time pursuant to this Article Twelve for any of the following purposes:

(a) to give any notice to Arch Western, the Issuer or any Guarantor or to the Trustee, or to give any directions to the Trustee, or to consent to the waiving of any Default hereunder and its consequences, or to take any other action authorized to be taken by Holders pursuant to Article Nine;

(b) to remove the Trustee and appoint a successor trustee pursuant to Article Seven; or

(c) to consent to the execution of an indenture supplement pursuant to Section 9.02.

SECTION 12.02. Place of Meetings. Meetings of Holders may be held at such place or places as the Trustee or, in case of its failure to act, the Issuer, any Guarantor or the Holders calling the meeting, shall from time to time determine.

SECTION 12.03. Call and Notice of Meetings. (a) The Trustee may at any time (upon not less than 21 days' notice) call a meeting of Holders to be held at such time and at such place in New York, New York or in such other city as determined by the Trustee pursuant to Section 12.02. Notice of every meeting of Holders, setting forth the time and the place of such meeting and in general terms the action proposed to be taken at such meeting, shall be mailed to each Holder and published in the manner contemplated by Section 13.02(b).

(b) In case at any time the Issuer, pursuant to a resolution of the Board of Directors, or the Holders of at least 10% in aggregate principal amount at maturity of the Notes then outstanding, shall have requested the Trustee to call a meeting of the Holders, by written request setting forth in reasonable detail the action proposed to be taken at the meeting, and the Trustee shall not have made the first giving of the notice of such meeting within 20 days after receipt of such request, then the Issuer or the Holders of Notes in the amount above specified may determine the time (not less than 21 days after notice is given) and the place in New York, New York or in such other city as determined by the Issuer or the Holders pursuant to Section 12.02 for such meeting and may call such meeting to take any action authorized in Section 12.01 by giving notice thereof as provided in Section 12.01(a).

SECTION 12.04. Voting at Meetings. To be entitled to vote at any meeting of Holders, a Person shall be (i) a Holder at the relevant Record Date set in accordance with Section 6.15 or (ii) a Person appointed by an instrument in writing as proxy for a Holder or Holders by such Holder or Holders. The only Persons who shall be entitled to be present or to speak at any meeting of Holders shall be the Person so entitled to vote at such meeting and their counsel and any representatives of the Trustee and its counsel and any representatives of the Issuer and any Guarantor and their counsel.

SECTION 12.05. Voting Rights, Conduct and Adjournment. (a) Notwithstanding any other provisions of this Indenture, the Trustee may make such reasonable regulations as it may deem advisable for any meeting of Holders in regard to proof of the holding of Notes and of the appointment of proxies and in regard to the appointment and duties of inspectors of votes, the submission and examination of proxies, certificates and other evidence of the right to vote, and such other matters concerning the conduct of the meeting as it shall deem appropriate. Except as otherwise permitted or required by any such regulations, the holding of Notes shall be proved in the manner specified in Section 2.03 and the appointment of any proxy shall be proved in such manner as is deemed appropriate by the Trustee or by having the signature of the Person executing the proxy witnessed or guaranteed by any bank, banker or trust company customarily authorized to certify to the holding of a Note such as a Global Note.

(b) At any meeting of Holders, the presence of Persons holding or representing Notes in an aggregate principal amount at Stated Maturity sufficient under the appropriate provision of this Indenture to take action upon the business for the transaction of which such meeting was called shall constitute a quorum. Subject to any required aggregate principal amount at Stated Maturity of Notes required for the taking of any action pursuant to Article Nine, in no event shall less than a majority of the votes given by Persons holding or representing Notes at any meeting of Holders be sufficient to approve an action. Any meeting of Holders duly called pursuant to Section 11.03 may be adjourned from time to time by vote of the Holders (or proxies for the Holders) of a majority of the Notes represented at the meeting and entitled to vote, whether or not a quorum shall be present; and the meeting may be held as so adjourned without further notice. No action at a meeting of Holders shall be effective unless approved by Persons holding or representing Notes in the aggregate principal amount at Stated Maturity required by the provision of this Indenture pursuant to which such action is being taken.

(c) At any meeting of Holders, each Holder or proxy shall be entitled to one vote for each $1,000 aggregate principal amount at Stated Maturity of outstanding Notes held or represented.

SECTION 12.06. Revocation of Consent by Holders at Meetings. At any time prior to (but not after) the evidencing to the Trustee of the taking of any action at a meeting of Holders by the Holders of the percentage in aggregate principal amount at maturity of the Notes specified in this Indenture in connection with such action, any Holder of a Note the serial number of which is included in the Notes the Holders of which have consented to such action may, by filing written notice with the Trustee at its principal Corporate Trust Office and upon proof of holding as provided herein, revoke such consent so far as concerns such Note. Except as aforesaid, any such consent given by the Holder of any Note shall be conclusive and binding upon such Holder and upon all future Holders and owners of such Note and of any Note issued in

exchange therefor, in lieu thereof or upon transfer thereof, irrespective of whether or not any notation in regard thereto is made upon such Note. Any action taken by the Holders of the percentage in aggregate principal amount at maturity of the Notes specified in this Indenture in connection with such action shall be conclusively binding upon the Issuer, the Guarantors, the Trustee and the Holders. This Section 11.06 shall not apply to revocations of consents to amendments, supplements or waivers, which shall be governed by the provisions of Section 9.04.

ARTICLE THIRTEEN
MISCELLANEOUS

SECTION 13.01. Trust Indenture Act Controls. If and to the extent that any provision of this Indenture limits, qualifies or conflicts with the duties imposed by, or with another provision (an "incorporated provision") included in this Indenture by operation of, Sections 310 to 318, inclusive, of the TIA incorporated hereto in accordance with Section 1.03 hereto, such imposed duties or incorporated provision shall control.

SECTION 13.02. Notices. (a) Any notice or communication shall be in writing and delivered in person or mailed by first class mail or sent by facsimile transmission addressed as follows:

if to Arch Western, the Issuer or any Subsidiary Guarantor:

Arch Western Resources, LLC
One CityPlace Drive
Suite 300
St. Louis, Missouri 63141

Telephone: 1-800-238-7398
Facsimile: 314-994-2734
Attention: General Counsel

With copies to:
Kirkpatrick & Lockhart LLP
535 Smithfield Street 15222
Pittsburgh, PA
Attention: Ronald West

if to the Trustee:

The Bank of New York
101 Barclay Street, Floor 8 West
New York, NY 10286

Telephone: -
Facsimile: (212) 815-5704
Attention: Corporate Trust Division-Corporate Finance Unit

The Issuer, the Guarantors or the Trustee by notice to the other may designate additional or different addresses for subsequent notices or communications. All communications delivered to the Trustee shall be deemed effective when received.

(b) Notices to the Holders regarding the Notes shall be mailed to each Holder by first-class mail at such Holder's respective address as it appears on the registration books of the Registrar.

Notices given by first-class mail shall be deemed given five calendar days after mailing. Failure to mail a notice or communication to a Holder or any defect in it shall not affect its sufficiency with respect to other Holders. If a notice or communication is mailed in the manner provided above, it is duly given, whether or not the addressee receives it.

(c) Where this Indenture provides for notice in any manner, such notice may be waived in writing by the Person entitled to receive such notice, either before or after the event, and such waiver shall be the equivalent of such notice. Waivers of notice by Holders shall be filed with the Trustee, but such filing shall not be a condition precedent to the validity of any action taken in reliance upon such waiver.

SECTION 13.03. Communication by Holders with Other Holders. Holders may communicate pursuant to TIA Section 312(b) with other Holders with respect to their rights under this Indenture or the Notes. The Issuer, any Guarantor, the Trustee, the Registrar and anyone else shall have the protection of TIA Section 312(c).

SECTION 13.04. Certificate and Opinion as to Conditions Precedent. Upon any request or application by the Issuer or any Guarantor to the Trustee to take or refrain from taking any action under this Indenture (except in connection with the original issuance of the Notes on the date hereof), the Issuer or any Guarantor, as the case may be, shall furnish upon request to the Trustee:

(a) an Officers' Certificate in form reasonably satisfactory to the Trustee stating that, in the opinion of the signer, all conditions precedent, if any, provided for in this Indenture relating to the proposed action have been complied with; and

(b) an Opinion of Counsel in form reasonably satisfactory to the Trustee stating that, in the opinion of such counsel, all such conditions precedent have been complied with.

Any Officers' Certificate may be based, insofar as it relates to legal matters, upon an Opinion of Counsel, unless the officer signing such certificate knows, or in the exercise of reasonable care should know, that such Opinion of Counsel with respect to the matters upon which such Officers' Certificate is based are erroneous. Any Opinion of Counsel may be based and may state that it is so based, insofar as it relates to factual matters, upon an Officers' Certificate stating that the information with respect to such factual matters is in the possession of the Issuer, unless the counsel signing such Opinion of Counsel knows, or in the exercise of reasonable care should know, that the Officers' Certificate with respect to the matters upon which such Opinion of Counsel is based are erroneous.

SECTION 13.05. Statements Required in Certificate or Opinion. Every certificate or opinion with respect to compliance with a condition or covenant provided for in this Indenture shall include:

(a) a statement that each individual signing such certificate or opinion has read such covenant or condition and the definitions herein relating thereto;

(b) a brief statement as to the nature and scope of the examination or investigation upon which the statements or opinions contained in such certificate or opinion are based;

(c) a statement that, in the opinion of each such individual, he has made such examination or investigation as is necessary to enable him to express an informed opinion as to whether or not such covenant or condition has been complied with; and

(d) a statement as to whether, in the opinion of each such individual, such condition or covenant has been complied with.

SECTION 13.06. Rules by Trustee, Paying Agent and Registrar. The Trustee may make reasonable rules for action by or at a meeting of Holders. The Registrar and the Paying Agent may make reasonable rules for their functions.

SECTION 13.07. Legal Holidays. If an Interest Payment Date or other payment date is not a Business Day, payment shall be made on the next succeeding day that is a Business Day, and no interest shall accrue for the intervening period. If a Record Date is not a Business Day, the Record Date shall not be affected.

SECTION 13.08. Governing Law. THIS INDENTURE AND THE NOTES SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK.

SECTION 13.09. No Recourse Against Others. A director, officer, employee or shareholder, as such, of the Issuer or any Guarantor shall not have any liability for any obligations of the Issuer or any Guarantor under the Notes, this Indenture or any Guarantee or for any claim based on, in respect of or by reason of such obligations or their creation. By accepting a Note, each Holder shall waive and release all such liability. The waiver and release shall be part of the consideration for the issue of the Notes.

SECTION 13.10. Successors. All agreements of the Issuer and any Guarantor in this Indenture and the Notes shall bind their respective successors. All agreements of the Trustee in this Indenture shall bind its successors.

SECTION 13.11. Multiple Originals. The parties may sign any number of copies of this Indenture. Each signed copy shall be an original, but all of them together represent the same agreement. One signed copy is enough to prove this Indenture.

SECTION 13.12. Table of Contents, Cross-Reference Sheet and Headings. The table of contents, cross-reference sheet and headings of the Articles and Sections of this

Indenture have been inserted for convenience of reference only, are not intended to be considered a part hereof and shall not modify or restrict any of the terms or provisions hereof.

SECTION 13.13. Severability. In case any provision in this Indenture or in the Notes shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

This Indenture may be signed in any number of counterparts each of which so executed shall be deemed to be an original, but all such counterparts shall together constitute but one and the same Indenture.

IN WITNESS WHEREOF, the parties have caused this Indenture to be duly executed as of the date first written above.

Arch Western Finance, LLC

as Issuer

By: /s/ JAMES E. FLORCZAK

Name: James E. Florczak
Title: Vice President & Treasurer

Arch Western Resources, LLC
As Guarantor

By: /s/ JAMES E. FLORCZAK

Name: James E. Florczak
Title: Vice President & Treasurer

Thunder Basin Coal Company, L.L.C.
As Guarantor

By: /s/ JAMES E. FLORCZAK

Name: James E. Florczak
Title: Vice President & Treasurer

Mountain Coal Company, L.L.C.
As Guarantor

By: /s/ JAMES E. FLORCZAK

Name: James E. Florczak
Title: Vice President & Treasurer

Arch of Wyoming, LLC
As Guarantor

By: /s/ JAMES E. FLORCZAK

Name: James E. Florczak
Title: Vice President & Treasurer

THE BANK OF NEW YORK,
as Trustee

By: /s/ ROBERT A. MASSIMILLO

Name: Robert A. Massimillo
Title: Vice President

EXHIBIT A

[FORM OF FACE OF NOTE]

UNLESS THIS GLOBAL NOTE IS PRESENTED BY AN AUTHORIZED REPRESENTATIVE OF THE DEPOSITORY TRUST COMPANY, A NEW YORK CORPORATION ("DTC"), TO THE ISSUER OR ITS AGENT FOR REGISTRATION OF TRANSFER, EXCHANGE, OR PAYMENT, AND ANY GLOBAL NOTE ISSUED IS REGISTERED IN THE NAME OF CEDE & CO. OR IN SUCH OTHER NOMINEE AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF DTC (AND ANY PAYMENT IS MADE TO CEDE & CO. OR TO SUCH OTHER ENTITY AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF DTC, ANY TRANSFER, PLEDGE OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL IN AS MUCH AS THE REGISTERED OWNER HEREOF, CEDE & CO., HAS AN INTEREST HEREIN.

TRANSFERS OF THIS GLOBAL NOTE SHALL BE LIMITED TO TRANSFERS IN WHOLE, BUT NOT IN PART, TO NOMINEES OF DTC OR TO A SUCCESSOR THEREOF OR SUCH SUCCESSOR'S NOMINEE AND TRANSFERS OF PORTIONS OF THIS GLOBAL NOTE SHALL BE LIMITED TO TRANSFERS MADE IN ACCORDANCE WITH THE RESTRICTIONS SET FORTH IN THE INDENTURE REFERRED TO ON THE REVERSE HEREOF.

THIS GLOBAL NOTE AND ANY RELATED DOCUMENTATION MAY BE AMENDED OR SUPPLEMENTED FROM TIME TO TIME TO MODIFY THE RESTRICTIONS ON AND PROCEDURES FOR OR RESALES AND OTHER TRANSFERS OF THIS GLOBAL NOTE TO REFLECT ANY CHANGE IN APPLICABLE LAW OR REGULATION (OR THE INTERPRETATION THEREOF) OR IN PRACTICES RELATING TO THE RESALE OR TRANSFER OF RESTRICTED SECURITIES GENERALLY. THE HOLDER OF THIS GLOBAL NOTE SHALL BE DEEMED, BY THE ACCEPTANCE HEREOF, TO HAVE AGREED TO ANY SUCH AMENDMENT OR SUPPLEMENT.

