

The information in this prospectus supplement is not complete and may be changed. This prospectus supplement and the accompanying prospectus are not an offer to sell these securities, and we are not soliciting offers to buy these securities in any state where the offer or sale is not permitted.

Filed Pursuant to Rule 424(b)(5)
Registration No. 333-157880

Subject to completion, dated July 27, 2009

PROSPECTUS SUPPLEMENT

(To Prospectus dated March 12, 2009)

17,000,000 Shares



Common Stock

We are offering 17,000,000 shares of our common stock.

Our common stock is listed on the New York Stock Exchange under the symbol "ACI." The last reported sale price of our common stock on the New York Stock Exchange on July 24, 2009 was \$18.14 per share.

Investing in our common stock involves risks. See "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2008 and all subsequent filings under Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, as well as the additional risk factors beginning on page S-10 of this prospectus supplement, to read about important factors you should consider before buying shares of our common stock.

	<u>Per Share</u>	<u>Total(1)</u>
Public offering price	\$	\$
Underwriting discount	\$	\$
Proceeds, before expenses, to us	\$	\$

(1) We have granted the underwriters an option exercisable for a period of 30 days from the date of this prospectus supplement to purchase up to 2,550,000 additional shares of common stock at the public offering price, less underwriting discount, to cover over-allotments, if any.

The underwriters are offering our common stock as described in "Underwriting." Delivery of the common stock will be made to purchasers on or about July , 2009.

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

Joint Book-Running Managers

BofA Merrill Lynch
Citi

Morgan Stanley
J.P.Morgan

The date of this prospectus supplement is July , 2009

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ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part consists of this prospectus supplement, which describes the specific terms of this offering. The second part consists of the accompanying prospectus, which gives more general information about securities that we may offer from time to time, some of which may not be applicable to the shares of common stock offered by this prospectus supplement and the accompanying prospectus. For more information about our common stock offered in this offering, see “Description of Common Stock” in this prospectus supplement and “Description of Capital Securities — Common Stock” in the accompanying prospectus.

Before you invest in our common stock, you should read the registration statement of which this prospectus supplement and the accompanying prospectus form a part. You also should read the exhibits to that registration statement, as well as this prospectus supplement, the accompanying prospectus and the documents incorporated by reference into this prospectus supplement and the accompanying prospectus. The documents incorporated by reference are described in this prospectus supplement under “Where You Can Find More Information.”

If the information set forth in this prospectus supplement varies in any way from the information set forth in the accompanying prospectus, you should rely on the information contained in this prospectus supplement. If the information set forth in this prospectus supplement varies in any way from the information set forth in a document that we have incorporated by reference into this prospectus supplement, you should rely on the information in the more recent document.

You should rely only on the information contained or incorporated by reference in this prospectus supplement and the accompanying prospectus. We have not, and the underwriters have not, authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not, and the underwriters are not, making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference is accurate only as of their respective dates. Our business, financial condition, results of operations and prospects may have changed since those dates.

In this prospectus supplement, unless otherwise specified or the context requires otherwise, we use the terms “Arch Coal,” the “company,” “we,” “us” and “our” to refer to Arch Coal, Inc. and its subsidiaries.

FORWARD-LOOKING STATEMENTS

Information we have included or incorporated by reference in this prospectus supplement and the accompanying prospectus contains or may contain forward-looking statements. These forward-looking statements include, among others, statements of our plans, objectives, expectations (financial or otherwise) or intentions. Words such as “may,” “expects,” “anticipates,” “approximates,” “believes,” “estimates” and “intends” and variations of such words and similar expressions are intended to identify such forward-looking statements.

Our forward-looking statements involve risks and uncertainties. Our actual results may differ significantly from those projected or suggested in any forward-looking statements. We do not undertake any obligation to release publicly any revisions to such forward-looking statements to reflect events or circumstances occurring after the date hereof or to reflect the occurrence of unanticipated events. Factors that might cause such a difference to occur include, but are not limited to:

- market demand for coal and electricity;
- geologic conditions, weather and other inherent risks of coal mining that are beyond our control;
- competition within our industry and with producers of competing energy sources;
- excess production and production capacity;

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- our ability to acquire or develop coal reserves in an economically feasible manner;
- inaccuracies in our estimates of our coal reserves;
- availability and price of mining and other industrial supplies;
- availability of skilled employees and other workforce factors;
- disruptions in the quantities of coal produced by our contract mine operators;
- our ability to collect payments from our customers;
- defects in title or the loss of a leasehold interest;
- the closing of our pending acquisition of Jacobs Ranch;
- railroad, barge, truck and other transportation performance and costs;
- our ability to successfully integrate the operations that we acquire, including as a result of our pending acquisition of the Jacobs Ranch mining complex;
- our ability to secure new coal supply arrangements or to renew existing coal supply arrangements;
- our relationships with, and other conditions affecting, our customers;
- the deferral of contracted shipments of coal by our customers;
- our ability to service our outstanding indebtedness;
- our ability to comply with the restrictions imposed by our credit facility and other financing arrangements;
- the availability and cost of surety bonds;
- failure by Magnum Coal Company, which we refer to as Magnum, a subsidiary of Patriot Coal Corporation, to satisfy certain below-market contracts that we guarantee;
- our ability to manage the market and other risks associated with certain trading and other asset optimization strategies;
- terrorist attacks, military action or war;
- environmental laws, including those directly affecting our coal mining operations and those affecting our customers' coal usage;
- our ability to obtain and renew mining permits;
- future legislation and changes in regulations, governmental policies and taxes, including those aimed at reducing emissions of elements such as mercury, sulfur dioxides, nitrogen oxides, particulate matter or greenhouse gases;
- the accuracy of our estimates of reclamation and other mine closure obligations;
- the existence of hazardous substances or other environmental contamination on property owned or used by us; and
- the availability of future permits authorizing the disposition of certain mining waste.

These and other relevant factors, including those risk factors identified in our Annual Report on Form 10-K for the year ended December 31, 2008, our Quarterly Report on Form 10-Q for the quarter ended March 31, 2009 and our other filings with the Securities and Exchange Commission, which we refer to as the SEC, under the Securities Exchange Act of 1934, as amended, which we refer to as the Exchange Act, which are incorporated by reference in this prospectus supplement and the accompanying prospectus, should be carefully considered when reviewing any forward-looking statement. See "Where You Can Find More Information."

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights selected information about us and this offering. This summary is not complete and does not contain all of the information that may be important to you. You should read carefully this entire prospectus supplement and the accompanying prospectus, including the "Risk Factors" section, and the other documents that we refer to and incorporate by reference in this prospectus supplement and the accompanying prospectus for a more complete understanding of us and this offering. In particular, we incorporate by reference important business and financial information into this prospectus supplement and the accompanying prospectus. Except as otherwise noted, all information in this prospectus supplement assumes no exercise of the underwriters' option to purchase additional shares of our common stock.

Our Company

Our Business

We are one of the largest coal producers in the United States, based on 2008 coal production. For the year ended December 31, 2008, we sold approximately 139.6 million tons of coal, including approximately 6.1 million tons of coal which we purchased from third parties, fueling approximately 6% of all electricity generated in the United States in 2008. For the three months ended March 31, 2009, we sold approximately 30.9 million tons of coal, including approximately 1.4 million tons of coal which we purchased from third parties. We sell substantially all of our coal to power plants, steel mills and industrial facilities. As of March 31, 2009, we operated 20 active mines located in each of the major low-sulfur coal-producing regions of the United States. The locations of our mines enable us to ship coal to most of the major coal-fueled power plants, steel mills and export facilities located in the United States.

We estimate that we owned or controlled approximately 2.8 billion tons of proven and probable recoverable reserves as of December 31, 2008. Of these reserves, approximately 73.4% consist of compliance coal, or coal which emits 1.2 pounds or less of sulfur dioxide per million Btus upon combustion, while an additional 8.7% could be sold as low-sulfur coal, or coal which emits 1.6 pounds or less of sulfur dioxide per million Btus upon combustion. The balance is classified as high-sulfur coal. Most of our reserves are suitable for the domestic steam coal markets. A substantial portion of the low-sulfur and compliance coal reserves at the Cumberland River, Lone Mountain and Mountain Laurel mining complexes may also be used as metallurgical coal. Metallurgical coal is distinguishable from other types of coal because of its high carbon content, low expansion pressure, low sulfur content and various other chemical attributes. As such, the price offered by steel makers for metallurgical coal is generally higher than the price offered by power plants and industrial users for steam coal. We sold approximately 0.4 million tons and 0.8 million tons of metallurgical quality coal in the three months ended March 31, 2009 and 2008, respectively, and approximately 4.4 million tons, 2.1 million tons and 2.0 million tons of metallurgical quality coal in the years ended December 31, 2008, 2007 and 2006, respectively.

Competitive Strengths

We believe that the following competitive strengths are instrumental to our success:

We are a leading producer and marketer of cleaner-burning coal, with a reserve base consisting of a significant percentage of compliance and low sulfur coal. Demand for clean-burning, low sulfur coal has grown dramatically since the adoption of the Clean Air Act. In 2008, we sold approximately 139.6 million tons of compliance and low sulfur coal. We are one of the largest producers of compliance and low sulfur coal in the United States and are the only producer with a leading position in each of the nation's principal low sulfur coal basins, the Powder River Basin, the Western Bituminous region and Central Appalachia. As of December 31, 2008, we owned or controlled approximately 2.8 billion tons of proven and probable coal reserves, approximately 82.1% of which was compliance or low sulfur coal.

Our operations and low-sulfur reserves are balanced in the western and eastern United States. In 2008, we sold approximately 102.6 million tons of compliance and low sulfur coal from the Powder River Basin,

approximately 20.6 million tons of compliance and low sulfur coal from the Western Bituminous region and approximately 16.4 million tons of compliance and low sulfur coal from Central Appalachia. We believe that this geographic diversity provides us with a competitive advantage, allowing us to source coal from multiple regions and giving us greater flexibility to meet the needs of certain of our customers.

We have high quality reserves and significant expansion opportunities in each of the reserve basins in which we operate. In the Powder River Basin, the nation's largest coal supply basin, we controlled approximately 1.7 billion tons of reserves as of December 31, 2008. At December 31, 2008, we controlled approximately 336.0 million tons of high Btu, low sulfur reserves in Central Appalachia and approximately 455.0 million tons of compliance and low sulfur reserves in the Western Bituminous region. These reserves should support low-cost mining for many years to come. We also own or control approximately 374.0 million tons of coal in the Illinois Basin which we believe could provide an attractive expansion opportunity in that region once pollution control technologies, such as scrubbers, are more widely adopted.

In 2008, our mines ranked among the most productive in the industry. Coal production costs vary dramatically and are affected by a number of factors, such as mining methods, coal seam thickness, overburden ratios and depth of underground reserves. Through careful management, the application of advanced technologies and the use of efficient mining equipment, we strive to maintain high levels of productivity in each of our operating regions. In 2008, our surfacing mining operations were 140% more productive per hour than the U.S. surface coal industry average, while our underground mining operations were 86% more efficient than the underground coal industry average.

We have longstanding relationships and multiple long-term contracts with many of the largest coal-fueled electricity generators in the United States. We supply coal to 175 power plants operated by electricity generators in 35 states nationwide and customers in 21 countries worldwide. We are recognized as a preferred supplier to many of these customers, with a reputation for reliability and superior customer service. Our long-term supply agreements provide us with a relatively reliable and stable revenue base, while our uncommitted position enables us to increase our participation in coal markets as pricing improves.

We are a recognized industry leader in safety and environmental performance. Our profitability depends, in part, on our ability to avoid lost-time injuries and environmental violations. We operate some of the nation's safest mines, with a 2008 lost-time safety incident rate of 0.81 per 200,000 hours worked, which is more than three times better than the industry average of 3.06 per 200,000 hours worked. We also emphasize safety and environmental compliance company-wide. In 2008, we earned eight national and state environmental awards, including two Good Neighbor Awards from the U.S. Department of Interior. We base incentive compensation for much of our management team in part on several key environmental and safety metrics. We believe achieving excellence in safety and environmental performance lowers the likelihood of production disruptions at our mines, which allows us to better maintain lower production costs.