THIS NOTE HAS NOT BEEN REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR ANY STATE SECURITIES LAWS. NEITHER THIS NOTE NOR ANY INTEREST OR PARTICIPATION HEREIN MAY BE REOFFERED, SOLD, ASSIGNED, TRANSFERRED, PLEDGED, ENCUMBERED OR OTHERWISE DISPOSED OF IN THE ABSENCE OF SUCH REGISTRATION OR UNLESS SUCH TRANSACTION IS EXEMPT FROM, OR NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT. THE HOLDER OF THIS NOTE BY ITS ACCEPTANCE HEREOF AGREES TO OFFER, SELL OR OTHERWISE TRANSFER SUCH NOTE, PRIOR TO THE DATE WHICH IS TWO YEARS AFTER THE LATER OF THE ORIGINAL ISSUE DATE HEREOF AND THE LAST DATE ON WHICH THE ISSUER OR ANY AFFILIATE OF THE ISSUER WAS THE OWNER OF THIS NOTE (OR ANY PREDECESSOR OF THIS NOTE) ONLY (A) TO THE ISSUER, (B) PURSUANT TO A REGISTRATION STATEMENT WHICH HAS BEEN DECLARED EFFECTIVE UNDER THE SECURITIES ACT, (C) FOR SO LONG AS THE NOTES ARE ELIGIBLE FOR

RESALE PURSUANT TO RULE 144A UNDER THE SECURITIES ACT ("RULE 144A"), TO A PERSON IT REASONABLY BELIEVES IS A "QUALIFIED INSTITUTIONAL BUYER" AS DEFINED IN RULE 144A THAT PURCHASES FOR ITS OWN ACCOUNT OR FOR THE ACCOUNT OF A QUALIFIED INSTITUTIONAL BUYER TO WHOM NOTICE IS GIVEN THAT THE TRANSFER IS BEING MADE IN RELIANCE ON RULE 144A, (D) PURSUANT TO OFFERS AND SALES THAT OCCUR OUTSIDE THE UNITED STATES IN COMPLIANCE WITH REGULATION S UNDER THE SECURITIES ACT OR (E) PURSUANT TO ANOTHER AVAILABLE EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT, SUBJECT TO THE ISSUER'S AND THE TRUSTEE'S RIGHTS PRIOR TO ANY SUCH OFFER, SALE OR TRANSFER (i) PURSUANT TO CLAUSE (E) TO REQUIRE THE DELIVERY OF AN OPINION OF COUNSEL, CERTIFICATION AND/OR OTHER INFORMATION SATISFACTORY TO EACH OF THEM AND (ii) IN EACH OF THE FOREGOING CASES, TO REQUIRE THAT AN ASSIGNMENT FORM IN THE FORM APPEARING ON THE OTHER SIDE OF THIS NOTE AND ANY OTHER CERTIFICATE REQUIRED UNDER THE INDENTURE ARE COMPLETED AND DELIVERED BY THE TRANSFEROR TO THE TRUSTEE.

EACH PURCHASER OF THIS GLOBAL NOTE OR ANY INTEREST HEREIN IS HEREBY NOTIFIED THAT THE SELLER OF THIS GLOBAL NOTE MAY BE RELYING ON THE EXEMPTION FROM THE PROVISIONS OF SECTION 5 OF THE SECURITIES ACT PROVIDED BY RULE 144A THEREUNDER.

THE HOLDER OF THIS GLOBAL NOTE IS SUBJECT TO, AND ENTITLED TO THE BENEFITS OF, THE REGISTRATION RIGHTS AGREEMENT, DATED AS OF JUNE 25, 2003 AMONG THE ISSUER, THE GUARANTORS AND THE OTHER PARTIES REFERRED TO THEREIN.

UNTIL 40 DAYS AFTER THE COMMENCEMENT OF THE OFFERING, AN OFFER OR SALE OF SECURITIES WITHIN THE UNITED STATES BY A DEALER (AS DEFINED IN THE U.S. SECURITIES ACT) MAY VIOLATE THE REGISTRATION REQUIREMENTS OF THE U.S. SECURITIES ACT IF SUCH OFFER OR SALE IS MADE OTHERWISE THAN IN ACCORDANCE WITH RULE 144A UNDER THE U.S. SECURITIES ACT.

[If Restricted Global Note - CUSIP Number -/Common Code -/ISIN Number -]

[If Regulation S Global Note - CUSIP Number -/Common Code -/ISIN Number -]

[If Exchange Note - CUSIP Number -/Common Code -/ISIN Number -]

No. _____

6 3/4% SENIOR NOTE DUE 2013

Arch Western Finance LLC, a limited liability company under the laws of the State of Delaware, for value received promises to pay to Cede & Co. or registered assigns the principal sum of $_____ ( ) on July 1, 2013.

From June 25, 2003, or from the most recent interest payment date to which interest has been paid or provided for, cash interest on this Note will accrue at 6.75%, payable semiannually on January 1 and July 1 of each year, beginning on January 1, 2004, to the Person in whose name this Note (or any predecessor Note) is registered at the close of business on the preceding June 15 or December 15, as the case may be.

THIS NOTE SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK.

Unless the certificate of authentication hereon has been executed by the Trustee referred to on the reverse hereof by manual signature of an authorized signatory, this Note shall not be entitled to any benefit under the Indenture or be valid or obligatory for any purpose.

Reference is hereby made to the further provisions of this Note set forth on the reverse hereof and to the provisions of the Indenture, which provisions shall for all purposes have the same effect as if set forth at this place.

IN WITNESS WHEREOF, Arch Western Finance, LLC has caused this Note to be signed manually or by facsimile by its duly authorized signatory.

Dated:_____, 2003

Arch Western Finance, LLC

By:_____
Name:
Title:

TRUSTEE'S CERTIFICATE OF AUTHENTICATION

THE BANK OF NEW YORK,
as Trustee, certifies that this is one of the Notes referred to in the Indenture.

By:_____
Authorized Signatory

[FORM OF REVERSE SIDE OF NOTE]

6 3/4% Senior Note Due 2013

1. Interest

Arch Western Finance, LLC, a limited liability company organized under the laws of the State of Delaware, (such limited liability company, and its successors and assigns under the Indenture hereinafter referred to, being herein called the "Issuer"), for value received promises to pay interest on the principal amount of this Note from June 25, 2003 at the rate per annum shown above. Interest will be computed on the basis of a 360-day year of twelve 30-day months. The Issuer will pay interest on overdue principal at the interest rate borne by the Notes compounded semiannually, and it shall pay interest on overdue installments of interest at the same rate compounded semiannually to the extent lawful. Any interest paid on this Note shall be increased to the extent necessary to pay Special Interest as set forth in this Note.

2. Special Interest

The Holder is entitled to the benefits of the Registration Rights Agreement dated June 25, 2003, among the Issuer, Arch Coal, Inc., a corporation organized under the laws of Delaware (the "Company"), Arch Western Resources, LLC, a limited liability company organized under the laws of Delaware ("Arch Western") and each of Arch Western's wholly owned subsidiaries, namely; Arch of Wyoming, LLC, Mountain Coal Company, L.L.C., and Thunder Basin Coal Company, L.L.C. (each a Guarantor, and together with Arch Western, (the "Guarantors"), and the Initial Purchasers (the "Registration Rights Agreement").

In the event that (a) the Exchange Offer Registration Statement (as defined in the Registration Rights Agreement) is not filed with the U.S. Securities and Exchange Commission on or prior to the 90th calendar day following the date of the Indenture, (b) the Exchange Offer Registration Statement is not declared effective on or prior to the 180th day following the date of the Indenture, (c) the Exchange Offer (as defined in the Registration Rights Agreement) is not consummated on or prior to the 225th day following the date of the Indenture, or (id) if required, a Shelf Registration Statement (as defined in the Registration Rights Agreement) with respect to the Notes is not on or prior to the 60th day following the date the obligation to file the Shelf Registration Statement arises, the Shelf Registration Statement has not filed with the U.S. Securities and Exchange Commission (each event referred to in clauses (a) through (d) above, a "Registration Deadline Event"), then the Issuer will be required to pay additional interest ("Special Interest") in cash on January 1 and July 1 of each year, commencing on the first such date following any Registration Deadline Event, at a rate per annum equal to 0.25% of the principal amount of the Notes (determined daily) with respect to the first 90-day period following such Registration Deadline Event. Such amount of Special Interest shall increase by an additional 0.25% per annum to a maximum of 1.00% per annum for each subsequent 90-day period until such Registration Deadline Event has been cured. Upon the cure of any Registration Deadline Event, Special Interest with respect to such event shall cease to accrue from the date of the filing, effectiveness or consummation that cured such event, as the case may be, if the Issuer and the Guarantors are otherwise in compliance with this paragraph. However, if, after any such

Special Interest ceases to accrue, a different Registration Deadline Event occurs, Special Interest will again accrue as described.

3. Method of Payment

The Issuer shall pay interest on this Note (except defaulted interest) to the persons who are registered Holders of this Note at the close of business on the Record Date for the next Interest Payment Date even if this Note is cancelled after the Record Date and on or before the Interest Payment Date. The Issuer shall pay principal and interest in U.S. Dollars in immediately available funds that at the time of payment is legal tender for payment of public and private debts; provided, however, that payment of interest may be made at the option of the Issuer by check mailed to the Holder.

The amount of payments in respect of interest on each Interest Payment Date shall correspond to the aggregate principal amount of Notes represented by the Restricted Global Note and the Regulation S Global Note, as established by the Registrar at the close of business on the relevant Record Date. Payments of principal shall be made upon surrender of the Restricted Global Note and Regulation S Global Note to the Paying Agent.

4. Paying Agent and Registrar

Initially, The Bank of New York or one of its affiliates will act as Paying Agent and Registrar. The Issuer or any of its Affiliates incorporated in the United States may act as Paying Agent, Registrar or co-Registrar, subject to the provisions of the Indenture.

5. Indenture

The Issuer issued the Notes under an indenture dated as of June 25, 2003 (the "Indenture"), among the Issuer, the Guarantors and The Bank of New York, as trustee (the "Trustee"). The terms of the Notes include those stated in the Indenture and those made part of the Indenture by reference to the Trust Indenture Act of 1939 as in effect on the date of the Indenture and, to the extent required by any amendment after such date, as so amended (the "Trust Indenture Act"). Terms defined in the Indenture and not defined herein have the meanings ascribed thereto in the Indenture. The Notes are subject to all such terms, and Holders are referred to the Indenture and the Trust Indenture Act for a statement of those terms.

The Notes are unsecured senior guaranteed obligations of the Issuer and are issued in an initial aggregate principal amount $700,000,000. The Indenture imposes certain limitations on the Issuer, the Guarantors and their affiliates, including, without limitation, limitations on the incurrence of indebtedness and issuance of stock, the payment of dividends and other payment restrictions affecting the Issuer and its subsidiaries, the sale of assets, transactions with and among affiliates of the Issuer and the Restricted Subsidiaries, change of control and Liens.

6. Optional Redemption

Except pursuant to the next paragraph, the Notes will not be redeemable at the option of the Issuer prior to July 1, 2008. Starting on that date, the Issuer may redeem all or any portion of the Notes, at once or over time, after giving the required notice under this Indenture at the

redemption prices set forth below, plus accrued and unpaid interest to the redemption date (subject to the right of Holders of record on the relevant Record Date to receive interest due on the relevant interest payment date). The following prices are for Notes redeemed during the 12-month period commencing on July 1, 2008 of the years set forth below, and are expressed as percentages of principal amount:

YEAR	REDEMPTION PRICE
2008.....	103.375%
2009.....	102.250%
2010.....	101.125%
2011 and thereafter.....	100.000%

In addition, at any time and from time to time, prior to July 1, 2006, the Issuer may redeem up to a maximum of 35% of the original aggregate principal amount of the Notes (calculated giving effect to any issuance of Additional Notes) with the proceeds of one or more Public Equity Offerings, at a redemption price equal to 106.750% of the principal amount thereof, plus accrued and unpaid interest to the redemption date (subject to the right of Holders of record on the relevant Record Date to receive interest due on the relevant interest payment date); provided, however, that after giving effect to any such redemption, at least 65% of the original aggregate principal amount of the Notes (calculated giving effect to any issuance of Additional Notes) remains outstanding (excluding Notes held by Arch Coal or any of its Subsidiaries). Any such redemption shall be made within 75 days of such Public Equity Offering upon not less than 30 nor more than 60 days' prior notice.

Any redemption pursuant to this Section 3.01 shall be made pursuant to the provisions of this Article Three.

7. Notice of Redemption

Notice of redemption will be mailed first-class postage prepaid at least 30 days but not more than 60 days before the Redemption Date to the Holder of this Note to be redeemed at the addresses contained in the Security Register. If this Note is in a denomination larger than $1,000 of principal amount it may be redeemed in part but only in integral multiples of $1,000. In the event of a redemption of less than all of the Notes, the Notes for redemption will be chosen by the Trustee in accordance with the Indenture. If this Note is redeemed subsequent to a Record Date with respect to any Interest Payment Date specified above, then any accrued interest will be paid to the Holder at the close of business on such Record Date. If money sufficient to pay the Redemption Price of and accrued interest on all Notes (or portions thereof) to be redeemed on the Redemption Date is deposited with the applicable Paying Agent on or before the Redemption Date and certain other conditions are satisfied, interest ceases to accrue on such Notes (or such portions thereof) called for redemption on or after such date.

8. Repurchase at the Option of Holders

Upon the occurrence of a Change of Control, each holder of Notes shall have the right to require the Issuer to repurchase all or any part of such holder's Notes pursuant to the offer

described below (the "Change of Control Offer") at a purchase price (the "Change of Control Purchase Price") equal to 101% of the principal amount thereof, plus accrued and unpaid interest to the repurchase date (subject to the right of holders of record on the relevant Record Date to receive interest due on the relevant interest payment date). If the repurchase date is after a Record Date and on or before the relevant interest payment date, the accrued and unpaid interest, if any, will be paid to the person or entity in whose name the Note is registered at the close of business on that Record Date, and no additional interest will be payable to holders whose Notes shall be subject to redemption.

Within 30 days following any Change of Control, the Issuer shall:

(a) cause a notice of the Change of Control Offer to be sent at least once to the Dow Jones News Service or similar business news service in the United States; and

(b) send, by first-class mail, with a copy to the Trustee, to each holder of Notes, at such holder's address appearing in the Security Register, a notice stating:

(1) that a Change of Control has occurred and a Change of Control Offer is being made pursuant to Section 4.11 of the Indenture and that all Notes timely tendered will be accepted for payment;

(2) the Change of Control Purchase Price and the repurchase date, which shall be, subject to any contrary requirements of applicable law, a business day no earlier than 30 days nor later than 60 days from the date such notice is mailed;

(3) the circumstances and relevant facts regarding the Change of Control (including information with respect to pro forma historical income, cash flow and capitalization after giving effect to the Change of Control); and

(4) the procedures that holders of Notes must follow in order to tender their Notes (or portions thereof) for payment, and the procedures that holders of Notes must follow in order to withdraw an election to tender Notes (or portions thereof) for payment.

The Issuer will not be required to make a Change of Control Offer following a Change of Control if a third party makes the Change of Control Offer in the manner, at the times and otherwise in compliance with the requirements set forth in the Indenture applicable to a Change of Control Offer made by the Issuer and purchases all Notes validly tendered and not withdrawn under such Change of Control Offer.

The Issuer shall comply, to the extent applicable, with the requirements of Section 14(e) of the Exchange Act and any other securities laws or regulations in connection with the repurchase of Notes pursuant to a Change of Control Offer. To the extent that the provisions of any securities laws or regulations conflict with the provisions of this covenant, the Issuer will comply with the applicable securities laws and regulations and will not be deemed to have breached its obligations under this covenant by virtue of such compliance.

9. Denominations

The Notes are in denominations of $1,000 and integral multiples of $1,000 of principal amount. The transfer of Notes may be registered, and Notes may be exchanged, as provided in the Indenture. The Registrar may require a Holder, among other things, to furnish appropriate endorsements and transfer documents and to pay any taxes and fees required by law or permitted by the Indenture.

10. Unclaimed Money

All moneys paid by the Issuer or the Guarantors to the Trustee or a Paying Agent for the payment of the principal of, or premium, if any, or interest on, any Notes that remain unclaimed at the end of three years after such principal, premium or interest has become due and payable may be repaid to the Issuer or the Guarantors, subject to applicable law, and the Holder of such Note thereafter may look only to the Issuer or the Guarantors for payment thereof.

11. Discharge and Defeasance

Subject to certain conditions, the Issuer at any time may terminate some or all of its obligations and the obligations of the Guarantors under the Notes, the Guarantees and the Indenture if the Issuer irrevocably deposits with the Trustee U.S. Dollars or U.S. Government Obligations for the payment of principal and interest on the Notes to redemption or maturity, as the case may be.

12. Amendment, Supplement and Waiver

Subject to certain exceptions set forth in the Indenture, the Indenture may be amended or supplemented with the written consent of the Holders of at least a majority in aggregate principal amount of the relevant Notes then outstanding (including consents obtained in connection with a tender offer or exchange offer for the Notes) and any existing default or compliance with any provisions may be waived with the consent of the Holders of at least a majority in aggregate principal amount of the Notes then outstanding. However, without the consent of the Holder of each outstanding Note affected thereby, an amendment may not:

(a) reduce the amount of Notes whose Holders must consent to an amendment or waiver,

(b) reduce the rate of, or extend the time for payment of, interest on any Note,

(c) reduce the principal of, or extend the Stated Maturity of, any Note,

(d) make any Note payable in money other than that stated in the Note,

(e) impair the right of any Holder to receive payment of principal of, premium, if any, and interest, on, such holder's Notes on or after the due dates therefor or to institute suit for the enforcement of any payment on or with respect to such Holder's Notes,

(f) release any security interest that may have been granted in favor of the Holders other than pursuant to the terms of such security interest,

(g) reduce the premium payable upon the redemption of any Note or change the time at which any Note may be redeemed, pursuant to Section 3.01 of the Indenture

(h) reduce the premium payable upon a Change of Control or, at any time after a Change of Control has occurred, change the time at which the Change of Control Offer relating thereto must be made or at which the Notes must be repurchased pursuant to such Change of Control Offer,

(i) at any time after the Issuer is obligated to make a Prepayment Offer with the Excess Proceeds from Asset Sales, change the time at which such Prepayment Offer must be made or at which the Notes must be repurchased pursuant thereto,

(j) modify or change any provision of the Indenture affecting the ranking of the Notes or the Note Guarantees in a manner adverse to the Holders (it being understood that amendments or waivers of Security Documents or releases of Liens on the Arch Coal Notes do not relate to ranking), or

(k) release any Guarantor from any of its obligations under its Note Guarantee or the Indenture other than in accordance with the provisions of the Indenture, or amend or modify any provision relating to such release.

The consent of the Holders is not necessary under the Indenture to approve the particular form of any proposed amendment. It is sufficient if such consent approves the substance of the proposed amendment.

Notwithstanding the foregoing, without notice to or the consent of any Holder of the Notes, the Issuer, the Guarantors and the Trustee may, among other things, modify, amend or supplement the Indenture:

(a) cure any ambiguity, omission, defect or inconsistency in any manner that is not adverse in any material respect to any holder of the Notes,

(b) provide for the assumption by a Surviving Person of the obligations of Arch Western under the Indenture,

(c) provide for uncertificated Notes in addition to or in place of certificated Notes (provided that the uncertificated Notes are issued in registered form for purposes of Section 163(f) of the Code, or in a manner such that the uncertificated Notes are described in Section 163(f)(2)(B) of the Code),

(d) add Note Guarantees with respect to the Notes or confirm and evidence the release, termination or discharge of any security or Note Guarantee when such release, termination or discharge is permitted by the Indenture,

(e) secure the Notes, add to the covenants of the Issuer for the benefit of the Holders or surrender any right or power conferred upon the Issuer,

(f) make any change that does not adversely affect the rights of any holder of the Notes,

(g) comply with any requirement of the Commission in connection with the qualification of this Indenture under the Trust Indenture Act, or

(h) provide for the issuance of Additional Notes in accordance with the Indenture.

After an amendment becomes effective in accordance with the above position, the Issuer shall mail to each Holder at such Holder's address appearing in the Security Register a notice briefly describing such amendment. However, the failure to give such notice to all Holders, or any defect therein, will not impair or affect the validity of the amendment.

13. Defaults and Remedies

The Notes have the Events of Default as set forth in Section 6.01 of the Indenture. If an Event of Default occurs and is continuing, the Trustee, by notice to the Issuer, or the registered Holders of not less than 25% in aggregate principal amount of the Notes then outstanding by notice to the Issuer and the Trustee, subject to certain limitations, may declare all the Notes to be due and payable immediately. Certain events of bankruptcy or insolvency are Events of Default and shall result in the Notes being due and payable immediately upon the occurrence of such Events of Default.

Holders may not enforce the Indenture or the Notes except as provided in the Indenture. The Trustee may refuse to enforce the Indenture or the Notes unless it receives an indemnity satisfactory to it. Subject to certain limitations, Holders of a majority in aggregate principal amount of the Notes may direct the Trustee in its exercise of any trust or power. The Holders of a majority in aggregate principal amount of the Notes then outstanding by written notice to the Trustee may rescind any acceleration and its consequence if the rescission would not conflict with any judgment or decree and if all existing Events of Default have been cured or waived except nonpayment of principal, premium, if any, or interest that has become due solely because of such acceleration. The above description of Events of Default and remedies is qualified by reference, and subject in its entirety, to the more complete description thereof contained in the Indenture.

14. Trustee Dealings with the Issuer

Subject to certain limitations imposed by the Trust Indenture Act, the Trustee under the Indenture, in its individual or any other capacity, may become the owner or pledgee of Notes and may otherwise deal with and collect obligations owed to it by the Issuer, the Guarantor or any of their Affiliates with the same rights it would have if it were not Trustee. Any Paying Agent, Registrar, co-Registrar or co-Paying Agent may do the same with like rights.

15. No Recourse Against Others

A director, officer, employee, or stockholder, as such, of the Issuer or the Guarantor shall not have any liability for any obligations of the Issuer or the Guarantor under the Notes, the Guarantees or the Indenture or for any claim based on, in respect of, or by reason of, such obligations or their creation. By accepting a Note, each Holder shall waive and release all such liability. The waiver and release are part of the consideration for the issue of the Notes.

16. Authentication

This Note shall not be valid until an authorized officer of the Trustee (or an authenticating agent) manually signs the certificate of authentication on the other side of this Note.

17. Governing Law

THIS NOTE SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK.

The Issuer or a Guarantor shall furnish to any Holder upon written request and without charge to the Holder a copy of the Indenture. Requests may be made to:

Arch Western Finance, LLC
One CityPlace Drive
Suite 300
St. Louis, Missouri 63141

GUARANTEE

For value received, each Guarantor hereby fully and unconditionally guarantees, as principal obligor and not merely as surety, on an unsecured, senior, joint and several basis, to each Holder and to the Trustee and its successors and assigns on behalf of each Holder, the full payment of principal of, premium, if any, and interest on, and all other monetary obligations of the Issuer under the Indenture and this Note (including obligations to the Trustee and the obligations to pay Special Interest, if any) with respect to each Note authenticated and delivered by the Trustee or its agent pursuant to and in accordance with the Indenture, in accordance with the terms of the Indenture (all the foregoing being hereinafter collectively called the "Obligations"). Each Guarantor further agrees that the Obligations may be extended or renewed, in whole or in part, without notice or further assent from the Guarantor and that the Guarantor will remain bound by Article Ten of the Indenture notwithstanding any extension or renewal of any Obligation. All payments under this Guarantee shall be made in U.S. Dollars.

These and other additional obligations of the Guarantors to the Holder and to the Trustee pursuant to this Guarantee and the Indenture (including, without limitation, the provisions relating to submission to jurisdiction and appointment of the Authorized Agent set forth in the Indenture) are expressly set forth in the Indenture to which reference is hereby made for the precise terms of such obligations.

THIS GUARANTEE SHALL BE GOVERNED BY, AND CONSTRUED WITH, THE LAWS OF THE STATE OF NEW YORK.

This Guarantee is dated the date of the Note upon which it is endorsed.

IN WITNESS WHEREOF, each Guarantor has caused this Guarantee to be duly executed.

Arch Western Resources, LLC
As Guarantor

By:_____
Name:
Title:

Thunder Basin Coal Company, L.L.C.
As Guarantor

By:_____
Name:
Title:

Mountain Coal Company, L.L.C.
As Guarantor

By:_____
Name:
Title:

Arch of Wyoming, LLC
As Guarantor

By:_____
Name:
Title:

ASSIGNMENT FORM

To assign and transfer this Note, fill in the form below:

(I) or (the Issuer) assign and transfer this Note to

_____
(Insert assignee's social security or tax I.D. no.)

_____
(Print or type assignee's name, address and postal code)

and irrevocably appoint _____ agent to transfer this Note on the books of the Issuer. The agent may substitute another to act for him.

Your Signature: _____
Sign exactly as your name appears on the other side of this Note)

Signature Guarantee: _____
(Participant in a recognized signature guarantee medallion program)

Date:_____

Certifying Signature: _____

[Include only if Original Note and delete if Exchange Note -- In connection with any transfer of any Notes evidenced by this certificate occurring prior to the date that is two years after the later of the date of original issuance of such Notes and the last date, if any, on which the Notes were owned by the Issuer or any Affiliate of the Issuer, the undersigned confirms that such Notes are being transferred in accordance with the transfer restrictions set forth in such Notes and:

CHECK ONE BOX BELOW

(1) [X] to the Issuer; or

(2) [X] pursuant to and in compliance with Rule 144A under the U.S. Securities Act of 1933; or

(3) [X] pursuant to and in compliance with Regulation S under the U.S. Securities Act of 1933; or

(4) [X] pursuant to another available exemption from the registration requirements of the U.S. Securities Act of 1933; or

(5) [X] pursuant to an effective registration statement under the U.S. Securities Act of 1933.

Unless one of the boxes is checked, the Trustee will refuse to register any of the Notes evidenced by this certificate in the name of any person other than the registered Holder thereof; provided, however, that if box (2) is checked, by executing this form, the Transferor is deemed to have certified that such Notes are being transferred to a person it reasonably believes is a "qualified institutional buyer" as defined in Rule 144A under the U.S. Securities Act of 1933 who has received notice that such transfer is being made in reliance on Rule 144A; if box (3) is checked, by executing this form, the Transferor is deemed to have certified that such transfer is made pursuant to an offer and sale that occurred outside the United States in compliance with Regulation S under the U.S. Securities Act; and if box (4) is checked, the Trustee may require, prior to registering any such transfer of the Notes, such legal opinions, certifications and other information as the Issuer reasonably requests to confirm that such transfer is being made pursuant to an exemption from or in a transaction not subject to, the registration requirements of the U.S. Securities Act of 1933.

Signature: _____

Signature Guarantee:

_____

(Participant in a recognized signature guarantee medallion program)

Certifying Signature: _____ Date:_____

Signature Guarantee: _____

(Participant in a recognized signature guarantee medallion program)]

OPTION OF HOLDER TO ELECT PURCHASE

If you want to elect to have this Note or a portion thereof repurchased pursuant to Section 4.09 or 4.11 of the Indenture, check the box: [ ]

If the purchase is in part, indicate the portion (in denominations of $1,000 or any integral multiple thereof) to be purchased:

Your signature:

(Sign exactly as your name appears on the other side of this Note)

Date:

Certifying Signature: _____

SCHEDULE A

SCHEDULE OF PRINCIPAL AMOUNT

The following decreases/increases in the principal amount of this Security have been made:

Date of Decrease/ Increase	Decrease in Principal Amount	Increase in Principal Amount	Principal Amount Following such Decrease/ Increase	Notation Made by or on Behalf of Registrar

EXHIBIT B

FORM OF TRANSFER CERTIFICATE FOR TRANSFER FROM RESTRICTED GLOBAL NOTE TO REGULATION S GLOBAL NOTE

(Transfers pursuant to Section 2.06(a)(ii) of the Indenture)

The Bank of New York, as Transfer Agent
101 Barclay Street, 8W
New York, NY 10286
Attn: Corporate Trust Division-Corporate Finance Unit

Re: 6 3/4% Senior Notes Due 2013 (the "Notes")

Reference is hereby made to the Indenture dated as of June 25, 2003, (the "Indenture") among Arch Western Finance, LLC, as Issuer, Arch Western Resources, LLC, a limited liability company organized under the laws of Delaware ("Arch Western") and each of Arch Western's wholly owned subsidiaries, namely; Arch of Wyoming, LLC, Mountain Coal Company L.L.C., and Thunder Basin Coal Company, L.L.C. (each a Guarantor, and together with Arch Western, (the "Guarantors")) and The Bank of New York, as Trustee. Capitalized terms used but not defined herein shall have the meanings given them in the Indenture.