Our management team has a proven track record. Our management team has a proven track record of increasing productivity, making strategic acquisitions, developing and maintaining strong customer relationships and effectively positioning us for future growth. Our senior executives have an average of 23 years of experience in the coal industry and 20 years of experience with us.

Business Strategies

We believe that we are well positioned for improved long-term financial performance through implementation of a strategy consisting of the following:

Capitalizing on the ongoing shift to compliance and low sulfur coals. To comply with the Clean Air Act, many power producers must burn compliance and low sulfur coal or install pollution control technologies, such as scrubbers. Our reserve base of compliance and low sulfur coal should enable us to benefit from this trend. Over time, we expect the Powder River Basin to continue to capture a significant portion of the growth in U.S. coal demand, and we intend to continue our expansion efforts in this highly strategic basin. We believe our acquisition of the Jacobs Ranch mining complex provides an attractive opportunity for continued growth in the Powder River Basin.

Strengthening our position as a low-cost producer. We focus on continuous improvement at all of our operations, with an emphasis on lowering costs and improving productivity. We seek to reduce costs by pursuing advanced technologies, such as GPS-enabled equipment dispatch, and by leveraging our significant economies of scale, experienced and innovative workforce, large fleet of mining equipment, information technology systems and centralized purchasing and land management functions. In addition, we expect that the integration of the Jacobs Ranch mining complex into our existing Black Thunder mine will provide opportunities to realize operating synergies.

Continuing to focus on excellence in safety performance and environmental stewardship. We intend to continue to improve upon our recognized industry leadership as the operator of some of the safest mines in the United States. We also will continue our commitment to achieve environmental excellence and to restore mined properties to a condition that is as good as or better than existed before they were mined. Our ability to avoid lost-time injuries and environmental violations improves our cost structure, fosters community and regulatory support and ultimately enhances our financial performance.

Enhancing strong relationships with customers. We are recognized as a preferred provider of compliance and low sulfur coal to many electric generators, and we have a reputation for reliability, quality assurance and customer service. We intend to maintain our strong customer relationships and to build upon these relationships and our status as a preferred supplier to the nation's largest electric generators in order to enhance our market position.

Recent Developments

Pending Acquisition of Jacobs Ranch

On March 9, 2009, we announced that we agreed to purchase the Jacobs Ranch mining complex in the Powder River Basin of Wyoming from Rio Tinto Energy America for a purchase price of \$761.0 million in cash, subject to certain cash, working capital, indebtedness and other post-closing adjustments. In 2008, Jacobs Ranch produced 42.1 million tons of sub-bituminous coal for sale to power generators located throughout the United States.

At December 31, 2008, we estimate that Jacobs Ranch controlled approximately 381.0 million tons of low-cost coal reserves that are contiguous to our Black Thunder mine, sharing a six-mile property line. The acquisition also includes a high-speed rail loadout, a recently added overland conveyor and near-pit crushing system, customer commitments and a fleet of mining equipment at Jacobs Ranch.

Jacobs Ranch is served by the joint rail line in the Powder River Basin. Like Black Thunder, Jacobs Ranch can ship its output to a broad and geographically diverse customer base. The equipment fleet at Jacobs Ranch includes a 120-cubic-yard dragline, eight large electric shovels and more than 40 large haul trucks, all of which are expected to complement the existing equipment at Black Thunder. Jacobs Ranch also benefits from competitive mining costs due to the thickness of the region's coal seam and the proximity of the seam to the surface.

On a pro forma basis, our reserves in the Powder River Basin would have increased to 2.1 billion tons, and our total reserve base across all regions would increase to 3.2 billion tons, assuming the acquisition had closed on December 31, 2008.

Consummation of the acquisition is subject to certain governmental and regulatory conditions and approvals, including under competition laws and regulations, and other customary conditions. On May 27, 2009, we announced that we received a request for additional information from the Federal Trade Commission, which we refer to as the FTC, in connection with the acquisition, effectively extending the waiting period imposed by the Hart-Scott-Rodino Antitrust Improvements Act of 1976, which we refer to as the HSR Act, until 30 days after we and Rio Tinto Energy America have substantially complied with the request, unless that period is extended voluntarily by the parties or terminated sooner by the FTC. There can be no assurance that the acquisition will be completed.

For more information regarding our pending acquisition of Jacobs Ranch, see "The Acquisition."

Results for the Three and Six Months Ended June 30, 2009

	Three Months Ended June 30,		Six Months Ended June 30,	
	2009	2008	2009	2008
(In millions, except per share data) (Unaudited)				
Statement of operations data:				
Coal sales revenue	\$554.6	\$785.1	\$ 1,235.7	\$ 1,484.5
Cost of coal sales	467.5	568.5	1,014.6	1,082.9
Depreciation, depletion and amortization	68.5	72.0	141.5	145.0
Selling, general and administrative expenses	21.6	33.0	46.7	58.7
Change in fair value of coal derivatives and coal trading activities	(6.5)	(53.2)	(6.9)	(83.7)
Costs related to acquisition of Jacobs Ranch	3.0	—	6.4	—
Other operating income, net	(6.8)	(4.4)	(12.6)	(4.3)
Income from operations	7.3	169.2	46.0	285.9
Interest expense, net	(20.2)	(18.2)	(33.8)	(38.3)
Income (loss) before income taxes	(12.9)	151.0	12.2	247.6
Provision for (benefit from) income taxes	2.2	37.7	(3.3)	52.9
Net income (loss)	(15.1)	113.3	15.5	194.7
Less: Net (income) loss attributable to non-controlling interest	—	(0.3)	—	(0.6)
Net income (loss) attributable to Arch Coal, Inc.	<u>\$ (15.1)</u>	<u>\$ 113.0</u>	<u>\$ 15.5</u>	<u>\$ 194.1</u>
Earnings (loss) per share:				
Weighted average shares outstanding:				
Basic	142.8	144.1	142.8	143.8
Diluted	142.8	145.0	142.9	144.8
Basic earnings (loss) per common share	\$ (0.11)	\$ 0.78	\$ 0.11	\$ 1.35
Diluted earnings (loss) per common share	\$ (0.11)	\$ 0.78	\$ 0.11	\$ 1.34
Other Data:				
Tons sold ⁽¹⁾	27.7	34.8	58.6	69.6

	As of June 30, 2009 (Unaudited)
Balance sheet data:	
Cash and cash equivalents	\$ 50.6
Total assets	4,029.0
Working capital	75.5
Debt	1,436.3
Other long-term obligations	498.4
Arch Coal, Inc. stockholders' equity	1,750.6

(1) Includes certain transactions in which we act as an intermediary with no effect on our results, primarily related to contracts that were retained after mining operations were sold. These transactions totaled 0.2 million tons and 0.4 million tons in the three months ended June 30, 2009 and 2008, respectively, and 0.5 million tons and 0.9 million tons in the six months ended June 30, 2009 and 2008, respectively.

On July 24, 2009, we reported a net loss of \$15.1 million, or \$0.11 per fully diluted share, in the second quarter of 2009, compared with net income of \$113.0 million, or \$0.78 per fully diluted share, in the second quarter of 2008. For the six months ended June 30, 2009, we reported net income of \$15.5 million, or \$0.11 per fully diluted share, compared with net income of \$194.1 million, or \$1.34 per fully diluted share, for the six months ended June 30, 2008, when market conditions were much stronger.

Lower average price realizations in our Powder River Basin and Central Appalachia regions and higher unit costs resulting from the impact of lower production levels and four longwall moves hampered our financial results for the second quarter of 2009 when compared to the first quarter of 2009. Tons sold were reduced 3.2 million tons in the second quarter of 2009, compared with already reduced volume levels in the first quarter of 2009, reflecting additional equipment idling, planned production reductions and continued weak market demand. Over the same time periods, average sales price per ton decreased due to a larger percentage of Powder River Basin coal in our overall volume mix in addition to lower price realizations in the Powder River Basin and Central Appalachia regions. Per-ton operating costs for the second quarter of 2009 declined slightly from the first quarter of 2009, benefiting from a larger percentage of Powder River Basin production and improved cost containment in that region. In addition, our results for the second quarter of 2009 include acquisition-related expenses associated with our acquisition of the Jacobs Ranch mining complex of \$3.0 million.

In the Powder River Basin, second quarter 2009 volumes were reduced by 1.8 million tons from the first quarter of 2009, reflecting the idling of a second dragline and associated equipment at the Black Thunder mine in early May. Average sales price fell by \$0.69 per ton over the same time period, resulting from lower pricing on market-indexed tons. Operating costs per ton decreased slightly in the second quarter of 2009 relative to the first quarter of 2009, driven by cost containment efforts which helped offset the impact of lower volume levels and higher hedged diesel prices. Our Powder River Basin segment earned \$0.72 per ton of operating margin in the second quarter of 2009 compared with \$1.33 per ton in the first quarter.

In the Western Bituminous region, second quarter 2009 volumes were reduced by 0.5 million tons from the first quarter, primarily reflecting the impact of three longwall moves in the region. Average sales price increased \$1.82 per ton over the same time period, benefiting from a more favorable mix of customer shipments offset somewhat by quality-related discounts stemming from continuing coal quality issues on a portion of the production at the West Elk mine in Colorado. Operating costs rose by \$1.16 per ton in the quarter just ended, due to lost production from the longwall moves. The Western Bituminous region incurred an operating loss of \$1.56 per ton in the second quarter of 2009 compared with a loss of \$2.22 per ton in the first quarter.

In Central Appalachia, second quarter 2009 volumes were reduced by 0.8 million tons compared with the first quarter, reflecting lower shipment levels across all mining complexes in the region. Average price realizations declined \$2.81 per ton over the same time period due to reduced metallurgical coal shipments and lower pricing on metallurgical coal sales. Operating costs per ton rose by \$5.36 per ton in the second quarter, driven by the impact of lower volume levels across all operations. Our Central Appalachian segment contributed \$3.36 per ton in operating margin in the second quarter of 2009 versus \$11.53 per ton in the first quarter.

The foregoing is a summary of our unaudited results of operations for the three and six months ended June 30, 2009. This summary is not intended to be a comprehensive statement of our unaudited financial results for these periods. Full financial results will be included in our Quarterly Report on Form 10-Q for the quarter ended June 30, 2009, which we intend to file with the SEC on or about August 7, 2009.

Other Developments

We estimate that year-to-date U.S. power generation declined approximately 4.2% through the third week of July 2009 in response to weak domestic and international economic conditions. Additionally, U.S. coal consumption has declined significantly primarily as a result of weak industrial demand in geographic regions that traditionally rely more heavily on coal-fueled generation caused by the current U.S. economic recession. As a result of these market pressures, coupled with continued geological challenges in certain regions, cost pressures, regulatory hurdles and limited access to capital, we expect that coal production and capital spending across the domestic coal industry have been, and will continue to be, curtailed.

In response to weakened demand caused by challenging domestic and international economic conditions, we have decreased our expected capital expenditures for 2009 and have established other process improvement initiatives and cost containment programs. In addition, we have curtailed production at our West Elk mine in response to declining demand from power generation and industrial customers for Western Bituminous coal and elevated levels of lower quality, mid-ash coal currently being produced at the mine resulting from intermittent sandstone intrusions. As a result of the curtailment, we have laid off 61 employees, discontinued the use of 38 contractors and plan to reduce production by more than 2.5 million tons at West Elk in 2009. We estimate that the challenges at West Elk will result in approximately \$50 million to \$75 million of lost operating income in total during 2009.

As a result of the decision to curtail production at West Elk and in response to the continued softness in coal demand that has resulted in modest pushback of tonnage under some existing sales contracts, we have reduced our expected sales volume for 2009. In addition, we continue to reduce discretionary capital expenditures during the current weak market cycle in order to align capital spending with our volume expectations for 2009.

Concurrent Offering

Concurrently with this offering of common stock, we are offering \$500.0 million aggregate principal amount of Senior Notes due 2016, which we refer to as the Senior Notes, in accordance with Rule 144A under the Securities Act of 1933, as amended. All of our subsidiaries that guarantee indebtedness under our existing senior secured credit facility will be guarantors of the Senior Notes on a senior basis. Neither the completion of the Senior Notes offering nor the completion of this offering is contingent on the completion of the other. We plan to use the net proceeds from the Senior Notes offering together with the net proceeds of this offering as described under "Use of Proceeds". We estimate that the net proceeds of the Senior Notes offering, after deducting the underwriting discount and estimated expenses, but before taking into account any original issue discount, will be approximately \$489.5 million.

The concurrent offering of Senior Notes will not be registered under the Securities Act of 1933, as amended, or the securities laws of any other jurisdiction, and the Senior Notes may not be offered or sold in the United States absent registration or an applicable exemption from registration requirements. The Senior Notes will only be offered to qualified institutional buyers in the United States pursuant to Rule 144A under the Securities Act and outside the United States pursuant to Regulation S under the Securities Act. This description and other information in this prospectus supplement regarding our concurrent offering of Senior Notes is included in this prospectus supplement solely for informational purposes. Nothing in this prospectus supplement should be construed as an offer to sell, or the solicitation of an offer to buy, any Senior Notes.

Additional Information

We were organized in Delaware in 1969. Our principal executive offices are located at One CityPlace Drive, Suite 300, St. Louis, Missouri 63141, and our telephone number at that address is (314) 994-2700. Our website address is www.archcoal.com. The information on or accessible through our website is not part of this prospectus supplement or the accompanying prospectus and should not be relied upon in connection with making any investment decision with respect to the securities offered by this prospectus supplement and the accompanying prospectus.

The Offering

The following is a brief summary of some of the terms of this offering and is not intended to be complete. For a more complete description of our common stock, please refer to “Description of Common Stock” in this prospectus supplement and “Description of Capital Stock — Common Stock” in the accompanying prospectus.

Issuer	Arch Coal, Inc.
Shares of our common stock offered	17,000,000 shares ⁽¹⁾
Option to purchase additional shares	We have granted the underwriters an option exercisable for a period of 30 days from the date of this prospectus supplement to purchase up to an additional 2,550,000 shares of our common stock at the public offering price, less the underwriting discount, to cover over-allotments, if any.
Common stock to be outstanding after this offering	159,920,977 shares ⁽²⁾
Use of proceeds	Assuming an offering price of \$18.14 per share, the last reported sales price of our common stock on the New York Stock Exchange on July 24, 2009, we estimate that the net proceeds from this offering will be approximately \$294.8 million (or approximately \$339.1 million if the underwriters’ over-allotment option is exercised in full), after deducting underwriting discount and estimated offering expenses. We expect to use the net proceeds from this offering and the concurrent Senior Notes offering to finance the cost of our acquisition of the Jacobs Ranch mining complex and pay related fees and expenses. If our acquisition of Jacobs Ranch is not completed, we intend to use the net proceeds from this offering and the concurrent Senior Notes offering for general corporate purposes, which may include the financing of future acquisitions, including lease-by-applications, or strategic combinations, capital expenditures, additions to working capital, repurchases, repayment or refinancing of debt or stock repurchases. See “Use of Proceeds.”
Risk factors	You should carefully consider the information set forth in the “Risk Factors” section of this prospectus supplement as well as all other information included in or incorporated by reference in this prospectus supplement and the accompanying prospectus before deciding whether to invest in our common stock.
New York Stock Exchange symbol	ACI

(1) If the underwriters exercise their option to purchase such additional shares in full, the total number of shares of common stock offered will be 19,550,000.

(2) The number of shares of common stock that will be outstanding after this offering is based on the number of shares outstanding on July 24, 2009 and assumes no exercise of the underwriters’ over-allotment option. 142,920,977 shares of our common stock were outstanding at July 24, 2009. The number of issued shares of our common stock as of July 24, 2009 excludes an aggregate of approximately 4.0 million shares of our common stock issuable upon the exercise of stock options outstanding as of July 24, 2009 at a weighted average exercise price of \$25.22 per share and an aggregate of approximately 0.1 million shares of our common stock issuable upon vesting of certain restricted stock units that we have issued to our executive officers.

Summary Consolidated Financial Data

We derived the historical statement of operations data and the other data for the years ended December 31, 2008, 2007 and 2006, and the historical balance sheet data as of December 31, 2008 and 2007, presented below from our audited consolidated financial statements incorporated by reference into this prospectus supplement. The historical statement of operations data and the other data for the three months ended March 31, 2009 and 2008, and the historical balance sheet data as of March 31, 2009, have been derived from our unaudited condensed consolidated financial statements incorporated by reference into this prospectus supplement. In the opinion of management, the interim financial information provided herein reflects all adjustments (consisting of normal and recurring adjustments) necessary for a fair statement of the data for the periods presented. Interim results are not necessarily indicative of the results to be expected for the entire fiscal year.

You should read the summary historical financial data together with “Management’s Discussion and Analysis of Financial Condition and Results of Operations” incorporated by reference into this prospectus supplement from our Annual Report on Form 10-K for the year ended December 31, 2008 and our Quarterly Report on Form 10-Q for the quarter ended March 31, 2009.

	Three Months Ended March 31,		Year Ended December 31,		
	2009	2008	2008	2007(1)	2006(2)(3)
	(Unaudited)				
	(In millions, except per share data)				
Statement of operations data:					
Coal sales revenue	\$681.0	\$699.4	\$2,983.8	\$2,413.6	\$2,500.4
Cost of coal sales	547.1	514.4	2,183.9	1,888.3	1,909.8
Depreciation, depletion and amortization	73.0	73.1	292.8	242.1	208.4
Selling, general and administrative expenses	25.1	25.7	107.1	84.4	75.4
Change in fair value of coal derivatives and coal trading activities	(0.5)	(30.6)	(55.1)	(7.3)	—
Costs related to acquisition of Jacobs Ranch	3.4	—	—	—	—
Other operating (income) expense, net	(5.7)	0.1	(5.3)	(23.5)	(29.8)
Income from operations	38.6	116.7	460.4	229.6	336.6
Interest expense, net	(13.6)	(20.1)	(64.3)	(72.3)	(60.6)
Other non-operating expenses, net	—	—	—	(2.3)	(7.4)
Income before income taxes	25.0	96.6	396.1	155.0	268.6
Provision for (benefit from) income taxes	(5.6)	15.2	41.8	(19.9)	7.7
Net income attributable to Arch Coal, Inc.	<u>\$ 30.6</u>	<u>\$ 81.4</u>	<u>\$ 354.3</u>	<u>\$ 174.9</u>	<u>\$ 260.9</u>
Earnings per share:					
Weighted average shares outstanding:					
Basic	142.8	143.5	143.6	142.5	142.8
Diluted	142.8	144.6	144.4	144.0	144.8
Basic earnings per common share	\$ 0.21	\$ 0.56	\$ 2.47	\$ 1.23	\$ 1.83
Diluted earnings per common share	0.21	0.56	2.45	1.21	1.80
Other Data:					
Tons sold	30.9	34.8	139.6	135.0	135.0
Tons produced	29.9	33.6	133.1	126.6	126.0
Tons purchased from third parties	1.4	1.6	6.0	8.5	10.1

	As of March 31, 2009 (Unaudited)	As of December 31, 2008 2007	
Balance sheet data:			
Cash and cash equivalents	\$ 27.8	\$ 70.6	\$ 5.1
Total assets	4,089.7	3,979.0	3,594.6
Working capital	64.4	46.6	(35.4)
Debt	1,444.0	1,312.4	1,303.2
Other long-term obligations	505.0	491.5	420.8
Arch Coal, Inc. stockholders' equity	1,754.2	1,728.7	1,531.7

- (1) On June 29, 2007, we sold select assets and related liabilities associated with our Mingo Logan-Ben Creek mining complex in West Virginia for \$43.5 million. We recognized a net gain of \$8.9 million in 2007 resulting from the sale.
- (2) On October 27, 2005, we conducted a precautionary evacuation of our West Elk mine after we detected elevated readings of combustion-related gases in an area of the mine where we had completed mining activities but had not yet removed final longwall equipment. We estimate that the idling resulted in \$30.0 million of lost profits during the first quarter of 2006. We also recognized insurance recoveries related to the event of \$41.9 million during the year ended December 31, 2006.
- (3) On December 31, 2005, we sold all of the stock of three subsidiaries and their associated mining operations and coal reserves in Central Appalachia to Magnum. We recognized expenses of \$8.7 million during 2006 related to the finalization of working capital adjustments to the purchase price, adjustments to estimated volumes associated with sales contracts acquired by Magnum and expense related to settlement accounting for pension plan withdrawals.

RISK FACTORS

An investment in our common stock involves certain risks. You should carefully consider the risks described below, as well as the Risk Factors contained in our Annual Report on Form 10-K for our fiscal year ended December 31, 2008, our Quarterly Report on Form 10-Q for the quarter ended March 31, 2009 and the other information included or incorporated by reference in this prospectus supplement and the accompanying prospectus before making an investment decision. Our business, financial condition or results of operations could be materially adversely affected by any of these risks. The market or trading price of our common stock could decline due to any of these risks, and you may lose all or part of your investment. In addition, please read "Forward-Looking Statements" in this prospectus supplement and the accompanying prospectus where we describe additional uncertainties associated with our business and the forward-looking statements included or incorporated by reference in this prospectus supplement and the accompanying prospectus. Please note that additional risks not presently known to us or that we currently deem immaterial may also impair our business and operations.

Additional Risk Related to Our Business

Certain of our customers have deferred, and other customers may in the future seek to defer, contracted shipments of coal, which could affect our results of operations and liquidity.

As the ongoing global economic recession has caused the price of, and demand for, coal to decline, certain of our thermal and metallurgical coal customers have delayed shipments, or requested deferrals, pursuant to our existing long-term coal supply agreements. Other customers similarly may seek to delay shipments or request deferrals under existing agreements. In the current economic environment, the spot market for coal may not provide an acceptable alternative to sell our uncommitted tons. We currently are evaluating customer deferrals and are in negotiations with a number of the customers that have made such requests. There is no assurance that we will be able to resolve existing and potential deferrals on favorable terms, or at all.

Risks Related to Our Acquisition of Jacobs Ranch

Failure to complete our acquisition of Jacobs Ranch could negatively impact our stock price and our future business and financial results.

Consummation of our acquisition of Jacobs Ranch is subject to certain conditions, including, among others:

- the absence of certain legal impediments;
- the accuracy of the representations and warranties and compliance with the respective covenants of the parties, subject to certain materiality qualifiers;
- execution of certain ancillary agreements; and
- the receipt of necessary governmental approvals.

Third parties, such as governmental agencies, may impose conditions on the consummation, or require changes to their terms, of the acquisition. Any such conditions or changes could have the effect of preventing the consummation of the acquisition. On May 27, 2009, we announced that we received a request for additional information from the FTC in connection with the acquisition, effectively extending the waiting period imposed by the HSR Act until 30 days after we and Rio Tinto Energy America have substantially complied with the request, unless that period is extended voluntarily by the parties or terminated sooner by the FTC. If the acquisition is not completed for any reason, our ongoing business and financial results may be adversely affected and we will be subject to a number of risks, including the following:

- we will be required to pay certain costs relating to the acquisition, whether or not the acquisition is completed; and

- matters relating to the acquisition (including integration planning) may require substantial commitments of time and resources by our management, whether or not the acquisition is completed, which could otherwise have been devoted to other opportunities that may have been beneficial to us.

We may also be subject to litigation related to any failure to complete the acquisition. If the acquisition is not completed, these risks may materialize and may adversely affect our business, financial results and financial condition, as well as the price of our common stock, which will cause the value of your investment to decline.