This letter relates to _____ aggregate principal amount of Notes that are held as a beneficial interest in the form of the Restricted Global Note (CUSIP No. _____; ISIN No: _____) with the Depositary in the name of [name of transferor](the "Transferor"). The Transferor has requested an exchange or transfer of such beneficial interest for an equivalent beneficial interest in the Regulation S Global Note (Common Code No. _____; ISIN No. _____).

In connection with such request, the Transferor does hereby certify that such transfer has been effected in accordance with the transfer restrictions set forth in the Notes and:

(a) with respect to transfers made in reliance on Regulation S ("Regulation S") under the United States Securities Act of 1933, as amended (the "U.S. Securities Act"), does certify that:

(i) the offer of the Notes was not made to a person in the United States;

(ii) either (1) at the time the buy order is originated the transferee is outside the United States or the Transferor and any person acting on its behalf reasonably believe that the transferee is outside the United States or; (2) the transaction was executed in, on or through the facilities of a designated offshore securities market described in paragraph (b) of Rule 902 of Regulation S and neither the Transferor nor any person acting on its behalf knows that the transaction was pre-arranged with a buyer in the United States

(iii) no directed selling efforts have been made in the United States by the Transferor, an affiliate thereof or any person their behalf in contravention of the requirements of Rule 903 or 904 of Regulation S, as applicable;

(iv) the transaction is not part of a plan or scheme to evade the registration requirements of the U.S. Securities Act; and

(v) the Transferor is not the Issuer, a distributor of the Notes, an affiliate of the Issuer or any such distributor (except any officer or director who is an affiliate solely by virtue of holding such position) or a person acting on behalf of any of the foregoing.

(b) with respect to transfers made in reliance on Rule 144 the Transferor certifies that the Notes are being transferred in a transaction permitted by Rule 144 under the U.S. Securities Act.

You, the Issuer, the Guarantors and the Trustee are entitled to rely upon this letter and are irrevocably authorized to produce this letter or a copy hereof to any interested party in any administrative or legal proceedings or official inquiry with respect to the matters covered hereby. Terms used in this certificate have the meanings set forth in Regulation S.

[Name of Transferor]

By: _____

Name:

Title:

Date:

cc:

Attn:

EXHIBIT C
FORM OF TRANSFER CERTIFICATE FOR TRANSFER FROM REGULATION S GLOBAL NOTE TO RESTRICTED GLOBAL NOTE

(Transfers pursuant to Section 2.06(a)(iii) of the Indenture)

The Bank of New York, as Trustee
101 Barclay Street
New York, NY 10286
Attn: Corporate Trust Office

Re: 6 3/4% Senior Notes Due 2013 (the "Notes")

Reference is hereby made to the Indenture dated as of June 25, 2003, (the "Indenture") among Arch Western Finance, LLC, as Issuer, Arch Western Resources, LLC, a limited liability company organized under the laws of Delaware ("Arch Western") and each of Arch Western's wholly owned subsidiaries, namely; Arch of Wyoming, LLC, Mountain Coal Company L.L.C., and Thunder Basin Coal Company, L.L.C. (each a Guarantor, and together with Arch Western, (the "Guarantors")) and The Bank of New York, as Trustee. Capitalized terms used but not defined herein shall have the meanings given them in the Indenture.

This letter relates to $_____ aggregate principal amount at maturity of Notes that are held in the form of the Regulation S Global Note with the Depositary (Common Code No. _____; ISIN No. _____) in the name of Cede & Co. (the "Transferor") to effect the transfer of the Notes in exchange for an equivalent beneficial interest in the Restricted Global Note (CUSIP No. _____, ISIN No. _____).

In connection with such request, and in respect of such Notes the Transferor does hereby certify that such Notes are being transferred in accordance with the transfer restrictions set forth in the Notes and that:

CHECK ONE BOX BELOW:

[X][ ] the Transferor is relying on Rule 144A under the United States Securities Act of 1933, as amended (the "Securities Act") for exemption from such Act's registration requirements; it is transferring such Notes to a person it reasonably believes is a "qualified institutional buyer" as defined in Rule 144A that purchases for its own account, or for the account of a qualified institutional buyer, and to whom the Transferor has given notice that the transfer is made in reliance on Rule 144A and the transfer is being made in accordance with any applicable securities laws of any state of the United States; or

[X]: the Transferor is relying on an exemption other than Rule 144A from the registration requirements of the Securities Act, subject to the Issuer's and the Trustee's right prior to any such offer, sale or transfer to require the

delivery of an Opinion of Counsel, certification and/or other information satisfactory to each of them.

You, the Issuer, the Guarantors and the Trustee are entitled to rely upon this letter and are irrevocably authorized to produce this letter or a copy hereof to any interested party in any administrative or legal proceedings or official inquiry with respect to the matters covered hereby.

[Name of Transferor]

By: _____

Name:

Title:

Dated:

cc:

Attn:

EXHIBIT 4.4

ARCH WESTERN FINANCE, LLC

6 3/4% SENIOR NOTES DUE 2013

REGISTRATION RIGHTS AGREEMENT

New York, New York

June 25, 2003

Citigroup Global Markets Inc.
J.P. Morgan Securities Inc.
Morgan Stanley & Co. Incorporated
As Representatives of the Initial Purchasers
c/o Citigroup Global Markets Inc.
388 Greenwich Street
New York, New York 10013

Dear Sirs:

Arch Western Finance, LLC, a limited liability company organized under the laws of Delaware (the "Issuer"), proposes to issue and sell to certain purchasers (the "Initial Purchasers"), upon the terms set forth in a Purchase Agreement dated June 19, 2003 (the "Purchase Agreement") relating to the initial placement (the "Initial Placement") of the Issuer's 6 3/4% Senior Notes due 2013 (the "Notes"). The Notes will be fully and unconditionally guaranteed as to payment of principal, premium if any, and interest (the "Guarantees" and together with the Notes hereinafter referred to as the "Securities") by Arch Western Resources, LLC, a limited liability company organized under the laws of Delaware ("Arch Western") and the Subsidiary Guarantors listed in Schedule II to the Purchase Agreement. Arch Western and the Subsidiary Guarantors are hereinafter referred to as the "Guarantors". To induce the Initial Purchasers to enter into the Purchase Agreement and to satisfy a condition of your obligations thereunder, each of the Issuer, Arch Coal, Inc., a corporation organized under the laws of Delaware (the "Company"), and the Guarantors, jointly and severally, agrees with you for your benefit and the benefit of the holders from time to time of the Securities (including the Initial Purchasers) (each a "Holder" and, together, the "Holders"), as follows:

1. Definitions. Capitalized terms used herein without definition shall have their respective meanings set forth in the Purchase Agreement. As used in this Agreement, the following capitalized defined terms shall have the following meanings:

"Act" shall mean the Securities Act of 1933, as amended, and the rules and regulations of the Commission promulgated thereunder.

"Affiliate" of any specified Person shall mean any other Person that, directly or indirectly, is in control of, is controlled by, or is under common control with, such specified Person. For purposes of this definition, control of a Person shall mean the power, direct or

indirect, to direct or cause the direction of the management and policies of such Person whether by contract or otherwise; and the terms "controlling" and "controlled" shall have meanings correlative to the foregoing.

"Arch Western" shall have the meaning set forth in the preamble hereto.

"Broker-Dealer" shall mean any broker or dealer registered as such under the Exchange Act.

"Business Day" shall mean any day other than a Saturday, a Sunday or a legal holiday or a day on which banking institutions or trust companies are authorized or obligated by law to close in New York City.

"Commission" shall mean the Securities and Exchange Commission.

"Company" shall have the meaning set forth in the preamble hereto.

"Exchange Act" shall mean the Securities Exchange Act of 1934, as amended, and the rules and regulations of the Commission promulgated thereunder.

"Exchange Offer Registration Period" shall mean the one-year period following the consummation of the Registered Exchange Offer, exclusive of any period during which any stop order shall be in effect suspending the effectiveness of the Exchange Offer Registration Statement.

"Exchange Offer Registration Statement" shall mean a registration statement of each of the Issuer and the Guarantors on an appropriate form under the Act with respect to the Registered Exchange Offer, all amendments and supplements to such registration statement, including post-effective amendments thereto, in each case including the Prospectus contained therein, all exhibits thereto and all material incorporated by reference therein.

"Exchanging Dealer" shall mean any Holder (which may include any Initial Purchaser) that is a Broker-Dealer and elects to exchange for New Securities any Securities that it acquired for its own account as a result of market-making activities or other trading activities (but not directly from the Issuer or any Guarantor or any Affiliate of the Issuer or any Guarantor) for New Securities.

"Final Memorandum" shall have the meaning set forth in the Purchase Agreement.

"Guarantors" shall have the meaning set forth in the preamble hereto.

"Holder" shall have the meaning set forth in the preamble hereto.

"Indenture" shall mean the Indenture relating to the Securities, dated as of June 25, 2003, among each of the Issuer, the Guarantors and the Bank of New York, as trustee, as the same may be amended from time to time in accordance with the terms thereof.

"Initial Placement" shall have the meaning set forth in the preamble hereto.

"Initial Purchaser" shall have the meaning set forth in the preamble hereto.

"Issuer" shall have the meaning set forth in the preamble hereto.

"Losses" shall have the meaning set forth in Section 6(d) hereof.

"Majority Holders" shall mean the Holders of a majority of the aggregate principal amount of Securities registered under a Registration Statement.

"Managing Underwriters" shall mean the investment banker or investment bankers and manager or managers that shall administer an underwritten offering.

"New Securities" shall mean debt securities of the Issuer identical in all material respects to the Securities (except that the cash interest and interest rate step-up provisions and the transfer restrictions shall be modified or eliminated, as appropriate) and to be issued under the Indenture or the New Securities Indenture.

"New Securities Indenture" shall mean an indenture among each of the Issuer, the Guarantors and the New Securities Trustee, identical in all material respects to the Indenture (except that the cash interest and interest rate step-up provisions will be modified or eliminated, as appropriate).

"New Securities Trustee" shall mean a bank or trust company reasonably satisfactory to the Initial Purchasers, as trustee with respect to the New Securities under the New Securities Indenture.

"Notes" shall have the meaning set forth in the preamble hereto.

"Prospectus" shall mean the prospectus included in any Registration Statement (including, without limitation, a prospectus that discloses information previously omitted from a prospectus filed as part of an effective registration statement in reliance upon Rule 430A under the Act), as amended or supplemented by any prospectus supplement, with respect to the terms of the offering of any portion of the Securities or the New Securities covered by such Registration Statement, and all amendments and supplements thereto and all material incorporated by reference therein.

"Purchase Agreement" shall have the meaning set forth in the preamble hereto.

"Registered Exchange Offer" shall mean the proposed offer of the Issuer and the Guarantors to issue and deliver to the Holders of the Securities that are not prohibited by any law or policy of the Commission from participating in such offer, in exchange for the Securities, a like aggregate principal amount of the New Securities.

"Registration Statement" shall mean any Exchange Offer Registration Statement or Shelf Registration Statement that covers any of the Securities or the New Securities pursuant to the provisions of this Agreement, any amendments and supplements to such registration

statement, including post-effective amendments (in each case including the Prospectus contained therein), all exhibits thereto and all material incorporated by reference therein.

"Securities" shall have the meaning set forth in the preamble hereto.

"Shelf Registration" shall mean a registration effected pursuant to Section 3 hereof.

"Shelf Registration Period" has the meaning set forth in Section 3(b) hereof.

"Shelf Registration Statement" shall mean a "shelf" registration statement of the Issuer and the Guarantors pursuant to the provisions of Section 3 hereof which covers some or all of the Securities or New Securities, as applicable, on an appropriate form under Rule 415 under the Act, or any similar rule that may be adopted by the Commission, amendments and supplements to such registration statement, including post-effective amendments, in each case including the Prospectus contained therein, all exhibits thereto and all material incorporated by reference therein.

"Subsidiary Guarantor" shall have the meaning set forth in the preamble hereto.

"Trustee" shall mean the trustee with respect to the Securities under the Indenture.

"underwriter" shall mean any underwriter of Securities in connection with an offering thereof under a Shelf Registration Statement.

2. (a) Unless prohibited under applicable law or policy of the Commission, the Issuer, the Company and the Guarantors shall prepare and, not later than 90 days following the date of the original issuance of the Securities (or if such 90th day is not a Business Day, the next succeeding Business Day), the Issuer and the Guarantors shall file with the Commission the Exchange Offer Registration Statement with respect to the Registered Exchange Offer. The Issuer, the Company and the Guarantors shall use their reasonable best efforts to cause the Exchange Offer Registration Statement to become effective under the Act within 180 days of the date of the original issuance of the Securities (or if such 180th day is not a Business Day, the next succeeding Business Day).

(b) Upon the effectiveness of the Exchange Offer Registration Statement, the Issuer, the Company and the Guarantors shall promptly commence the Registered Exchange Offer, it being the objective of such Registered Exchange Offer to enable each Holder electing to exchange Securities for New Securities (assuming that such Holder is not an Affiliate of the Issuer or any Guarantor, acquires the New Securities in the ordinary course of such Holder's business, has no arrangements with any Person to participate in the distribution of the New Securities and is not prohibited by any law or policy of the Commission from participating in the Registered Exchange Offer) to trade such New Securities from and after their receipt without any limitations or restrictions under the Act and without material restrictions under the securities laws of a substantial proportion of the several states of the United States.