We cannot provide any assurance that the acquisition will be completed, that there will not be a delay in the completion of the acquisition or that all or any of the anticipated benefits of the acquisition will be obtained. In the event the acquisition agreement is terminated or the acquisition is materially delayed for any reason, the price of our common stock may decline.

The anticipated benefits of our acquisition of Jacobs Ranch may not be fully realized and may take longer to realize than expected.

Our acquisition of Jacobs Ranch involves the integration of the Jacobs Ranch mining complex with our existing operations and the uncertainties inherent in such an integration. We will be required to devote significant management attention and resources to integrating the Jacobs Ranch mining complex. Delays or unexpected difficulties in the integration process could adversely affect our business, financial results and financial condition. Even if we are able to integrate the Jacobs Ranch mining complex successfully, this integration may not result in the realization of the full benefits of synergies, cost savings and operational efficiencies that we expect or the achievement of these benefits within a reasonable period of time. In addition, we may have not discovered during the due diligence process, and we may not discover prior to closing, all known and unknown factors regarding Jacobs Ranch that could produce unintended and unexpected consequences for us. Undiscovered factors could result in us incurring financial liabilities, which could be material, and in us not achieving the expected benefits from the acquisitions within our desired time frames, if at all.

We will incur significant transaction and acquisition-related costs in connection with our acquisition of Jacobs Ranch.

We will incur significant costs in connection with our acquisition of Jacobs Ranch. The substantial majority of these costs will be non-recurring expenses related to the acquisition, facilities and systems consolidation costs. We may incur additional costs to maintain employee morale and to retain key employees. We will also incur substantial transaction fees and costs related to formulating integration plans.

The market price of our common stock may decline as a result of our acquisition of Jacobs Ranch.

The market price of our common stock may decline as a result of our acquisition of Jacobs Ranch if, among other things

- the operational cost savings estimates in connection with the integration of the Jacobs Ranch mining complex are not realized;
- the transaction costs related to the acquisition are greater than expected; or
- the financing related to the transaction is on unfavorable terms.

The market price of our common stock also may decline if we do not achieve the perceived benefits of the acquisition as rapidly or to the extent anticipated by financial or industry analysts or if the effect of the acquisition on our financial results is not consistent with the expectations of financial or industry analysts.

Risks Related to the Offering

We have not identified any specific use of the net proceeds of this offering and the concurrent Senior Notes offering in the event the Jacobs Ranch acquisition agreement is terminated.

Consummation of our acquisition of Jacobs Ranch is subject to a number of conditions and, if the Jacobs Ranch acquisition agreement is terminated for any reason, our board of directors and management will have broad discretion over the use of the net proceeds we receive in this offering and the concurrent Senior Notes offering and might not apply the net proceeds in ways that increase the trading price of our common stock. Since the primary purpose of this offering and the concurrent Senior Notes offering is to provide funds to pay the acquisition consideration and related fees and expenses, we have not identified a specific use for the proceeds in the event the Jacobs Ranch acquisition is not completed. If our acquisition of Jacobs Ranch is not completed, we intend to use the net proceeds from this offering and the concurrent Senior Notes offering for general corporate purposes, which may include the financing of future acquisitions, including lease-by-applications, or strategic combinations, capital expenditures, additions to working capital, repurchases, repayment or refinancing of debt or stock repurchases. The failure of our management to use the net proceeds from this offering and the concurrent Senior Notes offering effectively could have a material adverse effect on our business and may have an adverse effect on our earnings per share.

This offering is expected to be dilutive, and there may be future dilution of our common stock.

Except as described under the heading “Underwriting,” we are not restricted from issuing additional shares of our common stock, including securities that are convertible into or exchangeable for, or that represent the right to receive shares of our common stock. In this offering, we expect to issue 17,000,000 shares of common stock (or 19,550,000 shares of common stock if the underwriters exercise their over-allotment option in full). Giving effect to the issuance of common stock in this offering, the receipt of the expected net proceeds and the use of those net proceeds as described under “Use of Proceeds,” we expect that this offering will have a dilutive effect on our expected earnings per share for the year ending December 31, 2009 and possibly future years, particularly if our acquisition of Jacobs Ranch is not consummated. The actual amount of such dilution cannot be determined at this time and will be based on numerous factors.

The market price of our common stock may be volatile, which could cause the value of your investment to decline.

Any of the following factors could affect the market price of our common stock:

- general market, political and economic conditions;
- changes in earnings estimates and recommendations by financial analysts;
- our failure to meet financial analysts’ performance expectations; and
- changes in market valuations of other coal companies.

In addition, many of the risks that are described elsewhere in this “Risk Factors” section and under “Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2008 and our Quarterly Report on Form 10-Q for the quarter ended March 31, 2009 (which are incorporated by reference into this prospectus supplement and the accompanying prospectus) could materially and adversely affect our stock price. Stock markets recently have experienced price and volume volatility that has affected many companies’ stock prices. Stock prices for many companies recently have experienced wide fluctuations that have often been unrelated to the operating performance of those companies. Fluctuations such as these may affect the market price of our common stock materially.

Other companies may have difficulty acquiring us due to provisions in our certificate of incorporation and bylaws.

Provisions in our certificate of incorporation and our bylaws could make it more difficult for other companies to acquire us, even if that acquisition would benefit our stockholders. Our certificate of

incorporation and bylaws contain the following provisions, among others, which may inhibit an acquisition of our company by a third party:

- our board of directors is classified into three classes;
- subject to the rights of holders of our preferred stock, if any, the affirmative vote of the holders of not less than two-thirds of the shares of common stock voting thereon is required in order to:
 - adopt an agreement or plan of merger or consolidation;
 - authorize the sale, lease or exchange of all or substantially all of our property or assets; or
 - authorize the disposition of Arch Coal or the distribution of all or substantially all of our assets to our stockholders;
- subject to the rights of holders of our preferred stock, if any, certain provisions of the restated certificate may be amended only by the affirmative vote of the holders of at least two-thirds of the shares of common stock voting on the proposed amendment;
- subject to the rights of holders of our preferred stock, if any, all actions required to be taken or which may be taken at any annual or special meeting of our stockholders must be taken at a duly called annual or special meeting of stockholders and cannot be taken by a consent in writing without a meeting; and
- special meetings of the stockholders may be called at any time by our board of directors and may not be called by any other person or persons or in any other manner.

Any of these restrictions could have the effect of delaying or preventing a change of control.

THE ACQUISITION

Overview

On March 9, 2009, we announced that we agreed to purchase the Jacobs Ranch mining complex in the Powder River Basin of Wyoming from Rio Tinto Energy America for a purchase price of \$761.0 million in cash, subject to certain cash, working capital, indebtedness and other post-closing adjustments. In 2008, Jacobs Ranch produced 42.1 million tons of sub-bituminous coal for sale to power generators located throughout the United States.

At December 31, 2008, we estimate that Jacobs Ranch controlled approximately 381.0 million tons of low-cost coal reserves that are contiguous to our Black Thunder mine, sharing a six-mile property line. The acquisition also includes a high-speed rail loadout, a recently added overland conveyor and near-pit crushing system, customer commitments and a fleet of mining equipment at Jacobs Ranch.

Jacobs Ranch is served by the joint rail line in the Powder River Basin. Like Black Thunder, Jacobs Ranch can ship its output to a broad and geographically diverse customer base. The equipment fleet at Jacobs Ranch includes a 120-cubic-yard dragline, eight large electric shovels and more than 40 large haul trucks, all of which are expected to complement the existing equipment at Black Thunder. Jacobs Ranch also benefits from competitive mining costs due to the thickness of the region's coal seam and the proximity of the seam to the surface.

On a pro forma basis as of December 31, 2008, our reserves in the Powder River Basin would have increased to 2.1 billion tons, and our total reserve base across all regions would have increased to 3.2 billion tons, assuming the acquisition had closed on December 31, 2008.

We expect to use the net proceeds of this offering and the concurrent Senior Notes offering to finance the cost of our acquisition of the Jacobs Ranch mining complex and pay related fees and expenses. If this offering is completed but the concurrent Senior Notes offering is not completed, we anticipate that we would finance the remainder of the cost of our acquisition of the Jacobs Ranch mining complex and pay related fees and

expenses with any combination of internally generated cash flow from operations, borrowings under our senior secured credit facility and possible future issuances of debt or equity securities.

Consummation of the acquisition is subject to certain governmental and regulatory conditions and approvals, including under competition laws and regulations, and other customary conditions. On May 27, 2009, we announced that we received a request for additional information from the FTC in connection with the acquisition, effectively extending the waiting period imposed by the HSR Act until 30 days after we and Rio Tinto Energy America have substantially complied with the request, unless that period is extended voluntarily by the parties or terminated sooner by the FTC. There can be no assurance that the acquisition will be completed.

Business Rationale

We expect to realize several benefits from the acquisition of the Jacobs Ranch mining complex, including the following:

- *Committed production.* Nearly 100% of Jacobs Ranch's projected production for 2009 is committed and priced under existing sales contracts. Additionally, more than 75% of the mine's projected 2010 production, and nearly 50% of its 2011 production, is committed and priced.
- *Increase in scale and operational efficiency.* We believe that the addition of the Jacobs Ranch mining complex to our adjacent Black Thunder mining complex will enable us to optimize the combined equipment fleet, increase utilization of an expanded coal handling system and a state-of-the-art loadout and experience greater flexibility in product blending and quality control. In addition, upon integration, the combined Black Thunder complex will have 22 train landing spots and three loadouts, which will be capable of loading four trains simultaneously.
- *Cost savings opportunities.* We expect that the integration of the Jacobs Ranch mining complex into our existing Black Thunder Mine will provide opportunities to achieve operating synergies, including through more efficient inventory management and capital efficiency, purchasing efficiencies and lower general administrative costs.

For a discussion of various factors that could prohibit or limit us from realizing some or all of these benefits, see "Forward-Looking Statements" and "Risk Factors."

Acquisition Agreement

The acquisition agreement contains customary representations and warranties, covenants and other terms and conditions, including conditions relating to competition laws and regulations. While we anticipate that all such conditions will be satisfied, we cannot assure you that all such conditions will be satisfied or, where permissible, waived. The closing is expected to occur as soon as possible following receipt of such approvals in the relevant jurisdictions. The acquisition agreement may be terminated at any time prior to the closing, as follows:

- by mutual written consent of us and the seller;
- by either party if certain required conditions, including expiration or termination of applicable waiting periods under the HSR Act, are not satisfied within 90 days after the initial filing with the FTC, which occurred on April 23, 2009;
- by the seller if closing has not occurred within 180 days after the initial filing with the FTC;
- automatically if closing has not occurred within 365 days after the initial filing with the FTC;
- by either party if the other party fails or refuses to consummate the transaction in accordance with the terms of the acquisition agreement; or
- by the seller if the value of certain undisclosed encumbrances exceed \$10.0 million unless a corresponding adjustment to the purchase price is made.

In the acquisition agreement, the parties have agreed to various instances in which a termination fee may be payable by us to the seller, including the following:

- \$2.0 million if certain required conditions, including expiration or termination of applicable waiting periods under the HSR Act, are not satisfied within 90 days after the initial filing with the FTC;
- \$30.0 million if closing has not occurred within 365 days after the initial filing with the FTC or if we fail or refuse to consummate the transaction in accordance with the terms of the acquisition agreement; or
- \$50.0 million if the closing has not occurred within 365 days after the initial filing with the FTC solely as a result of our inability to pay the purchase price.

There can be no assurance that the transactions contemplated by the acquisition agreement will be consummated. The completion of this offering is not contingent upon the consummation of our acquisition of Jacobs Ranch.