(c) In connection with the Registered Exchange Offer, the Issuer, the Company and the Guarantors shall:

(i) mail to each Holder a copy of the Prospectus forming part of the Exchange Offer Registration Statement, together with an appropriate letter of transmittal and related documents;

(ii) keep the Registered Exchange Offer open for not less than 30 Business Days and not more than 45 Business Days after the date notice thereof is mailed to the Holders (or, in each case, longer if required by applicable law);

(iii) use their reasonable best efforts to keep the Exchange Offer Registration Statement continuously effective under the Act, supplemented and amended as required, under the Act to ensure that it is available for sales of New Securities by Exchanging Dealers during the Exchange Offer Registration Period;

(iv) utilize the services of a depositary for the Registered Exchange Offer with an address in the Borough of Manhattan in New York City, which may be the Trustee, the New Securities Trustee or an Affiliate of either of them;

(v) permit Holders to withdraw tendered Securities at any time prior to the close of business, New York time, on the last Business Day on which the Registered Exchange Offer is open;

(vi) prior to effectiveness of the Exchange Offer Registration Statement, provide a supplemental letter to the Commission (A) stating that the Issuer and the Guarantors are conducting the Registered Exchange Offer in reliance on the position of the Commission in Exxon Capital Holdings Corporation (pub. avail. May 13, 1988), Morgan Stanley and Co., Inc. (pub. avail. June 5, 1991); and (B) including a representation that each of the Issuer and the Guarantors has not entered into any arrangement or understanding with any Person to distribute the New Securities to be received in the Registered Exchange Offer and that, to the best of each of the Issuer's and the Guarantors' information and belief, each Holder participating in the Registered Exchange Offer is acquiring the New Securities in the ordinary course of business and has no arrangement or understanding with any Person to participate in the distribution of the New Securities; and

(vii) comply in all material respects with all applicable laws.

(d) As soon as practicable after the close of the Registered Exchange Offer, the Issuer and the Guarantors shall:

(i) accept for exchange all Securities tendered and not validly withdrawn pursuant to the Registered Exchange Offer;

(ii) deliver to the Trustee for cancellation in accordance with Section 4(s) all Securities so accepted for exchange; and

(iii) cause the New Securities Trustee promptly to authenticate and deliver to each Holder of Securities a principal amount of New Securities equal to the principal amount of the Securities of such Holder so accepted for exchange.

(e) Each Holder hereby acknowledges and agrees that any Broker-Dealer and any such Holder using the Registered Exchange Offer to participate in a distribution of the New Securities (x) could not under Commission policy as in effect on the date of this Agreement rely on the position of the Commission in Morgan Stanley and Co., Inc. (pub. avail. June 5, 1991) and Exxon Capital Holdings Corporation (pub. avail. May 13, 1988), as interpreted in the Commission's letter to Shearman & Sterling dated July 2, 1993 and similar no-action letters; and (y) must comply with the registration and prospectus delivery requirements of the Act in connection with any secondary resale transaction must be covered by an effective registration statement containing the selling security holder information required by Item 507 or 508, as applicable, of Regulation S-K under the Act if the resales are of New Securities obtained by such Holder in exchange for Securities acquired by such Holder directly from the Company or one of its Affiliates. Accordingly, each Holder participating in the Registered Exchange Offer shall be required to represent to the Issuer and the Guarantors that, at the time of the consummation of the Registered Exchange Offer:

(i) any New Securities received by such Holder will be acquired in the ordinary course of business;

(ii) such Holder will have no arrangement or understanding with any Person to participate in the distribution of the Securities or the New Securities within the meaning of the Act; and

(iii) such Holder is not an Affiliate of the Issuer or any Guarantor.

(f) If any Initial Purchaser determines that it is not eligible to participate in the Registered Exchange Offer with respect to the exchange of Securities constituting any portion of an unsold allotment, at the request of such Initial Purchaser, the Issuer, the Company and the Guarantors shall issue and deliver to such Initial Purchaser or the Person purchasing New Securities registered under a Shelf Registration Statement as contemplated by Section 3 hereof from such Initial Purchaser, in exchange for such Securities, a like principal amount of New Securities. The Issuer, the Company and the Guarantors shall use their reasonable best efforts to cause the CUSIP Service Bureau to issue the same CUSIP number for such New Securities as for New Securities issued pursuant to the Registered Exchange Offer.

3. Shelf Registration. (a) If (i) due to any change in law or applicable interpretations thereof by the Commission's staff, the Issuer, the Company and the Guarantors determines upon advice of their outside counsel that they are not permitted to effect the Registered Exchange Offer as contemplated by Section 2 hereof; (ii) for any other reason the Registered Exchange Offer is not consummated within 225 days of the date hereof; (iii) any Initial Purchaser so requests with respect to Securities that are not eligible to be exchanged for New Securities in the Registered Exchange Offer and that are held by it following consummation of the Registered Exchange Offer; (iv) any Holder (other than an Initial Purchaser) is not eligible to participate in the Registered Exchange Offer; or (v) in the case of any Initial Purchaser that participates in the Registered Exchange Offer or acquires New Securities pursuant to Section 2(f) hereof, such Initial Purchaser does not receive freely tradeable New Securities in exchange for Securities constituting any portion of an unsold allotment (it being understood that (x) the requirement that an Initial Purchaser deliver a Prospectus containing the information required by

Item 507 or 508 of Regulation S-K under the Act in connection with sales of New Securities acquired in exchange for such Securities shall result in such New Securities being not "freely tradeable"; and (y) the requirement that an Exchanging Dealer deliver a Prospectus in connection with sales of New Securities acquired in the Registered Exchange Offer in exchange for Securities acquired as a result of market-making activities or other trading activities shall not result in such New Securities being not "freely tradeable"), the Issuer, the Company and the Guarantors shall effect a Shelf Registration Statement in accordance with subsection (b) below.

(b) (i) The Issuer and the Guarantors shall as promptly as practicable (but in no event more than 60 days after so required or requested pursuant to this Section 3), file with the Commission and thereafter the Issuer, the Company and the Guarantors shall use their reasonable best efforts to cause to be declared effective under the Act a Shelf Registration Statement relating to the offer and sale of the Securities or the New Securities, as applicable, by the Holders thereof from time to time in accordance with the methods of distribution elected by such Holders and set forth in such Shelf Registration Statement; provided, however, that no Holder (other than an Initial Purchaser) shall be entitled to have the Securities held by it covered by such Shelf Registration Statement unless such Holder agrees in writing to be bound by all of the provisions of this Agreement applicable to such Holder; and provided further, that with respect to New Securities received by an Initial Purchaser in exchange for Securities constituting any portion of an unsold allotment, the Issuer and the Guarantors may, if permitted by current interpretations by the Commission's staff, file a post-effective amendment to the Exchange Offer Registration Statement containing the information required by Item 507 or 508 of Regulation S-K, as applicable, in satisfaction of their obligations under this subsection with respect thereto, and any such Exchange Offer Registration Statement, as so amended, shall be referred to herein as, and governed by the provisions herein applicable to, a Shelf Registration Statement.

(ii) The Issuer, the Company and the Guarantors shall use their reasonable best efforts to keep the Shelf Registration Statement continuously effective, supplemented and amended as required by the Act, in order to permit the Prospectus forming part thereof to be usable by Holders for a period of two years from the date the Shelf Registration Statement is declared effective by the Commission or such shorter period that will terminate when all the Securities or New Securities, as applicable, covered by the Shelf Registration Statement have been sold pursuant to the Shelf Registration Statement (in any such case, such period being called the "Shelf Registration Period"). Each of the Issuer, the Company and the Guarantors shall be deemed not to have used its reasonable best efforts to keep the Shelf Registration Statement effective during the requisite period if it voluntarily takes any action that would result in Holders of Securities covered thereby not being able to offer and sell such Securities during that period, unless (A) such action is required by applicable law; or (B) such action is taken by the Issuer, the Company and the Guarantors in good faith and for valid business reasons (not including avoidance of the Issuer's, the Company's and Guarantors' obligations hereunder), including the acquisition or divestiture of assets, so long as each of the Issuer, the Company and the Guarantors promptly thereafter complies with the requirements of Section 4(k) hereof, if applicable.

(iii) The Issuer, the Company and the Guarantors shall cause the Shelf Registration Statement and the related Prospectus and any amendment or supplement

thereto, as of the effective date of the Shelf Registration Statement or such amendment or supplement, (A) to comply in all material respects with the applicable requirements of the Securities Act and the rules and regulations of the Commission; and (B) not to contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading.

4. Additional Registration Procedures. In connection with any Shelf Registration Statement and, to the extent applicable, any Exchange Offer Registration Statement, the following provisions shall apply.

(a) The Issuer, the Company and the Guarantors shall:

(i) furnish to you, not less than five Business Days prior to the filing thereof with the Commission, a copy of any Shelf Registration Statement, and each amendment thereof and each amendment or supplement, if any, to the Prospectus included therein (including all documents incorporated by reference therein after the initial filing) and shall use their best efforts to reflect in each such document, when so filed with the Commission, such comments as you reasonably propose;

(ii) include the information set forth in Annex A hereto on the facing page of the Exchange Offer Registration Statement, in Annex B hereto in the forepart of the Exchange Offer Registration Statement in a section setting forth details of the Exchange Offer, in Annex C hereto in the underwriting or plan of distribution section of the Prospectus contained in the Exchange Offer Registration Statement, and in Annex D hereto in the letter of transmittal delivered pursuant to the Registered Exchange Offer;

(iii) if requested by an Initial Purchaser, include the information required by Item 507 or 508 of Regulation S-K, as applicable, in the Prospectus contained in the Exchange Offer Registration Statement; and

(iv) in the case of a Shelf Registration Statement, include the names of the Holders that propose to sell Securities pursuant to the Shelf Registration Statement as selling security holders.

(b) The Issuer, the Company and the Guarantors shall ensure that:

(i) any Registration Statement and any amendment thereto and any Prospectus forming part thereof and any amendment or supplement thereto complies in all material respects with the Act and the rules and regulations thereunder; and

(ii) any Registration Statement and any amendment thereto does not, when it becomes effective, contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading.

(c) The Company shall advise you, the Holders of Securities covered by any Shelf Registration Statement and any Exchanging Dealer under any Exchange Offer Registration

Statement that has been provided in writing to the Company a telephone or facsimile number and address for notices, and, if requested by you or any such Holder or Exchanging Dealer, shall confirm such advice in writing (which notice pursuant to clauses (ii)-(v) hereof shall be accompanied by an instruction to suspend the use of the Prospectus until the Issuer and the Guarantors shall have remedied the basis for such suspension):

(i) when a Registration Statement and any amendment thereto has been filed with the Commission and when the Registration Statement or any post-effective amendment thereto has become effective;

(ii) of any request by the Commission for any amendment or supplement to the Registration Statement or the Prospectus or for additional information;

(iii) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or the initiation of any proceedings for that purpose;

(iv) of the receipt by the Issuer, the Company or any Guarantor of any notification with respect to the suspension of the qualification of the securities included therein for sale in any jurisdiction or the initiation of any proceeding for such purpose; and

(v) of the happening of any event that requires any change in the Registration Statement or the Prospectus so that, as of such date, the statements therein are not misleading and do not omit to state a material fact required to be stated therein or necessary to make the statements therein (in the case of the Prospectus, in the light of the circumstances under which they were made) not misleading.

(d) The Issuer, the Company and the Guarantors shall use their reasonable best efforts to obtain the withdrawal of any order suspending the effectiveness of any Registration Statement or the qualification of the securities therein for sale in any jurisdiction at the earliest possible time.

(e) The Issuer, the Company and the Guarantors shall furnish to each Holder of Securities covered by any Shelf Registration Statement, without charge, at least one copy of such Shelf Registration Statement and any post-effective amendment thereto, including all material incorporated therein by reference, and, if the Holder so requests in writing, all exhibits thereto (including exhibits incorporated by reference therein).

(f) The Issuer, the Company and the Guarantors shall, during the Shelf Registration Period, deliver to each Holder of Securities covered by any Shelf Registration Statement, without charge, as many copies of the Prospectus (including each preliminary Prospectus) included in such Shelf Registration Statement and any amendment or supplement thereto as such Holder may reasonably request. Each of the Issuer and the Guarantors consents to the use of the Prospectus or any amendment or supplement thereto by each of the selling Holders of securities in connection with the offering and sale of the securities covered by the Prospectus, or any amendment or supplement thereto, included in the Shelf Registration Statement.

(g) The Issuer, the Company and the Guarantors shall furnish to each Exchanging Dealer which so requests, without charge, at least one copy of the Exchange Offer Registration Statement and any post-effective amendment thereto, including all material incorporated by reference therein, and, if the Exchanging Dealer so requests in writing, all exhibits thereto (including exhibits incorporated by reference therein).

(h) The Issuer, the Company and the Guarantors shall promptly deliver to each Initial Purchaser, each Exchanging Dealer and each other Person required to deliver a Prospectus during the Exchange Offer Registration Period, without charge, as many copies of the Prospectus included in such Exchange Offer Registration Statement and any amendment or supplement thereto as any such Person may reasonably request. Each of the Issuer, the Company and the Guarantors consents to the use of the Prospectus or any amendment or supplement thereto by any Initial Purchaser, any Exchanging Dealer and any such other Person that may be required to deliver a Prospectus following the Registered Exchange Offer in connection with the offering and sale of the New Securities covered by the Prospectus, or any amendment or supplement thereto, included in the Exchange Offer Registration Statement.

(i) Prior to the Registered Exchange Offer or any other offering of Securities pursuant to any Registration Statement, the Issuer, the Company and the Guarantors shall use their reasonable best efforts to arrange, if necessary, for the qualification of the Securities or the New Securities for sale under the laws of such jurisdictions as any Holder shall reasonably request and will maintain such qualification in effect so long as required to enable the offer and sale in such jurisdictions of the Securities or New Securities; provided that in no event shall the Issuer, the Company or the Guarantors be obligated to qualify to do business in any jurisdiction where they are not then so qualified or to take any action that would subject them to service of process in suits, other than those arising out of the Initial Placement, the Registered Exchange Offer or any offering pursuant to a Shelf Registration Statement, in any such jurisdiction where they are not then so subject.

(j) The Issuer, the Company and the Guarantors shall cooperate with the Holders of Securities to facilitate the timely preparation and delivery of certificates representing New Securities or Securities to be issued or sold pursuant to any Registration Statement free of any restrictive legends and in such denominations and registered in such names as Holders may request.

(k) Upon the occurrence of any event contemplated by subsections (c)(ii) through (v) above during the period for which the Issuer, the Company and the Guarantors are required under this Agreement to maintain an effective Registration Statement. The Issuer, the Company and the Guarantors shall promptly prepare a post-effective amendment to the applicable Registration Statement or an amendment or supplement to the related Prospectus or file any other required document so that, as thereafter delivered to Initial Purchasers of the securities included therein, the Prospectus will not include an untrue statement of a material fact or omit to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading. In such circumstances, the period of effectiveness of the Exchange Offer Registration Statement provided for in Section 2 and the Shelf Registration Statement provided for in Section 3(b) shall each be extended by the number of days from and including the date of the giving of a notice of suspension pursuant to Section

4(c) to and including the date when the Initial Purchasers, the Holders of the Securities and any known Exchanging Dealer shall have received such amended or supplemented Prospectus pursuant to this Section.

(l) Not later than the effective date of any Registration Statement, the Issuer, the Company and the Guarantors shall provide a CUSIP number for the Securities or the New Securities, as the case may be, registered under such Registration Statement and provide the Trustee with printed certificates for such Securities or New Securities, in a form eligible for deposit with The Depository Trust Company.

(m) The Issuer, the Company and the Guarantors shall comply with all applicable rules and regulations of the Commission and shall make generally available to their security holders as soon as practicable after the effective date of the applicable Registration Statement an earnings statement satisfying the provisions of Section 11(a) of the Act.

(n) The Issuer and the Guarantors shall cause the Indenture or the New Securities Indenture, as the case may be, to be qualified under the Trust Indenture Act, as required by applicable law, in a timely manner.

(o) The Issuer and the Guarantors may require each Holder of securities to be sold pursuant to any Shelf Registration Statement to furnish to the Issuer and the Guarantors such information regarding the Holder and the distribution of such securities as the Issuer and the Guarantors may from time to time reasonably require for inclusion in such Registration Statement. The Issuer and the Guarantors may exclude from such Shelf Registration Statement the Securities of any Holder that fails to furnish such information within a reasonable time after receiving such request.

(p) In the case of any Shelf Registration Statement, the Issuer, the Company and the Guarantors shall enter into such and take all other appropriate actions (including if requested an underwriting agreement in customary form) in order to expedite or facilitate the registration or the disposition of the Securities, and in connection therewith, if an underwriting agreement is entered into, cause the same to contain indemnification provisions and procedures no less favorable than those set forth in Section 6 (or such other provisions and procedures acceptable to the Majority Holders and the Managing Underwriters, if any, with respect to all parties to be indemnified pursuant to Section 6.

(q) In the case of any Shelf Registration Statement, each of the Issuer, the Company and the Guarantors shall:

(i) make reasonably available for inspection by the Holders of Securities to be registered thereunder, any underwriter participating in any disposition pursuant to such Registration Statement, and any attorney, accountant or other agent retained by the Holders or any such underwriter all relevant financial and other records, pertinent corporate documents and properties of the Company and its subsidiaries;

(ii) cause the Company's and Arch Western's respective officers, directors and employees to supply all relevant information reasonably requested by the Holders or any such underwriter, attorney, accountant or agent in connection with any

such Registration Statement as is customary for similar due diligence examinations; provided, however, that any information that is designated in writing by the Company or Arch Western, in good faith, as confidential at the time of delivery of such information shall be kept confidential by the Holders or any such underwriter, attorney, accountant or agent, unless such disclosure is made in connection with a court proceeding or required by law, or such information becomes available to the public generally or through a third party without an accompanying obligation of confidentiality;

(iii) make such representations and warranties to the Holders of Securities registered thereunder and the underwriters, if any, in form, substance and scope as are customarily made by issuers to underwriters in primary underwritten offerings and covering matters including, but not limited to, those set forth in the Purchase Agreement;

(iv) obtain opinions of counsel to the Issuer, the Company and the Guarantors and updates thereof (which counsel and opinions (in form, scope and substance) shall be reasonably satisfactory to the Managing Underwriters, if any) addressed to each selling Holder and the underwriters, if any, covering such matters as are customarily covered in opinions requested in underwritten offerings and such other matters as may be reasonably requested by such Holders and underwriters;

(v) obtain "cold comfort" letters and updates thereof from the independent certified public accountants of the Company, Arch Western and Canyon Fuel Company, LLC (and, if necessary, any other independent certified public accountants of any subsidiary of the Company or of any business acquired by the Company for which financial statements and financial data are, or are required to be, included in the Registration Statement), addressed to each selling Holder of Securities registered thereunder and the underwriters, if any, in customary form and covering matters of the type customarily covered in "cold comfort" letters in connection with primary underwritten offerings; and

(vi) deliver such documents and certificates as may be reasonably requested by the Majority Holders and the Managing Underwriters, if any, including those to evidence compliance with Section 4(k) and with any customary conditions contained in the underwriting agreement or other agreement entered into by the Issuer, the Company and the Guarantors.

The actions set forth in clauses (iii), (iv), (v) and (vi) of this Section shall be performed at (A) the effectiveness of such Registration Statement and each post-effective amendment thereto; and (B) each closing under any underwriting or similar agreement as and to the extent required thereunder.

(r) In the case of any Exchange Offer Registration Statement, each of the Issuer, the Company and the Guarantors shall, for any Initial Purchaser which is exchanging Securities for New Securities in the Exchange Offer:

(i) make reasonably available for inspection by such Initial Purchaser, and any attorney, accountant or other agent retained by such Initial Purchaser, all relevant financial and other records, pertinent corporate documents and properties of the Company, Arch Western and their respective subsidiaries;

(ii) cause the Company's and Arch Western's respective officers, directors and employees to supply all relevant information reasonably requested by such Initial Purchaser or any such attorney, accountant or agent in connection with any such Registration Statement as is customary for similar due diligence examinations; provided, however, that any information that is designated in writing by the Company and Arch Western, in good faith, as confidential at the time of delivery of such information shall be kept confidential by such Initial Purchaser or any such attorney, accountant or agent, unless such disclosure is made in connection with a court proceeding or required by law, or such information becomes available to the public generally or through a third party without an accompanying obligation of confidentiality;

(iii) make such representations and warranties to such Initial Purchaser, in form, substance and scope as are customarily made by issuers to underwriters in primary underwritten offerings and covering matters including, but not limited to, those set forth in the Purchase Agreement;

(iv) obtain opinions of counsel to the Issuer, the Company and the Guarantors and updates thereof (which counsel and opinions (in form, scope and substance) shall be reasonably satisfactory to such Initial Purchaser and its counsel, addressed to such Initial Purchaser, covering such matters as are customarily covered in opinions requested in underwritten offerings and such other matters as may be reasonably requested by such Initial Purchaser or its counsel;

(v) obtain "cold comfort" letters and updates thereof from the independent certified public accountants of the Company, Arch Western and Canyon Fuel Company, LLC (and, if necessary, any other independent certified public accountants of any subsidiary of the Company or of any business acquired by the Company for which financial statements and financial data are, or are required to be, included in the Registration Statement), addressed to such Initial Purchaser, in customary form and covering matters of the type customarily covered in "cold comfort" letters in connection with primary underwritten offerings, or if requested by such Initial Purchaser or its counsel in lieu of a "cold comfort" letter, an agreed-upon procedures letter under Statement on Auditing Standards No. 35, covering matters requested by such Initial Purchaser or its counsel; and

(vi) deliver such documents and certificates as may be reasonably requested by such Initial Purchaser or its counsel, including those to evidence compliance with Section 4(k) and with conditions customarily contained in underwriting agreements.

The foregoing actions set forth in clauses (iii), (iv), (v), and (vi) of this Section shall be performed at the close of the Registered Exchange Offer and the effective date of any post-effective amendment to the Exchange Offer Registration Statement.

(s) If a Registered Exchange Offer is to be consummated, upon delivery of the Securities by Holders to the Issuer and the Guarantors (or to such other Person as directed by the Issuer and the Guarantors) in exchange for the New Securities, the Issuer and the Guarantors shall mark, or caused to be marked, on the Securities so exchanged that such Securities are being canceled in exchange for the New Securities. In no event shall the Securities be marked as paid or otherwise satisfied.

(t) The Issuer, the Company and the Guarantors shall use their best efforts (i) if the Securities have been rated prior to the initial sale of such Securities, to confirm such ratings will apply to the Securities or the New Securities, as the case may be, covered by a Registration Statement; or (ii) if the Securities were not previously rated, to cause the Securities covered by a Registration Statement to be rated with at least one nationally recognized statistical rating agency, if so requested by Majority Holders with respect to the related Registration Statement or by any Managing Underwriters.

(u) In the event that any Broker-Dealer shall underwrite any Securities or participate as a member of an underwriting syndicate or selling group or "assist in the distribution" (within the meaning of the Rules of Fair Practice and the By-Laws of the National Association of Securities Dealers, Inc.) thereof, whether as a Holder of such Securities or as an underwriter, a placement or sales agent or a broker or dealer in respect thereof, or otherwise, assist such Broker-Dealer in complying with the requirements of such Rules and By-Laws, including, without limitation, by:

(i) if such Rules or By-Laws shall so require, engaging a "qualified independent underwriter" (as defined in such Rules) to participate in the preparation of the Registration Statement, to exercise usual standards of due diligence with respect thereto and, if any portion of the offering contemplated by such Registration Statement is an underwritten offering or is made through a placement or sales agent, to recommend the yield of such Securities;

(ii) indemnifying any such qualified independent underwriter to the extent of the indemnification of underwriters provided in Section 6 hereof; and

(iii) providing such information to such Broker-Dealer as may be required in order for such Broker-Dealer to comply with the requirements of such Rules.

(iv) The Issuer, the Company and the Guarantors shall use their best efforts to take all other steps necessary to effect the registration of the Securities or the New Securities, as the case may be, covered by a Registration Statement.

5. Registration Expenses. The Issuer, the Company and the Guarantors shall bear all expenses incurred in connection with the performance of their obligations under Sections 2, 3 and 4 hereof and, in the event of any Shelf Registration Statement, will reimburse the Holders for the reasonable fees and disbursements of one firm or counsel designated by the Majority Holders to act as counsel for the Holders in connection therewith, and, in the case of any Exchange Offer Registration Statement, will reimburse the Initial Purchasers for the reasonable fees and disbursements of counsel acting in connection therewith.

6. Indemnification and Contribution. (a) Each of the Issuer, the Company and the Guarantors agrees, jointly and severally, to indemnify and hold harmless each Holder of Securities or New Securities, as the case may be, covered by any Registration Statement (including each Initial Purchaser and, with respect to any Prospectus delivery as contemplated in Section 4(h) hereof, each Exchanging Dealer), the directors, officers, employees and agents of each such Holder and each Person who controls any such Holder within the meaning of either the Act or the Exchange Act against any and all losses, claims, damages or liabilities, joint or several, to which they or any of them may become subject under the Act, the Exchange Act or other Federal or state statutory law or regulation, at common law or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement as originally filed or in any amendment thereof, or in any preliminary Prospectus or the Prospectus, or in any amendment thereof or supplement thereto, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, and agrees to reimburse each such indemnified party, as incurred, for any legal or other expenses reasonably incurred by them in connection with investigating or defending any such loss, claim, damage, liability or action; provided, however, that the Issuer, the Company and the Guarantors will not be liable in any case to the extent that any such loss, claim, damage or liability arises out of or is based upon any such untrue statement or alleged untrue statement or omission or alleged omission made therein in reliance upon and in conformity with written information furnished to the Issuer, the Company and the Guarantors by or on behalf of any such Holder specifically for inclusion therein. This indemnity agreement will be in addition to any liability which the Issuer, the Company and the Guarantors may otherwise have.

Each of the Issuer, the Company and the Guarantors also agrees to indemnify or contribute as provided in Section 6(d) to Losses of each any underwriter of Securities or New Securities, as the case may be, registered under a Shelf Registration Statement, their directors, officers, employees or agents and each Person who controls such underwriter on substantially the same basis as that of the indemnification of the Initial Purchasers and the selling Holders provided in this Section 6(a) and shall, if requested by any Holder, enter into an underwriting agreement reflecting such agreement, as provided in Section 4(p) hereof.

(b) Each Holder of securities covered by a Registration Statement (including each Initial Purchaser and, with respect to any Prospectus delivery as contemplated in Section 4(h) hereof, each Exchanging Dealer) severally agrees to indemnify and hold harmless each of the Issuer, the Company and the Guarantors, each of its directors, each of its officers who signs such Registration Statement and each Person who controls the Issuer, the Company or any Guarantor within the meaning of either the Act or the Exchange Act, to the same extent as the foregoing indemnity from each of the Issuer, the Company and the Guarantors to each such Holder, but only with reference to written information relating to such Holder furnished to the Issuer, the Company and the Guarantors by or on behalf of such Holder specifically for inclusion in the documents referred to in the foregoing indemnity. This indemnity agreement will be in addition to any liability which any such Holder may otherwise have.

(c) Promptly after receipt by an indemnified party under this Section 6 or notice of the commencement of any action, such indemnified party will, if a claim in respect

thereof is to be made against the indemnifying party under this Section, notify the indemnifying party in writing of the commencement thereof; but the failure so to notify the indemnifying party (i) will not relieve it from liability under paragraph (a) or (b) above unless and to the extent it did not otherwise learn of such action and such failure results in the forfeiture by the indemnifying party of substantial rights and defenses; and (ii) will not, in any event, relieve the indemnifying party from any obligations to any indemnified party other than the indemnification obligation provided in paragraph (a) or (b) above. The indemnifying party shall be entitled to appoint counsel of the indemnifying party's choice at the indemnifying party's expense to represent the indemnified party in any action for which indemnification is sought (in which case the indemnifying party shall not thereafter be responsible for the fees and expenses of any separate counsel retained by the indemnified party or parties except as set forth below); provided, however, that such counsel shall be satisfactory to the indemnified party. Notwithstanding the indemnifying party's election to appoint counsel to represent the indemnified party in an action, the indemnified party shall have the right to employ separate counsel (including local counsel), and the indemnifying party shall bear the reasonable fees, costs and expenses of such separate counsel if (i) the use of counsel chosen by the indemnifying party to represent the indemnified party would present such counsel with a conflict of interest; (ii) the actual or potential defendants in, or targets of, any such action include both the indemnified party and the indemnifying party and the indemnified party shall have reasonably concluded that there may be legal defenses available to it and/or other indemnified parties which are different from or additional to those available to the indemnifying party; (iii) the indemnifying party shall not have employed counsel satisfactory to the indemnified party to represent the indemnified party within a reasonable time after notice of the institution of such action; or (iv) the indemnifying party shall authorize the indemnified party to employ separate counsel at the expense of the indemnifying party. An indemnifying party will not, without the prior written consent of the indemnified parties, settle or compromise or consent to the entry of any judgment with respect to any pending or threatened claim, action, suit or proceeding in respect of which indemnification or contribution may be sought hereunder (whether or not the indemnified parties are actual or potential parties to such claim or action) unless such settlement, compromise or consent includes an unconditional release of each indemnified party from all liability arising out of such claim, action, suit or proceeding.