USE OF PROCEEDS

Assuming an offering price of \$18.14 per share, the last reported sales price of our common stock on the New York Stock Exchange on July 24, 2009, we estimate the net proceeds from the sale of common stock from this offering will be approximately \$294.8 million (or approximately \$339.1 million if the underwriters' over-allotment option is exercised in full), after deducting underwriting discount and estimated offering expenses. The net proceeds from the concurrent Senior Notes offering are expected to be approximately \$489.5 million, after deducting underwriting discount and estimated offering expenses, but before taking into account any original issue discount. We expect to use the net proceeds of this offering (including any proceeds resulting from any exercise by the underwriters of their over-allotment option) and the concurrent Senior Notes offering to finance the cost of our acquisition of the Jacobs Ranch mining complex and pay related fees and expenses. If our acquisition of Jacobs Ranch is not completed, we intend to use the net proceeds from this offering and the concurrent Senior Notes offering for general corporate purposes, which may include the financing of future acquisitions, including lease-by-applications, or strategic combinations, capital expenditures, additions to working capital, repurchases, repayment or refinancing of debt or stock repurchases. Pending any such use, we may temporarily repay amounts outstanding under our senior secured credit facility or our accounts receivable securitization facility or invest the net proceeds in short-term, investment grade, interest-bearing instruments.

Our senior secured credit facility allows for up to \$800.0 million of borrowings and expires June 23, 2011. We had borrowings outstanding under the senior secured credit facility of \$375.0 million at March 31, 2009. Borrowings under our senior secured credit facility bear interest at a floating rate based on LIBOR determined by reference to our leverage ratio, as calculated in accordance with the credit agreement governing our senior secured credit facility, as amended. The weighted average interest rate of borrowings under our senior secured credit facility at March 31, 2009 was 3.67%.

CAPITALIZATION

The following table sets forth our consolidated cash and cash equivalents and capitalization as of March 31, 2009:

- on an actual basis;
- on an as adjusted basis to give effect to the issuance and sale of 17,000,000 shares of our common stock in this offering at an assumed public offering price of \$18.14 per share, the last reported sale price of our common stock on the New York Stock Exchange on July 24, 2009, and the application of the net proceeds therefrom as described under “Use of Proceeds” assuming that we temporarily repay amounts outstanding under our senior secured credit facility pending such use of proceeds; and
- as further adjusted to give effect to the issuance and sale of \$500.0 million aggregate principal amount of Senior Notes and the application of the net proceeds therefrom as described under “Use of Proceeds”, without giving effect to any original issue discount, assuming that we temporarily repay amounts outstanding under our senior secured credit facility and our accounts receivable securitization facility pending such use of proceeds.

You should read the data set forth in the table below in conjunction with “Use of Proceeds” and “Summary Consolidated Financial Data” appearing elsewhere in this prospectus supplement, as well as our audited consolidated financial statements and related notes, which are incorporated by reference into this prospectus supplement from our Annual Report on Form 10-K for the year ended December 31, 2008, and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our unaudited condensed consolidated financial statements and related notes, which are incorporated by reference into this prospectus supplement from our Quarterly Report on Form 10-Q for the quarter ended March 31, 2009.

	As of March 31, 2009		
	Actual	As Adjusted (Unaudited)	As Further Adjusted
	(In millions, except per share amounts)		
Cash and cash equivalents	\$ 27.8	\$ 27.8	\$ 368.5
Debt:			
Commercial paper	\$ 32.9	\$ 32.9	\$ 32.9
Borrowings under \$800.0 million credit facility	375.0	80.2	—
Advances under \$175.0 million accounts receivable securitization facility ⁽¹⁾	68.6	68.6	—
6.75% senior notes due 2011	955.8	955.8	955.8
Senior notes due 2016 offered concurrently ⁽²⁾	—	—	500.0
Other	11.7	11.7	11.7
Total debt	<u>1,444.0</u>	<u>1,149.2</u>	<u>1,500.4</u>
Stockholders’ equity:			
Preferred stock, par value \$0.01 per share; 10.0 million shares authorized; no shares issued or outstanding	—	—	—
Common stock, par value \$0.01 per share; 260.0 million shares authorized; 144.4 million shares issued; 161.4 million shares issued as adjusted and as further adjusted ⁽³⁾	1.4	1.6	1.6
Paid-in capital	1,385.1	1,679.7	1,679.7
Treasury stock	(53.8)	(53.8)	(53.8)
Retained earnings	496.4	496.4	496.4
Accumulated other comprehensive loss	(74.9)	(74.9)	(74.9)
Total Arch Coal, Inc. stockholders’ equity	<u>1,754.2</u>	<u>2,049.0</u>	<u>2,049.0</u>
Total capitalization	<u>\$ 3,198.2</u>	<u>\$ 3,198.2</u>	<u>\$ 3,549.4</u>

(1) Excludes \$59.5 million of letters of credit outstanding under the accounts receivable securitization facility as of March 31, 2009.

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- (2) If the Senior Notes offered concurrently are issued with original issue discount, they will be recorded on our balance sheet at their discounted amount with the discount to be amortized over the life of the Senior Notes as interest expense.
- (3) The number of issued shares of our common stock as of March 31, 2009 excludes:
- an aggregate of 2,550,000 shares of our common stock issuable upon exercise of the underwriters' over-allotment option;
 - an aggregate of 3.9 million shares of our common stock issuable upon the exercise of stock options outstanding as of March 31, 2009 at a weighted average exercise price of \$25.27 per share; and
 - an aggregate of 0.1 million shares of our common stock issuable upon vesting of certain restricted stock units that we have issued to our executive officers as of March 31, 2009.

PRICE RANGE OF COMMON STOCK

Our common stock is listed on the New York Stock Exchange under the symbol “ACI.” The following table sets forth the high and low sale prices of our common stock and the cash dividends per share of common stock declared during the periods indicated.

	Price Range		Dividends Declared per Share
	High	Low	
Year Ending December 31, 2009:			
First Quarter	\$20.63	\$11.77	\$ 0.09
Second Quarter	19.94	12.52	0.09
Third Quarter (through July 24, 2009)	18.17	13.01	0.09
Year Ended December 31, 2008:			
First Quarter	\$56.15	\$32.98	\$ 0.07
Second Quarter	77.40	41.25	0.09
Third Quarter	75.41	27.90	0.09
Fourth Quarter	32.58	10.43	0.09
Year Ended December 31, 2007:			
First Quarter	\$33.79	\$27.18	\$ 0.06
Second Quarter	42.59	30.33	0.07
Third Quarter	37.00	27.76	0.07
Fourth Quarter	45.22	32.99	0.07

On July 24, 2009, the last reported sales price of our common stock on the New York Stock Exchange was \$18.14 per share. On July 24, 2009, there were approximately 7,700 registered holders of our common stock.

DIVIDEND POLICY

Holders of our common stock are entitled to receive dividends when they are declared by our board of directors. Historically, we have paid quarterly dividends ranging from \$0.03 per share in 2000 to \$0.09 per share in 2009. When dividends are declared on our common stock, they are usually paid in mid-March, mid-June, mid-September and mid-December. There is no assurance as to the amount or payment of dividends in the future because all future payments of dividends are at the discretion of our board of directors and will depend on our future earnings, capital requirements, financial condition, operating conditions, contractual restrictions and such other factors that our board of directors may deem relevant. You should read “Management’s Discussion and Analysis of Financial Condition and Results of Operation — Liquidity and Capital Resources” in our Quarterly Report on Form 10-Q for the quarter ended March 31, 2009, which is incorporated by reference into this prospectus supplement, for more information about restrictions on our ability to declare dividends.

DESCRIPTION OF COMMON STOCK

Please read the information discussed under the heading “Description of Capital Securities” beginning on page 11 of the accompanying prospectus. As of July 24, 2009, we had 260,000,000 shares of authorized common stock, par value \$0.01 per share, of which 142,888,501 shares were outstanding.

Upon completion of this offering, 159,920,977 shares of our common stock will be outstanding, based on the number of shares outstanding on July 24, 2009 (assuming no exercise of the underwriters’ over-allotment option or outstanding stock options in respect of approximately 4.0 million shares of common stock with a weighted average exercise price of \$25.22 per share as of July 24, 2009 or issuance of 0.1 million shares of common stock upon vesting of certain restricted stock units that we have issued to our executive officers as of July 24, 2009). See “Risk Factors — This offering is expected to be dilutive, and there may be future dilution of our common stock.”

UNDERWRITING

We intend to offer the shares of our common stock through the underwriters. Under the terms and subject to the conditions contained in an underwriting agreement dated July 1, 2009, we have agreed to sell to the underwriters named below, for whom Merrill Lynch, Pierce, Fenner & Smith Incorporated, Morgan Stanley & Co. Incorporated, Citigroup Global Markets Inc. and J.P. Morgan Securities Inc. are acting as representatives, the following respective number of shares of common stock:

<u>Underwriters</u>	<u>Number of Shares</u>
Merrill Lynch, Pierce, Fenner & Smith Incorporated	
Morgan Stanley & Co. Incorporated	
Citigroup Global Markets Inc.	
J.P. Morgan Securities Inc.	
Total	<u>17,000,000</u>

The underwriting agreement provides that the underwriters are obligated to purchase all of the shares if any are purchased, other than those shares covered by the over-allotment option described below. The underwriting agreement also provides that if an underwriter defaults, the purchase commitments of non-defaulting underwriters may be increased or the offering of the shares may be terminated.

We have agreed to indemnify the underwriters against certain liabilities under the Securities Act of 1933, or to contribute to the payments the underwriters may be required to make in respect of those liabilities.

Over-allotment Option

We have granted to the underwriters a 30-day option to purchase on a pro rata basis up to 2,550,000 additional shares at the public offering price less underwriting discount and commissions. The option may be exercised only to cover any over-allotments in the sale of the shares.

No Sales of Similar Securities

We have agreed with the underwriters, for a period of 90 days, beginning on the date of this prospectus supplement, not to (i) offer, sell, issue, pledge, contract to sell, or otherwise dispose of any shares of our common stock or any securities convertible into or exercisable or exchangeable for common stock (collectively, "lock-up securities"), (ii) enter into any swap, hedge or any other agreement that transfers, in whole or in part, the economic consequences of ownership of lock-up securities, (iii) establish or increase a put equivalent position or liquidate or decrease a call equivalent position in lock-up securities within the meaning of Section 16 of the Exchange Act or (iv) file with the SEC a registration statement relating to lock-up securities, or publicly disclose the intention to take any such action, in each case, without the prior written consent of the representatives of the underwriters.

The foregoing paragraph shall not apply to (i) issuances of lock-up securities pursuant to the conversion or exchange of convertible or exchangeable securities or the exercise of options already outstanding, (ii) grants of certain employee stock options, (iii) issuances of lock-up securities pursuant to the exercise of such options or (iv) reissuance of treasury shares to satisfy certain future pension contribution obligations.

Our directors and executive officers are subject to similar restrictions for a period of 90 days, beginning on the date of this prospectus supplement, subject to certain exceptions.

Commissions and Discounts

The representatives have advised us that the underwriters propose initially to offer the shares to the public at the initial public offering price on the cover page of this prospectus supplement and to dealers at that price less a concession not in excess of \$ per share. The underwriters may allow, and the dealers may reallocate, a

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discount not in excess of \$ per share to other dealers. After the initial public offering, the public offering price, concession and discount may be changed.

The following table shows the public offering price, underwriting discount and proceeds, before expenses, to us. The information assumes either no exercise or full exercise by the underwriters of their overallotment option.

	<u>Per Share</u>	<u>Without Option</u>	<u>With Option</u>
Public offering price			
Underwriting discount			
Proceeds, before expenses, to us			

The expenses of the offering, not including the underwriting discount, are estimated at \$500,000 and are payable by us.

Selling Restrictions

No action has been taken in any jurisdiction (except in the U.S.) that would permit a public offering of the shares of common stock, or the possession, circulation or distribution of this prospectus supplement, the accompanying prospectus or any other material relating to us or the shares where action for that purpose is required. Accordingly, the shares may not be offered or sold, directly or indirectly, and neither this prospectus supplement, the accompanying prospectus nor any other offering material or advertisements in connection with the shares may be distributed or published, in or from any country or jurisdiction except in compliance with any applicable rules and regulations of any such country or jurisdiction.