(d) In the event that the indemnity provided in paragraph (a) or (b) of this Section is unavailable to or insufficient to hold harmless an indemnified party for any reason, then each applicable indemnifying party shall have a joint and several obligation to contribute to the aggregate losses, claims, damages and liabilities (including legal or other expenses reasonably incurred in connection with investigating or defending same) (collectively "Losses") to which such indemnified party may be subject in such proportion as is appropriate to reflect the relative benefits received by such indemnifying party, on the one hand, and such indemnified party, on the other hand, from the Initial Placement and the Registration Statement which resulted in such Losses; provided, however, that in no case shall any Initial Purchaser or any subsequent Holder of any Security or New Security be responsible, in the aggregate, for any amount in excess of the purchase discount or commission applicable to such Security, or in the case of a New Security, applicable to the Security that was exchangeable into such New Security, as set forth on the cover page of the Final Memorandum, nor shall any underwriter be responsible for any amount in excess of the underwriting discount or commission applicable to the securities purchased by such underwriter under the Registration Statement which resulted in such Losses. If the allocation provided by the immediately preceding sentence is unavailable for

any reason, the indemnifying party and the indemnified party shall contribute in such proportion as is appropriate to reflect not only such relative benefits but also the relative fault of such indemnifying party, on the one hand, and such indemnified party, on the other hand, in connection with the statements or omissions which resulted in such Losses as well as any other relevant equitable considerations. Benefits received by each of the Issuer, the Company and the Guarantors shall be deemed to be equal to the sum of (x) the total net proceeds from the Initial Placement (before deducting expenses) and (y) the total amount of additional interest which the Issuer and the Guarantors were not required to pay as a result of registering the securities covered by the Registration Statement which resulted in such Losses. Benefits received by the Initial Purchasers shall be deemed to be equal to the total purchase discounts and commissions from the Initial Placement, and benefits received by any other Holders shall be deemed to be equal to the value of receiving Securities or New Securities, as applicable, registered under the Act. Benefits received by any underwriter shall be deemed to be equal to the total underwriting discounts and commissions, as set forth on the cover page of the Prospectus forming a part of the Registration Statement which resulted in such Losses. Relative fault shall be determined by reference to, among other things, whether any alleged untrue statement or omission relates to information provided by the indemnifying party, on the one hand, or by the indemnified party, on the other hand, the intent of the parties and their relative knowledge, access to information and opportunity to correct or prevent such untrue statement or omission. The parties agree that it would not be just and equitable if contribution were determined by pro rata allocation (even if the Holders were treated as one entity for such purpose) or any other method of allocation which does not take account of the equitable considerations referred to above. Notwithstanding the provisions of this paragraph (d), no Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Act) shall be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation. For purposes of this Section, each Person who controls a Holder within the meaning of either the Act or the Exchange Act and each director, officer, employee and agent of such Holder shall have the same rights to contribution as such Holder, and each Person who controls the Issuer, the Company or any Guarantor within the meaning of either the Act or the Exchange Act, each officer of the Issuer, the Company or any Guarantor who shall have signed the Registration Statement and each director of the Issuer, the Company or any Guarantor shall have the same rights to contribution as the Issuer, the Company and the Guarantors, subject in each case to the applicable terms and conditions of this paragraph (d).

(e) The provisions of this Section will remain in full force and effect, regardless of any investigation made by or on behalf of any Holder or the Issuer, the Company or any Guarantor or any of the officers, directors or controlling Persons referred to in this Section hereof, and will survive the sale by a Holder of securities covered by a Registration Statement.

7. Underwritten Registrations. (a) If any of the Securities or New Securities, as the case may be, covered by any Shelf Registration Statement are to be sold in an underwritten offering, the Managing Underwriters shall be selected by the Majority Holders.

(b) No Person may participate in any underwritten offering pursuant to any Shelf Registration Statement, unless such Person (i) agrees to sell such Person's Securities or New Securities, as the case may be, on the basis reasonably provided in any underwriting arrangements approved by the Persons entitled hereunder to approve such arrangements; and (ii)

completes and executes all questionnaires, powers of attorney, indemnities, underwriting agreements and other documents reasonably required under the terms of such underwriting arrangements.

8. No Inconsistent Agreements. The Issuer, the Company and the Guarantors have not, as of the date hereof, entered into, nor shall they, on or after the date hereof, enter into, any agreement with respect to their securities that is inconsistent with the rights granted to the Holders herein or otherwise conflicts with the provisions hereof.

9. Amendments and Waivers. The provisions of this Agreement, including the provisions of this sentence, may not be amended, qualified, modified or supplemented, and waivers or consents to departures from the provisions hereof may not be given, unless the Issuer, the Company and the Guarantors have obtained the written consent of the Majority Holders (or, after the consummation of any Registered Exchange Offer in accordance with Section 2 hereof, of New Securities); provided that, with respect to any matter that directly or indirectly affects the rights of any Initial Purchaser hereunder, the Issuer, the Company and the Guarantors shall obtain the written consent of each such Initial Purchaser against which such amendment, qualification, supplement, waiver or consent is to be effective. Notwithstanding the foregoing (except the foregoing proviso), a waiver or consent to departure from the provisions hereof with respect to a matter that relates exclusively to the rights of Holders whose Securities or New Securities, as the case may be, are being sold pursuant to a Registration Statement and that does not directly or indirectly affect the rights of other Holders may be given by the Majority Holders, determined on the basis of Securities or New Securities, as the case may be, being sold rather than registered under such Registration Statement.

10. Notices. All notices and other communications provided for or permitted hereunder shall be made in writing by hand-delivery, first-class mail, telex, telecopier or air courier guaranteeing overnight delivery:

(a) if to a Holder, at the most current address given by such holder to the Company in accordance with the provisions of this Section, which address initially is, with respect to each Holder, the address of such Holder maintained by the Registrar under the Indenture, with a copy in like manner to Citigroup Global Markets Inc;

(b) if to you, initially at the respective addresses set forth in the Purchase Agreement; and

(c) if to the Issuer, the Company or any Guarantor, initially at its address set forth in the Purchase Agreement.

All such notices and communications shall be deemed to have been duly given when received.

The Initial Purchasers or the Issuer, the Company and the Guarantors by notice to the other parties may designate additional or different addresses for subsequent notices or communications.

11. Successors. This Agreement shall inure to the benefit of and be binding upon the successors and assigns of each of the parties, including, without the need for an express assignment or any consent by the Issuer, the Company and the Guarantors thereto, subsequent Holders of Securities and the New Securities. Each of the Issuer, the Company and the Guarantors hereby agrees to extend the benefits of this Agreement to any Holder of Securities and the New Securities, and any such Holder may specifically enforce the provisions of this Agreement as if an original party hereto.

12. Counterparts. This agreement may be in signed counterparts, each of which shall an original and all of which together shall constitute one and the same agreement.

13. Headings. The headings used herein are for convenience only and shall not affect the construction hereof.

14. Applicable Law. This Agreement shall be governed by and construed in accordance with the laws of the State of New York applicable to contracts made and to be performed in the State of New York.

15. Severability. In the event that any one of more of the provisions contained herein, or the application thereof in any circumstances, is held invalid, illegal or unenforceable in any respect for any reason, the validity, legality and enforceability of any such provision in every other respect and of the remaining provisions hereof shall not be in any way impaired or affected thereby, it being intended that all of the rights and privileges of the parties shall be enforceable to the fullest extent permitted by law.

16. Securities Held by the Company or Arch Western, etc. Whenever the consent or approval of Holders of a specified percentage of principal amount of Securities or New Securities is required hereunder, Securities or New Securities, as applicable, held by the Company or Arch Western, or their Affiliates (other than subsequent Holders of Securities or New Securities if such subsequent Holders are deemed to be Affiliates solely by reason of their holdings of such Securities or New Securities) shall not be counted in determining whether such consent or approval was given by the Holders of such required percentage.

If the foregoing is in accordance with your understanding of our agreement, please sign and return to us the enclosed duplicate hereof, whereupon this letter and your acceptance shall represent a building agreement among the Issuer, the Company and the Guarantors and the several Initial Purchasers.

Very truly yours,

Arch Western Finance, LLC

By: /s/ JAMES E. FLORCZAK

Name: James E. Florczak
Title: Vice President & Treasurer

Arch Coal, Inc.

By: /s/ ROBERT J. MESSEY

Name: Robert J. Messey
Title: Senior V.P. and C.F.O.

Arch Western Resources, LLC

By: /s/ JAMES E. FLORCZAK

Name: James E. Florczak
Title: Vice President & Treasurer

Thunder Basin Coal Company, L.L.C.

By: /s/ JAMES E. FLORCZAK

Name: James E. Florczak
Title: Vice President & Treasurer

Mountain Coal Company, L.L.C.

By: /s/ JAMES E. FLORCZAK

Name: James E. Florczak
Title: Vice President & Treasurer

Arch of Wyoming, LLC

By: /s/ JAMES E. FLORCZAK

Name: James E. Florczak
Title: Vice President & Treasurer

The foregoing Agreement is hereby confirmed and
accepted as of the date first above written.

Citigroup Global Markets Inc.
J.P. Morgan Securities Inc.
Morgan Stanley & Co. Incorporated

By: Citigroup Global Markets Inc.

By: /s/ ASHOK NAYYAR

Name: Ashok Nayyar
Title: Managing Director

For themselves and the other several
Initial Purchasers named in Schedule I
of the Purchase Agreement.

ANNEX A

Each Broker-Dealer that receives New Securities for its own account pursuant to the Exchange Offer must acknowledge that it will deliver a prospectus in connection with any resale of such New Securities. The Letter of Transmittal states that by so acknowledging and by delivering a prospectus, a Broker-Dealer will not be deemed to admit that it is an "underwriter: within the meaning of the Securities Act. This Prospectus, as it may be amended or supplemented from time to time, may be used by a Broker-Dealer in connection with resales of New Securities received in exchange for Securities where such Securities were acquired by such Broker-Dealer as a result of market-making activities or other trading activities. The Issuer and the Guarantors have agreed that, starting on the Expiration Date (as defined herein) and ending on the close of business one year after the Expiration Date, they will make this Prospectus available to any Broker-Dealer for use in connection with any such resale. See "Plan of Distribution".

ANNEX B

Each Broker-Dealer that receives New Securities for its own account in exchange for Securities, where such Securities were acquired by such Broker-Dealer as a result of market-making activities or other trading activities, must acknowledge that it will deliver a prospectus in connection with any resale of such New Securities. See "Plan of Distribution".

PLAN OF DISTRIBUTION

Each Broker-Dealer that receives New Securities for its own account pursuant to the Exchange Offer must acknowledge that it will deliver a prospectus in connection with any resale of such New Securities. This Prospectus, as it may be amended or supplemented from time to time, may be used by a Broker-Dealer in connection with resales of New Securities received in exchange for Securities where such Securities were acquired as a result of market-making activities or other trading activities. The Issuer and the Guarantors have agreed that, starting on the Expiration Date and ending on the close of business 180 days after the Expiration Date, they will make this Prospectus, as amended or supplemented, available to any Broker-Dealer for use in connection with any such resale. In addition, until _____, 20___, dealers effecting transactions in the New Securities may be required to deliver a prospectus.

The Issuer and the Guarantors will not receive any proceeds from any sale of New Securities by brokers-dealers. New Securities received by Broker-Dealers for their own account pursuant to the Exchange Offer may be sold from time to time in one or more transactions in the over-the-counter market, in negotiated transactions, through the writing of options on the New Securities or a combination of such methods of resale, at market prices prevailing at the time of resale, at prices related to such prevailing market prices or negotiated prices. Any such resale may be made directly to purchasers or to or through brokers or dealers who may receive compensation in the form of commissions or concessions from any such Broker-Dealer and/or the purchasers of any such New Securities. Any Broker-Dealer that resales New Securities that were received by it for its own account pursuant to the Exchange Offer and any broker or dealer that participates in a distribution of such New Securities may be deemed to be an "underwriter" within the meaning of the Securities Act and any profit of any such resale of New Securities and any commissions or concessions received by any such Persons may be deemed to be underwriting compensation under the Securities Act. The Letter of Transmittal states that by acknowledging that it will deliver and by delivering a prospectus, a Broker-Dealer will not be deemed to admit that it is an "underwriter" within the meaning of the Securities Act.

For a period of 180 days after the Expiration Date, the Issuer and the Guarantors will promptly send additional copies of this Prospectus and any amendment or supplement to this Prospectus to any Broker-Dealer that requests such documents in the Letter of Transmittal. The Issuer and the Guarantors have agreed to pay all expenses incident to the Exchange Offer (including the expenses of one counsel for the holder of the Securities) other than commissions or concessions of any brokers or dealers and will indemnify the holders of the Securities (including any Broker-Dealers) against certain liabilities, including liabilities under the Securities Act.

Rider A

CHECK HERE IF YOU ARE A BROKER-DEALER AND WISH TO RECEIVE 10 ADDITIONAL COPIES OF THE PROSPECTUS AND 10 COPIES OF ANY AMENDMENTS OR SUPPLEMENTS THERETO.

Name: _____
Address: _____
_____

Rider B

If the undersigned is not a Broker-Dealer, the undersigned represents that it acquired the New Securities in the ordinary course of its business, it is not engaged in, and does not intend to engage in, a distribution of New Securities and it has not arrangements or understandings with any Person to participate in a distribution of the New Securities. If the undersigned is a Broker-Dealer that will receive New Securities for its own account in exchange for Securities, it represents that the Securities to be exchange for New Securities were acquired by it as a result of market-making activities or other trading activities and acknowledges that it will deliver a prospectus in connection with any resale of such New Securities; however, by so acknowledging and by delivering a prospectus, the undersigned will not be deemed to admit that it is an "underwriter" within the meaning of the Securities Act.