Each of the underwriters may arrange to sell the shares offered hereby in certain jurisdictions outside the U.S., either directly or through affiliates, where they are permitted to do so.

European Economic Area

In relation to each Member State of the European Economic Area, or EEA, which has implemented the Prospectus Directive, as defined below (each, a "Relevant Member State") an offer to the public of any shares which are the subject of the offering contemplated by this prospectus supplement may not be made in that Relevant Member State, except that an offer to the public in that Relevant Member State of any of the shares may be made at any time under the following exemptions under the Prospectus Directive, if they have been implemented in that Relevant Member State:

- to legal entities which are authorized or regulated to operate in the financial markets or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities;
- to any legal entity which has two or more of (1) an average of at least 250 employees during the last financial year; (2) a total balance sheet of more than €43,000,000 and (3) an annual net turnover of more than €50,000,000, as shown in its last annual or consolidated accounts;
- by the underwriters to fewer than 100 natural or legal persons (other than "qualified investors," as defined in the Prospectus Directive) subject to obtaining the prior consent of the representatives for any such offer; or
- in any other circumstances falling within Article 3(2) of the Prospectus Directive;

provided that no such offer of the shares shall result in a requirement for the publication by us or any underwriter of a prospectus pursuant to Article 3 of the Prospectus Directive.

Any person making or intending to make any offer within the EEA of the shares which are the subject of the offering contemplated in this prospectus supplement should only do so in circumstances in which no obligation arises for us or any of the underwriters to produce a prospectus for such offer. Neither we nor the underwriters have authorized, or will authorize, the making of any offer of the shares through any financial intermediary, other than offers made by the underwriters which constitute the final offering of the shares contemplated in this prospectus supplement.

For the purposes of this provision and the buyer's representation below, the expression "an offer to the public" in relation to the shares in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the shares to be offered so as to enable an investor to decide to purchase the shares, as the same may be varied in that Relevant Member State by any measure implementing the Prospectus Directive in that Relevant Member State and the expression "Prospectus Directive" means Directive 2003/71/EC and includes any relevant implementing measure in each Relevant Member State.

Each person in a Relevant Member State who receives any communication in respect of, or who acquires any of the shares which are the subject of the offering contemplated by this prospectus supplement under, the offers contemplated in this prospectus supplement will be deemed to have represented, warranted and agreed to and with each underwriter and us that:

- it is a qualified investor within the meaning of the law in that Relevant Member State implementing Article 2(1)(e) of the Prospectus Directive; and
- in the case of any shares acquired by it as a financial intermediary, as that term is used in Article 3(2) of the Prospectus Directive, (i) the shares acquired by it in the offering have not been acquired on behalf of, nor have they been acquired with a view to their offer or resale to, persons in any Relevant Member State other than "qualified investors", as defined in the Prospectus Directive, or in circumstances in which the prior consent of the representatives has been given to the offer or resale; or (ii) where the shares have been acquired by it on behalf of persons in any Relevant Member State other than qualified investors, the offer of those shares to it is not treated under the Prospectus Directive as having been made to such persons.

United Kingdom

This prospectus supplement and the accompanying prospectus is only being distributed to and is only directed at (i) persons who are outside the United Kingdom or (ii) to investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, which we refer to as the Order, or (iii) high net worth entities, and other persons to whom it may lawfully be communicated, falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as "relevant persons"). The shares of common stock are only available to, and any invitation, offer or agreement to subscribe, purchase or otherwise acquire the shares will be engaged in only with, relevant persons. Any person who is not a relevant person should not act or rely on this document or any of its contents.

In addition:

- an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000, which we refer to as FSMA) has only been communicated or caused to be communicated and will only be communicated or caused to be communicated in connection with the issue or sale of the Shares in circumstances in which Section 21(1) of the FSMA does not apply to us; and
- all applicable provisions of the FSMA have been complied with and will be complied with, with respect to anything done in relation to the Shares in, from or otherwise involving the United Kingdom.

Switzerland

This prospectus supplement, the accompanying prospectus as well as any other material relating to the shares, which are the subject of the offering contemplated by this prospectus supplement do not constitute an issue prospectus pursuant to Article 652a of the Swiss Code of Obligations. The shares offered hereby will not be listed on the SWX Swiss Exchange and, therefore, the documents relating to the shares, including, but not limited to, this prospectus supplement and the accompanying prospectus, do not claim to comply with the disclosure standards of the listing rules of SWX Swiss Exchange and corresponding prospectus schemes annexed to the listing rules of the SWX Swiss Exchange.

The shares are being offered in Switzerland by way of a private placement, i.e. to a small number of selected investors only, without any public offer and only to investors who do not purchase the shares with the intention to distribute them to the public. The investors will be individually approached by us from time to time.

This prospectus supplement and the accompanying prospectus, as well as any other material relating to the shares, are personal and confidential and do not constitute an offer to any other person. This prospectus supplement and the accompanying prospectus may only be used by those investors to whom it has been handed out in connection with the offering described herein and may neither directly nor indirectly be distributed or made available to other persons without our express consent. It may not be used in connection with any other offer and shall in particular not be copied and/or distributed to the public in (or from) Switzerland.

Dubai International Financial Centre

This prospectus supplement and the accompanying prospectus relate to an exempt offer in accordance with the Offered Securities Rules of the Dubai Financial Services Authority, or the DFSA. It is intended for distribution only to persons of a type specified in those rules. It must not be delivered to, or relied on by, any other person. The DFSA has no responsibility for reviewing or verifying any documents in connection with exempt offers. The DFSA has not approved this document nor taken steps to verify the information set out in it, and has no responsibility for it. The shares which are the subject of the offering contemplated by this prospectus supplement may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the shares offered should conduct their own due diligence on the shares. If you do not understand the contents of this prospectus supplement or the accompanying prospectus, you should consult an authorized financial adviser.

Other Relationships

The underwriters and certain of their affiliates have provided and may in the future provide certain commercial banking, financial advisory and investment banking services in the ordinary course of business for us and certain of our affiliates, for which they receive customary fees. Affiliates of certain of the underwriters are lenders under our existing senior secured credit facility, commercial paper facility and accounts receivable securitization program. In addition, in connection with our pending acquisition of Jacobs Ranch, affiliates of Merrill Lynch, Pierce, Fenner & Smith Incorporated and Citigroup Global Markets Inc. provided financial advisory services to us, and will receive customary fees from us.

As described in "Use of Proceeds," some of the net proceeds of this offering may be used to repay amounts outstanding under our senior secured credit facility. Because affiliates of certain of the underwriters are lenders under our senior secured credit facility and because more than 10% of the proceeds of this offering, not including underwriting compensation, may be received by affiliates of the underwriters in this offering, this offering is being conducted in compliance with Financial Industry Regulatory Authority, or FINRA, Rule 5110(h). Pursuant to that rule, the appointment of a qualified independent underwriter is not necessary in connection with this offering, as the offering is of a class of equity securities for which a "bona fide independent market," as defined by FINRA rules, exists as of the date of the filing of the registration statement and as of the effective date thereof.

Price Stabilization and Short Positions

In connection with the offering the underwriters may engage in stabilizing transactions, over-allotment transactions, syndicate covering transactions, penalty bids.

- Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum.
- Over-allotment involves sales by the underwriters of shares in excess of the number of shares the underwriters are obligated to purchase, which creates a syndicate short position. The short position may

be either a covered short position or a naked short position. In a covered short position, the number of shares over-allotted by the underwriters is not greater than the number of shares that they may purchase in the over-allotment option. In a naked short position, the number of shares involved is greater than the number of shares in the over-allotment option. The underwriters may close out any short position by either exercising their over-allotment option and/or purchasing shares in the open market.

- Syndicate covering transactions involve purchases of the shares in the open market after the distribution has been completed in order to cover syndicate short positions. In determining the source of shares to close out the short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the over-allotment option. If the underwriters sell more shares than could be covered by the over-allotment option, a naked short position, that position can only be closed out by buying shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in the offering.
- Penalty bids permit the representatives to reclaim a selling concession from a syndicate member when the shares originally sold by the syndicate member are purchased in a stabilizing or syndicate covering transaction to cover syndicate short positions.

These stabilizing transactions, over-allotment transactions, syndicate covering transactions and penalty bids may have the effect of raising or maintaining the market price of the shares or preventing or retarding a decline in the market price of the shares. As a result, the price of the shares may be higher than the price that might otherwise exist in the open market. These transactions may be effected on the New York Stock Exchange or otherwise and, if commenced, may be discontinued at any time.

LEGAL MATTERS

The validity of the common stock offered by this prospectus supplement will be passed upon for us by Robert G. Jones, Esq., our Senior Vice President-Law, General Counsel and Secretary. Certain legal matters in connection with this offering will be passed upon for us by K&L Gates LLP, Pittsburgh, Pennsylvania. The underwriters have been represented by Shearman & Sterling LLP, New York, New York. Mr. Jones is paid a salary by us, is a participant in various employee benefit plans offered by us to our employees generally and owns and has options to purchase shares of our common stock.

EXPERTS

The consolidated financial statements of Arch Coal, Inc. appearing in Arch Coal, Inc.'s Annual Report (Form 10-K) for the year ended December 31, 2008 (including schedule appearing therein), have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon, included therein, and incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

The information appearing in, and incorporated by reference in, this prospectus supplement and the accompanying prospectus concerning our estimates of proven and probable coal reserves at December 31, 2008 were prepared by Weir International, Inc., an independent mining and geological consultant.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC under the Exchange Act. You may inspect without charge any documents filed by us at the SEC's public reference room at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You may obtain information on the operation of the public reference room by calling the SEC at 1-800-SEC-0330. The SEC also maintains an Internet site, www.sec.gov, that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC, including Arch Coal, Inc. Our common stock is traded

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on the New York Stock Exchange. You may also inspect the information we file with the SEC at the New York Stock Exchange's offices at 20 Broad Street, New York, NY 10005. Information about us is also available at www.archcoal.com. The information on our Internet site is not a part of this prospectus supplement or the accompanying prospectus.

The SEC allows us to "incorporate by reference" information into this prospectus supplement and any accompanying prospectus, which means we can disclose important information to you by referring you to other documents filed separately with the SEC. The information incorporated by reference is considered part of this prospectus supplement, and information filed with the SEC subsequent to this prospectus supplement and prior to the termination of the particular offering referred to in such prospectus supplement will automatically be deemed to update and supersede this information. We incorporate by reference into this prospectus supplement the documents listed below (excluding any portions of such documents that have been "furnished" but not "filed" for purposes of the Exchange Act):

- Our Annual Report on Form 10-K for the year ended December 31, 2008;
- Our Quarterly Report on Form 10-Q for the quarter ended March 31, 2009;
- Our Current Reports on Form 8-K filed on February 23, 2009 and March 12, 2009;
- The portions of our Definitive Proxy Statement on Schedule 14A, as filed on March 12, 2009, that are deemed "filed" with the SEC under the Exchange Act; and
- The descriptions of our common stock and our preferred stock purchase rights, which are registered under Section 12 of the Exchange Act, in our registration statement on Form 8-B filed with the SEC on June 17, 1997 and our registration statement on Form 8-A filed with the SEC on March 9, 2000, including any amendments or reports filed for the purpose of updating such descriptions.

Any statement or information contained in those documents shall be deemed to be modified or superseded to the extent a statement or information included in this prospectus supplement and accompanying prospectus modifies or supersedes such statement or information. Any such statement or information so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement and accompanying prospectus. Any future filings made by us with the SEC (excluding those filings made under Items 2.02 or 7.01 of Form 8-K or other information "furnished" to the SEC) under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 after the date of this prospectus supplement and prior to the termination of this offering will also be deemed to be incorporated by reference into this prospectus supplement and to be part of this prospectus supplement from their dates of filing. Other than as expressly stated in this paragraph, none of our reports, proxy statements and other information filed, or that we may file, with the SEC is incorporated by reference herein.

We will provide without charge upon written or oral request to each person, including any beneficial owner, to whom a prospectus supplement is delivered, a copy of any and all of the documents which are incorporated by reference into this prospectus supplement but not delivered with this prospectus supplement (other than exhibits unless such exhibits are specifically incorporated by reference in such documents).

You may request a copy of these documents by writing or telephoning us at:

Arch Coal, Inc.
One CityPlace Drive, Suite 300
St. Louis, Missouri 63141
Attention: Investor Relations
(314) 994-2700



Debt Securities

Warrants

Purchase Contracts

Units

Preferred Stock

Depository Shares

Common Stock

Arch Coal, Inc. from time to time may offer to sell, in one or more series, senior or subordinated debt securities, warrants, purchase contracts, units, preferred stock, depository shares and common stock, or any combination of these securities. The debt securities, warrants, purchase contracts and preferred stock may be convertible into or exercisable or exchangeable for our common or preferred stock or other securities or debt or equity securities of one or more other entities. Our common stock is listed on the New York Stock Exchange and trades under the ticker symbol "ACI." If we decide to seek a listing of any securities offered by this prospectus, we will disclose the exchange or market on which the securities will be listed or where we have made an application for listing in one or more supplements to this prospectus.

We may offer and sell these securities to or through one or more underwriters, dealers and agents, or directly to purchasers, on a continuous or delayed basis.

This prospectus describes some of the general terms that may apply to these securities. The specific terms of any securities to be offered, and the specific manner in which they may be offered, will be described in one or more supplements to this prospectus or in one or more reports which we file with the Securities and Exchange Commission pursuant to the Securities Exchange Act of 1934. This prospectus may not be used to sell securities unless it is accompanied by a prospectus supplement that contains a description of those securities.

We may offer and sell these securities to or through one or more underwriters, dealers or agents, or directly to other purchasers, on a continuous or delayed basis. If any offering involves underwriters, dealers or agents, arrangements with them will be described in a prospectus supplement relating to that offering.

We urge you to carefully read the information included or incorporated by reference in this prospectus and any prospectus supplement for a discussion of factors you should consider before deciding to invest in any securities offered by this prospectus, including the information under "Risk Factors" on page 2 of this prospectus.

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

The date of this prospectus is March 12, 2009.

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About this Prospectus

This prospectus is part of a registration statement that we have filed with the Securities and Exchange Commission (the “SEC”), using an automatic shelf registration process. By using a shelf registration statement, we may sell, from time to time, in one or more offerings, any combination of the securities described in this prospectus. This prospectus does not contain all of the information in that registration statement. For further information about our business and the securities that may be offered under this prospectus, you should refer to the registration statement and its exhibits. The exhibits to the registration statement contain the full text of certain contracts and other important documents that we have summarized in this prospectus. Since these summaries may not contain all the information that you may find important in deciding whether to purchase the securities we may offer, you should review the full text of these contracts and documents. These summaries are qualified in all respects by reference to all of the provisions contained in the applicable contract or document. The registration statement and its exhibits can be obtained from the SEC as indicated under the heading “Where You Can Find More Information.”

This prospectus only provides you with a general description of the securities we may offer. Each time we sell securities pursuant to this prospectus, we will provide a prospectus supplement that contains specific information about the terms of those securities. The prospectus supplement may also add, update or change information contained in this prospectus. You should read this prospectus and any applicable prospectus supplement together with the additional information described below under the heading “Where You Can Find More Information.”

You should rely only on the information contained or incorporated by reference in this prospectus and any applicable prospectus supplement. We have not authorized anyone to provide you with different information. We are not making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should not assume that the information in this prospectus, any prospectus supplement or any document incorporated by reference in this prospectus or any applicable prospectus supplement is accurate as of any date other than the date of the applicable document. Our business, financial condition, results of operations and prospects may have changed since that date.

Where You Can Find More Information

Available Information

We file reports, proxy statements and other information with the Securities and Exchange Commission, which we refer to as the SEC. These reports, proxy statements and other information can be read and copied at the SEC’s public reference room at 100 F Street, N.E., Room 1580, 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, our common stock is listed on the New York Stock Exchange, and its reports and other information can be inspected at the offices of the New York Stock Exchange, 20 Broad Street, New York, New York 10005. Our Internet address is <http://www.archcoal.com>. The information on our Internet site is not part of this prospectus.

Incorporation by Reference

The SEC allows us to “incorporate by reference” in this prospectus the documents that we file with the SEC. This means that we can disclose important information to you by referring you to those documents. Any information we incorporate in this manner is considered part of this prospectus from the date we file that document, except to the extent updated and superseded by information contained either in this prospectus or an applicable prospectus supplement or in a later dated document incorporated by reference in this prospectus. Some information that we will file with the SEC after the date of this prospectus and until we sell all of the securities covered by this prospectus will automatically update and supersede the information contained in this prospectus.

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We incorporate by reference into this prospectus the following documents or information that we have filed with the SEC and any filing that we 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, which we refer to as the Exchange Act, including such documents filed with the SEC by us after the date of this prospectus and prior to the time we sell all of the securities covered by this prospectus, except as noted below:

- Our Annual Report on Form 10-K for the year ended December 31, 2008;
- The portions of our Definitive Proxy Statement on Schedule 14A that are deemed “filed” with the SEC under the Exchange Act, as filed on March 12, 2009;
- Our Current Reports on Form 8-K dated February 23, 2009 and March 12, 2009; and
- The descriptions of our common stock and our preferred stock purchase rights, which are registered under Section 12 of the Exchange Act, in our registration statement on Form 8-B filed with the SEC on June 17, 1997 and our registration statement on Form 8-A filed with the SEC on March 9, 2000, including any amendments or reports filed for the purpose of updating such descriptions.

Pursuant to General Instruction B of Form 8-K, any information furnished under Item 2.02, Results of Operations and Financial Condition, or Item 7.01, Regulation FD Disclosure, of Form 8-K is not deemed to be “filed” for purposes of Section 18 of the Exchange Act, and we are not subject to the liabilities of Section 18 with respect to information we furnish under Item 2.01 or Item 7.01 of Form 8-K. We are not incorporating by reference any information we furnish under Item 2.01 or Item 7.01 of Form 8-K into any filing under the Securities Act of 1933 or the Exchange Act or into this prospectus.

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 that contract or other document, those provisions are qualified in all respects by reference to all of the provisions of that contract or other document. Any statement contained in a document incorporated by reference, or deemed to be incorporated by reference, in this prospectus will 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 the statement. Any such statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus. For a more complete understanding and description of each such contract or other document, we urge you to read the documents contained in the exhibits to the registration statement of which this prospectus is a part.

We will provide without charge, upon written or oral request, a copy of any or all 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 also may review a copy of the registration statement of which this prospectus is a part and its exhibits at the SEC’s Public Reference Room in Washington, D.C., as well as through the SEC’s Internet site.

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.

Risk Factors

Investing in our securities involves risks. Before deciding to purchase any of our securities, you should carefully consider the discussion of risks and uncertainties under the heading “Risk Factors” contained in our Annual Report on Form 10-K for our fiscal year ended December 31, 2008, which is incorporated by reference in this prospectus, and under similar headings in our subsequently filed quarterly reports on Form 10-Q and annual reports on Form 10-K, as well as the other risks and uncertainties described in any applicable prospectus supplement and in the other documents incorporated by reference in this prospectus. The risks and

uncertainties that we discuss in any document incorporated by reference in this prospectus are those that we believed as of the date of the document may materially affect our company. Additional risks and uncertainties not then known to us or that we then believed to be immaterial also may materially and adversely affect our business, financial condition and results of operations.

Forward-Looking Statements

This prospectus, information incorporated by reference in this prospectus and any applicable prospectus supplement may contain “forward-looking statements” within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. These statements relate to future events and expectations and can be identified by the use of predictive, future-tense or forward-looking terminology, such as “anticipates,” “believes,” “estimates,” “expects,” “forecasts,” “intends,” “may,” “outlook,” “projects,” “should,” “will,” “will likely result” or other similar expressions. All statements that reflect our expectations, assumptions or projections about the future other than statements of historical fact are forward-looking statements, including, without limitation, forecasts concerning industry growth or other trend projections, anticipated financial results or operating performance and statements regarding our strategies, objectives, goals, targets, outlook and business and financial prospects. Forward-looking statements are subject to a number of risks, uncertainties and other factors and are not guarantees of future performance. Actual results, performance or outcomes may differ materially from those expressed in or implied by those forward-looking statements. Accordingly, you should not place undue reliance on such forward-looking statements. We undertake no obligation to update publicly any forward-looking statements, whether in response to new information, future events or otherwise, except as required by applicable law.

For information on some of the factors that could cause actual results to differ materially from those in forward-looking statements, see the section entitled “Risk Factors” in this prospectus.

Use of Proceeds

We intend to use the net proceeds from the sale of the securities for general corporate purposes unless otherwise indicated in the applicable prospectus supplement relating to a specific issuance of securities or in a report which we file with the SEC under the Exchange Act, which we refer to as an Exchange Act Report. Our general corporate purposes include, but are not limited to, working capital, capital expenditures, investments in or loans to our subsidiaries or joint ventures, repayment, redemption or refinancing of debt, redemption or repurchase of our outstanding securities, funding of possible acquisitions and satisfaction of other obligations. Pending any such use, the net proceeds from the sale of the securities may be invested in short-term, investment-grade, interest-bearing instruments. We will include a more detailed description of the use of proceeds of any specific offering in the applicable prospectus supplement relating to the offering or in an Exchange Act Report.

Description of Debt Securities

The following is a general description of the debt securities that we may offer from time to time under this prospectus. The particular terms of the debt securities offered under this prospectus and the extent, if any, to which the general provisions described below may apply will be described in the applicable prospectus supplement or in an Exchange Act Report. Although our securities include securities denominated in U.S. dollars, we may choose to issue securities in any other currency, including the euro.

The debt securities will be either senior debt securities or subordinated debt securities. We will issue the senior debt securities under a senior indenture between us and a trustee. We will issue the subordinated debt securities under a subordinated indenture between us and the same or another trustee. The senior indenture and the subordinated indenture are collectively referred to in this prospectus as the indentures, and each of the trustee under the senior indenture and the trustee under the subordinated indenture are referred to in this prospectus as the trustee. Any debt securities issued by us may be guaranteed by one or more of our subsidiaries.

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The following description is only a summary of the material provisions of the indentures. We urge you to read the appropriate indenture because it, and not this description, defines your rights as holders of the applicable debt securities. See the information under the heading “Where You Can Find More Information” for information on how to obtain a copy of the appropriate indenture. The following description also is subject to and qualified by reference to the description of the particular terms of the debt securities and the relevant indenture described in the related prospectus supplement, including definitions used in the relevant indenture. The particular terms of the debt securities that we may offer under this prospectus and the relevant indenture may vary from the terms described below.

General

The senior debt securities will be unsubordinated obligations, will rank equally with all other unsubordinated debt obligations of ours and, unless otherwise indicated in the related prospectus supplement or in an Exchange Act Report, will be unsecured. The subordinated debt securities will be subordinate in right of payment to senior debt securities. A description of the subordinated debt securities is provided below under “— Subordinated Debt Securities.” The specific terms of any subordinated debt securities will be provided in the related prospectus supplement or in an Exchange Act Report. For a complete understanding of the provisions pertaining to the subordinated debt securities, you should refer to the form of subordinated indenture attached as an exhibit to the Registration Statement of which this prospectus is a part.

Our primary sources of payment for our payment obligations under the debt securities will be revenues from our operations and investments and cash distributions from our subsidiaries. Our subsidiaries are separate and distinct legal entities and have no obligation whatsoever to pay any amounts due on debt securities issued by us or to make funds available to us. Our subsidiaries’ ability to pay dividends or make other payments or advances to us will depend upon their operating results and will be subject to applicable laws and contractual restrictions. The indentures do not restrict our subsidiaries from entering into agreements that prohibit or limit their ability to pay dividends or make other payments or advances to us.