EXHIBIT 5.1

[Robert G. Jones letterhead]

July __, 2003

Arch Western Finance, LLC
One CityPlace Drive, Suite 300
St. Louis, MO 63141

Ladies and Gentlemen:

I am the Vice President-Law and General Counsel of Arch Coal, Inc., a Delaware corporation ("Arch Coal"), and have acted as counsel to Arch Western Finance, LLC, a Delaware limited liability company (the "Company"), Arch Western Resources, LLC, a Delaware limited liability company ("Arch Western"), Arch of Wyoming, LLC, a Delaware limited liability company ("Arch of Wyoming"), Mountain Coal Company, L.L.C., a Delaware limited liability company ("Mountain Coal") and Thunder Basin Coal Company, L.L.C., a Delaware limited liability company ("Thunder Basin" and with Arch Western, Arch of Wyoming and Mountain Coal collectively, the "Guarantors") in connection with the Registration Statement of Form S-4 (the "Registration Statement") filed by the Company and the Guarantors with the Securities and Exchange Commission (the "SEC") under the Securities Act of 1933, as amended, relating to the issuance by the Company of $700,000,000 aggregate principal amount of its 6 3/4 Senior Notes due 2013 (the "Exchange Notes") and the issuance by the Guarantors of guarantees (the "Guarantees"), with respect to the Exchange Notes. The Exchange Notes will be offered by the Company in exchange for $700,000,000 aggregate principal amount of its outstanding 6 3/4% Senior Notes due 2013. The Exchange Notes and the GuaranteeS will be issued under an indenture dated as of June 25, 2003 (the "Indenture") among the Company, the Guarantors and The Bank of New York, as trustee.

In connection with rendering the opinions set forth below, I have examined the Registration Statement, the Prospectus contained therein, the Indenture, which has been filed with the SEC as exhibit to the Registration Statement, the respective constituent documents of the Company and the Guarantors and resolutions adopted by the respective managing members of the Company and the Guarantors, and I have made such other investigation as I have deemed appropriate. As to questions of fact material to this opinion letter, I have examined and relied upon certificates of public officials. I have not independently established any of the facts so relied on.

For purposes of this opinion letter, I have made the assumptions that are customary in opinion letters of this kind, including the assumptions that each document submitted to me is accurate and complete, that each such document that is an original is authentic, that each such document that is a copy conforms to an authentic original and that all signatures (other than signatures on behalf of the Company, the Guarantors or Arch Coal) on each such document are genuine. I further have assumed the legal capacity of natural persons, and I have assumed that each party to the documents I have examined or relied on (other than the Company, the

Guarantors or Arch Coal) has the legal capacity or authority and has satisfied all legal requirements that are applicable to that party to the extent necessary to make such documents enforceable against that party. I have not verified any of those assumptions.

The opinions expressed in this opinion letter are limited to the laws of the State of Missouri (excluding its conflict of laws rules) and the Limited Liability Company Act of the State of Delaware. I am not opining on, and I assume no responsibility for, the applicability to or effect on any of the matters covered herein of any other laws, the laws of any other jurisdiction or the local laws of any jurisdiction.

Based on the foregoing, and subject to the foregoing and the additional qualifications and other matters set forth below, it is my opinion that:

1. When the Exchange Notes have been duly executed, authenticated, issued and delivered in accordance with the provisions of the Indenture upon the exchange, the Exchange Notes will constitute valid and legally binding obligations of the Company enforceable against the Company in accordance with their terms.

2. When (a) the Exchange Notes have been duly executed, authenticated, issued and delivered in accordance with the provisions of the Indenture upon the exchange and (b) the Guarantees have been duly endorsed on the Exchange Notes, the Guarantees will constitute valid and legally binding obligations of the Guarantors enforceable against the Guarantors in accordance with their terms.

My opinions set forth above are subject to the effects of (i) bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium and other similar laws relating to or affecting creditors' rights generally; (ii) general equitable principles (whether considered in a proceeding in equity or at law) and (iii) an implied covenant of good faith and fair dealing.

I am furnishing this opinion letter to you solely in connection with the Registration Statement filed by the Company and the Guarantors with the SEC under the Securities Act of 1933, as amended, relating to the issuance by the Company of the Exchange Notes and the issuance by the Guarantors of the Guarantees. You may not rely on this opinion letter in any other connection, and it may not be furnished to or relied upon by any other person for any purpose, without my specific prior written consent. This opinion is as of the date hereof, and I have not undertaken to supplement this opinion with respect to factual matters or changes in law which may hereafter occur.

I hereby consent to the filing of this opinion letter as Exhibit 5 to the Registration Statement and to the use of my name under the caption "Legal Matters" in the Prospectus included in the Registration Statement.

Yours truly,

/s/ ROBERT G. JONES
Robert G. Jones
Vice President-Law and General Counsel

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Exhibit 12.1

Arch Western Resources
Ratio of Earnings to Fixed Charges
(Dollars in millions, except ratios)

	Year ended December 31,					Three Months Ended March 31,	
	1998	1999	2000	2001	2002	2002	2003
Earnings:							
Income (loss) from operations	(5,032)	27,152	12,451	60,370	49,824	4,652	14,689
Fixed charges net of capitalized interest	30,943	51,831	49,370	46,908	44,161	9,748	10,471
Amortization of capitalized interest	-	-	56	40	133	11	10
Earnings before taxes and fixed charges	25,911	78,983	61,877	107,318	94,118	14,411	25,170
Fixed charges:							
Interest expense	29,282	49,950	46,957	44,638	43,605	9,610	10,126
Capitalized interest	(39)	(1,190)	-	-	(711)	(173)	-
Portions of rent which represent an interest factor	1,700	3,071	2,413	2,270	1,267	311	345
Total fixed charges	30,943	51,831	49,370	46,908	44,161	9,748	10,471
RATIO OF EARNINGS TO FIXED CHARGES	(a)	1.52	1.25	2.29	2.13	1.48	2.40

(a) The deficiency of earnings to cover fixed charges and preference dividends was 5,032 for the year ended December 31, 1998.

Exhibit 23.1

Consent of Independent Auditors

We consent to the reference to our firm under the caption "Experts" and to the use of our report dated January 22, 2003 (except for Notes 13 and 16, as to which the date is May 23, 2003) in the Registration Statement (Form S-4 No. ____) and related Prospectus of Arch Western Finance Company for the registration of $700,000,000 of senior notes.

We also consent to the incorporation by reference herein of our report dated January 22, 2003 with respect to the financial statements and schedule of Arch Coal, Inc. for the years ended December 31, 2002, 2001, and 2000, included in the Annual Report (Form 10-K) for 2002 filed with the Securities and Exchange Commission.

We also consent to the incorporation by reference herein of our report dated January 22, 2003 with respect to the financial statements of Canyon Fuel Company, LLC for the years ended December 31, 2002, 2001, and 2002, incorporated by reference to the Arch Coal, Inc. Annual Report (Form 10-K) for 2002 filed with the Securities and Exchange Commission.

/s/ ERNST & YOUNG LLP

St. Louis, Missouri
July 29, 2003

Exhibit 25.1

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM T-1

STATEMENT OF ELIGIBILITY UNDER THE TRUST INDENTURE ACT OF 1939 OF A CORPORATION DESIGNATED TO ACT AS TRUSTEE

CHECK IF AN APPLICATION TO DETERMINE ELIGIBILITY OF A TRUSTEE PURSUANT TO SECTION 305(b)(2)

THE BANK OF NEW YORK
(Exact name of trustee as specified in its charter)

New York	13-5160382
(Jurisdiction of incorporation if not a U.S. national bank)	(I.R.S. Employer Identification No.)
One Wall Street, New York, New York	10286
(Address of principal executive offices)	(Zip code)

ARCH WESTERN FINANCE, LLC*
(Exact name of obligor as specified in its charter)

Delaware	43-1811130
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
One CityPlace Drive, Suite 300 St. Louis, Missouri	63141
(Address of principal executive offices)	(Zip code)

*See Additional Registrants below.

ARCH WESTERN RESOURCES, LLC
(Exact name of obligor as specified in its charter)

Delaware	43-1811130
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

One CityPlace Drive, Suite 300 St. Louis, Missouri (Address of principal executive offices)	63141 (Zip code)

ARCH OF WYOMING, LLC
(Exact name of obligor as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	43-1811130 (I.R.S. Employer Identification No.)
One CityPlace Drive, Suite 300 St. Louis, Missouri (Address of principal executive offices)	63141 (Zip code)

MOUNTAIN COAL COMPANY, L.L.C.
(Exact name of obligor as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	43-1811130 (I.R.S. Employer Identification No.)
One CityPlace Drive, Suite 300 St. Louis, Missouri (Address of principal executive offices)	63141 (Zip code)

THUNDER BASIN COAL COMPANY, L.L.C.
(Exact name of obligor as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	43-1811130 (I.R.S. Employer Identification No.)
One CityPlace Drive, Suite 300 St. Louis, Missouri (Address of principal executive offices)	63141 (Zip code)

6-3/4% SENIOR NOTES DUE 2013
(Title of the Indenture securities)

ITEM 1. GENERAL INFORMATION.

Furnish the following information as to the Trustee:

(a) Name and address of each examining or supervising authority to which it is subject.

Superintendent of Banks of the State of New York	2 Rector Street, New York, N.Y. 10006 and Albany, N.Y. 12203
Federal Reserve Bank of New York	33 Liberty Plaza, New York, N.Y. 10045
Federal Deposit Insurance Corporation	550 17th Street, N.W., Washington, D.C. 20429
New York Clearing House Association	New York, N.Y. 10005

(b) Whether it is authorized to exercise corporate trust powers.

Yes.

ITEM 2. AFFILIATIONS WITH OBLIGOR.

If the obligor is an affiliate of the trustee, describe each such affiliation.

None. (See Note on page 2.)

ITEM 16. LIST OF EXHIBITS.

Exhibits identified in parentheses below, on file with the Commission, are incorporated herein by reference as an exhibit hereto, pursuant to Rule 7a-29 under the Trust Indenture Act of 1939 (the "Act") and 17 C.F.R. 229.10(d).

1. - A copy of the Organization Certificate of The Bank of New York (formerly Irving Trust Company) as now in effect, which contains the authority to commence business and a grant of powers to exercise corporate trust powers. (Exhibit 1 to Amendment No. 1 to Form T-1 filed with Registration Statement No. 33-6215, Exhibits 1a and 1b to Form T-1 filed with Registration Statement No. 33-21672 and Exhibit 1 to Form T-1 filed with Registration Statement No. 33-29637.)

4. - A copy of the existing By-laws of the Trustee. (Exhibit 4 to Form T-1 filed as Exhibit 25(a) to Registration Statement No. 333-102200.)

6. - The consent of the Trustee required by Section 321(b) of the Act. (Exhibit 6 to Form T-1 filed with Registration Statement No. 33-44051.)

7. - A copy of the latest report of condition of the Trustee published pursuant to law or to the requirements of its supervising or examining authority.

NOTE

Inasmuch as this Form T-1 is being filed prior to the ascertainment by the Trustee of all facts on which to base a responsive answer to Item 2, the answer to said Item is based on incomplete information.

Item 2 may, however, be considered as correct unless amended by an amendment to this Form T-1.

SIGNATURE

Pursuant to the requirements of the Act, the Trustee, The Bank of New York, a corporation organized and existing under the laws of the State of New York, has duly caused this statement of eligibility to be signed on its behalf by the undersigned, thereunto duly authorized, all in The City of New York, and State of New York, on the 29th day of July 2003.

THE BANK OF NEW YORK

By: /s/ ROBERT A. MASSIMILLO

Name: Robert A. Massimillo
Title: Vice President

Consolidated Report of Condition of
THE BANK OF NEW YORK
of One Wall Street, New York, N.Y. 10286
And Foreign and Domestic Subsidiaries,
a member of the Federal Reserve System, at the close of business March 31, 2003, published in accordance with a call made by the Federal Reserve Bank of this District pursuant to the provisions of the Federal Reserve Act.

	Dollar Amounts In Thousands
ASSETS	
Cash and balances due from depository institutions:	
Noninterest-bearing balances and currency and coin..	$4,389,492
Interest-bearing balances.....	3,288,212
Securities:	
Held-to-maturity securities.....	654,763
Available-for-sale securities.....	17,626,360
Federal funds sold in domestic offices.....	1,759,600
Securities purchased under agreements to resell.....	911,600
Loans and lease financing receivables:	
Loans and leases held for sale.....	724,074
Loans and leases, net of unearned income.....32,368,718	
LESS: Allowance for loan and lease losses.....826,505	
Loans and leases, net of unearned income and allowance.....	31,542,213
Trading Assets.....	7,527,662
Premises and fixed assets (including capitalized leases).....	825,706
Other real estate owned.....	164
Investments in unconsolidated subsidiaries and associated companies.....	260,940
Customers' liability to this bank on acceptances outstanding.....	225,935
Intangible assets.....	
Goodwill.....	2,027,675
Other intangible assets.....	75,330
Other assets.....	4,843,295
Total assets.....	$76,683,021

LIABILITIES		
Deposits:		
In domestic offices		$33,212,852
Noninterest-bearing	12,997,086	
Interest-bearing	20,215,766	
In foreign offices, Edge and Agreement subsidiaries, and IBFs		24,210,507
Noninterest-bearing	595,520	
Interest-bearing	23,614,987	
Federal funds purchased in domestic offices		375,322
Securities sold under agreements to repurchase		246,755
Trading liabilities		2,335,466
Other borrowed money: (includes mortgage indebtedness and obligations under capitalized leases)		959,997
Bank's liability on acceptances executed and outstanding		227,253
Subordinated notes and debentures		2,090,000
Other liabilities		5,716,796
Total liabilities		$69,374,948
Minority interest in consolidated subsidiaries		540,772
EQUITY CAPITAL		
Perpetual preferred stock and related surplus		0
Common stock		1,135,284
Surplus		1,056,295
Retained earnings		4,463,720
Accumulated other comprehensive income		112,002
Other equity capital components		0
Total equity capital		6,767,301
Total liabilities minority interest and equity capital.		$76,683,021

I, Thomas J. Mastro, Senior Vice President and Comptroller of the above-named bank do hereby declare that this Report of Condition has been prepared in conformance with the instructions issued by the Board of Governors of the Federal Reserve System and is true to the best of my knowledge and belief.

Thomas J. Mastro,
Senior Vice President and Comptroller

We, the undersigned directors, attest to the correctness of this Report of Condition and declare that it has been examined by us and to the best of our knowledge and belief has been prepared in conformance with the instructions issued by the Board of Governors of the Federal Reserve System and is true and correct.

Thomas A. Renyi
Gerald L. Hassell
Alan R. Griffith

Directors