To the extent that we must rely on cash from our subsidiaries to pay amounts due on the debt securities, the debt securities will be effectively subordinated to all our subsidiaries’ liabilities, including their trade payables. This means that our subsidiaries may be required to pay all of their creditors in full before their assets are available to us. Even if we are recognized as a creditor of our subsidiaries, our claims would be effectively subordinated to any security interests in their assets and also could be subordinated to some or all other claims on their assets and earnings.

In addition to the debt securities that we may offer pursuant to this prospectus, we may issue other debt securities in public or private offerings from time to time. These other debt securities may be issued under other indentures or documentation that are not described in this prospectus, and those debt securities may contain provisions materially different from the provisions applicable to one or more issues of debt securities offered pursuant to this prospectus.

Terms

The indentures will not limit the principal amount of debt, including unsecured debt, or other securities that we or our subsidiaries may issue.

We may issue notes or bonds in traditional paper form, or we may issue a global security. The debt securities of any series may be issued in definitive form or, if provided in the related prospectus supplement or in an Exchange Act Report, may be represented in whole or in part by a global security or securities, registered in the name of a depository designated by us. Each Debt Security represented by a global security is referred to as a “Book-Entry Security.”

Debt securities may be issued from time to time pursuant to this prospectus and will be offered on terms determined by market conditions at the time of sale. Debt securities may be issued in one or more series with the same or various maturities and may be sold at par, a premium or an original issue discount. Debt securities sold at an original issue discount may bear no interest or interest at a rate that is below market rates. Unless

otherwise provided in the related prospectus supplement or in an Exchange Act Report, debt securities denominated in U.S. dollars will be issued in denominations of \$1,000 and integral multiples thereof.

Please refer to the related prospectus supplement or Exchange Act Report for the specific terms of the debt securities offered, including the following:

- Designation of an aggregate principal amount, purchase price and denomination;
- Date of maturity;
- If other than U.S. currency, the currency in which the debt securities may be purchased and the currency in which principal, premium, if any, and interest will be paid;
- The interest rate or rates and the method of calculating interest;
- The date or dates from which the interest will accrue, the payment dates on which any premium and interest will be payable or the manner of determination of the payment dates and the record dates for the determination of holders to whom interest is payable;
- The place or places where principal, any premium and interest will be payable;
- Any redemption or sinking fund provisions or other repayment or repurchase obligations;
- Any index used to determine the amount of payment of principal of and any premium and interest on the debt securities;
- The application, if any, of the defeasance provisions to the debt securities;
- If other than the entire principal amount, the portion of the debt securities that would be payable upon acceleration of the maturity thereof;
- Whether the debt securities will be issued in whole or in part in the form of one or more global securities, and in such case, the depositary for the global securities;
- Whether the debt securities may be converted into or exercised or exchanged for our common stock, preferred stock, warrants, purchase contracts or purchase units and the terms of such conversion, exercise or exchange, if any;
- Whether the debt securities will be guaranteed by one or more of our subsidiaries and, if so, the identity of the guarantors;
- Any covenants applicable to the debt securities being offered;
- Any events of default applicable to the debt securities being offered;
- Any changes to the events of default described in this prospectus;
- The terms of subordination, if applicable;
- The terms of conversion, if applicable; and
- Any other specific material terms, including any additions to the terms described in this prospectus and any terms that may be required by or advisable under applicable law.

Except with respect to book-entry securities, debt securities may be presented for exchange or registration of transfer, in the manner, at the places and subject to the restrictions set forth in the debt securities and the related prospectus supplement or Exchange Act Report. Such services will be provided without charge, other than any tax or other governmental charge payable in connection therewith, but subject to the limitations provided in the indentures.

Debt Guarantees

Debt securities offered by us may be guaranteed by one or more of our subsidiaries. Any guarantee of debt securities offered by us will be set forth in the applicable indenture or a supplemental indenture and

described in the applicable prospectus supplement or Exchange Act Report. The payment obligations of any guarantor with respect to a guarantee of debt securities offered by us will be effectively subordinate in right of payment to the prior payment in full of all senior indebtedness of any such guarantor to the same extent and manner that our payment obligations with respect to our subordinated debt securities are subordinate in right of payment to the prior payment in full of all of our senior indebtedness.

Events of Default

Except as otherwise set forth in the applicable prospectus supplement or in an Exchange Act Report, an event of default shall occur with respect to any series of debt securities when:

- We default in paying principal of or premium, if any, on any of the debt securities of such series when due;
- We default in paying interest on the debt securities of such series when due, continuing for 30 days;
- We default in making deposits into any sinking fund payment with respect to any debt security of such series when due;
- We or any subsidiary guarantor, if applicable, fail to perform any other covenant or warranty in the debt securities of such series or in the applicable indenture, and such failure continues for a period of 90 days after notice of such failure as provided in that indenture;
- A subsidiary guarantee of our debt securities, if applicable, is held in any judicial proceeding to be unenforceable or invalid;
- Certain events of bankruptcy, insolvency, or reorganization occur; or
- Any other event of default occurs with respect to debt securities of that series.

We will be required annually to deliver to the trustee officers' certificates stating whether or not the officers signing such certificates have any knowledge of any default in the performance by us of certain covenants.

If an event of default shall occur and be continuing with respect to any series (other than an event of default described in the sixth bullet point of the first paragraph above under “— Events of Default”), the trustee or the holders of not less than 25% in principal amount of the debt securities of such series then outstanding (or, if any securities of that series are original issue discount securities, the portion of the principal amount of such securities as may be specified by the terms thereof) may declare the debt securities of such series to be immediately due and payable. If an event of default described in the sixth bullet point of the first paragraph above under “— Events of Default” occurs with respect to any series of debt securities, the principal amount of all debt securities of that series (or, if any securities of that series are original issue discount securities, the portion of the principal amount of such securities as may be specified by the terms thereof) will automatically become due and payable without any declaration by the trustee or the holders. The trustee is required to give holders of the debt securities of any series written notice of a default with respect to such series as and to the extent provided by the Trust Indenture Act. As used in this paragraph, a “default” means an event described in the first paragraph under “— Events of Default” without including any applicable grace period.

If at any time after the debt securities of such series have been declared due and payable, and before any judgment or decree for the moneys due has been obtained or entered, we will pay or deposit with the trustee amounts sufficient to pay all matured installments of interest upon the debt securities of such series and the principal of all debt securities of such series which shall have become due, otherwise than by acceleration, together with interest on such principal and, to the extent legally enforceable, on such overdue installments of interest and all other amounts due under the applicable indenture shall have been paid, and any and all defaults with respect to such series under that indenture shall have been remedied, then the holders of a majority in aggregate principal amount of the debt securities of such series then outstanding, by written notice to us and the trustee, may rescind and annul the declaration that the debt securities of such series are due and payable.

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In addition, the holders of a majority in aggregate principal amount of the debt securities of such series may waive any past default and its consequences with respect to such series, except a default in the payment of the principal of or any premium or interest on any debt securities of such series or a default in the performance of a covenant that cannot be modified under the indentures without the consent of the holder of each affected debt security.

The trustee is under no obligation to exercise any of the rights or powers under the indentures at the request, order or direction of any of the holders of debt securities, unless such holders shall have offered to the trustee reasonable security or indemnity. Subject to such provisions for the indemnification of the trustee and certain limitations contained in the indentures, the holders of a majority in aggregate principal amount of the debt securities of each series at the time outstanding shall 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 debt securities of such series.

No holder of debt securities will have any right to institute any proceeding, judicial or otherwise, with respect to the indentures, for the appointment of a receiver or trustee or for any other remedy under the indentures unless:

- The holder has previously given written notice to the trustee of a continuing event of default with respect to the debt securities of that series; and
- The holders of at least 25% in principal amount of the outstanding debt securities of that series have made a written request to the trustee, and offered reasonable indemnity, to the trustee to institute proceedings as trustee, the trustee has failed to institute the proceedings within 60 days and the trustee has not received from the holders of a majority in principal amount of the debt securities of that series a direction inconsistent with that request.

Notwithstanding the foregoing, the holder of any debt security will have an absolute and unconditional right to receive payment of the principal of and any premium and, subject to the provisions of the applicable indenture regarding the payment of default interest, interest on that debt security on the due dates expressed in that security and to institute suit for the enforcement of payment.

Modification of the Indentures

Each indenture will contain provisions permitting us and the trustee to modify that indenture or enter into or modify any supplemental indenture without the consent of the holders of the debt securities in regard to matters as shall not adversely affect the interests of the holders of the debt securities, including, without limitation, the following:

- to evidence the succession of another corporation to us;
- to add to our covenants further covenants for the benefit or protection of the holders of any or all series of debt securities or to surrender any right or power conferred upon us by that indenture;
- to add any additional events of default with respect to all or any series of debt securities;
- to add to or change any of the provisions of that indenture to facilitate the issuance of debt securities in bearer form with or without coupons, or to permit or facilitate the issuance of debt securities in uncertificated form;
- to add to, change or eliminate any of the provisions of that indenture in respect of one or more series of debt securities thereunder, under certain conditions designed to protect the rights of any existing holder of those debt securities;
- to secure all or any series of debt securities;
- to establish the forms or terms of the debt securities of any series;

- to evidence the appointment of a successor trustee and to add to or change provisions of that indenture necessary to provide for or facilitate the administration of the trusts under that indenture by more than one trustee;
- to cure any ambiguity, to correct or supplement any provision of that indenture which may be defective or inconsistent with another provision of that indenture;
- to make other amendments that do not adversely affect the interests of the holders of any series of debt securities;
- to release a subsidiary guarantor, if applicable, from its obligations under its guarantee (other than in accordance with the terms thereof); and
- to add, change or eliminate any provision of that indenture as shall be necessary or desirable in accordance with any amendments to the Trust Indenture Act.

We and the trustee may otherwise modify each indenture or any supplemental indenture with the consent of the holders of not less than a majority in aggregate principal amount of each series of debt securities affected thereby at the time outstanding, except that no such modifications shall

- extend the fixed maturity of any debt securities or any installment of interest or premium on any debt securities, or reduce the principal amount thereof or reduce the rate of interest or premium payable upon redemption, or reduce the amount of principal of an original issue discount debt security or any other debt security that would be due and payable upon a declaration of acceleration of the maturity thereof, or change the currency in which the debt securities are payable or impair the right to institute suit for the enforcement of any payment after the stated maturity thereof or the redemption date, if applicable, or adversely affect any right of the holder of any debt security to require us to repurchase that security, without the consent of the holder of each debt security so affected;
- reduce the percentage of debt securities of any series, the consent of the holders of which is required for any waiver or supplemental indenture, without the consent of the holders of all debt securities affected thereby then outstanding; or
- modify the provisions of that indenture relating to the waiver of past defaults or the waiver or certain covenants or the provisions described under "Modification of the indentures," except to increase any percentage set forth in those provisions or to provide that other provisions of that indenture may not be modified without the consent of the holder of each debt security affected thereby, without the consent of the holder of each debt security affected thereby.

With respect to any vote of holders of a series of debt securities, we generally will be entitled to set any date as a record date for the purpose of determining the holders of outstanding debt securities that are entitled to vote or take other action under the indenture.

Satisfaction and Discharge, Defeasance and Covenant Defeasance

Each indenture shall be satisfied and discharged if (i) we shall deliver to the trustee all debt securities then outstanding for cancellation or (ii) all debt securities not delivered to the trustee for cancellation shall have become due and payable, are to become due and payable within one year or are to be called for redemption within one year and we shall deposit an amount sufficient to pay the principal, premium, if any, and interest to the date of maturity, redemption or deposit (in the case of debt securities that have become due and payable), provided that in either case we shall have paid all other sums payable under that indenture.

Each indenture will provide, if such provision is made applicable to the debt securities of a series,

- that we may elect either (A) to defease and be discharged from any and all obligations with respect to any debt security of such series, or "defeasance," or (B) to be released from our obligations with respect to such debt security under certain of the covenants and events of default under that indenture together with additional covenants that may be included for a particular series; and

- that certain events of default shall not be events of default under that indenture with respect to such series (“covenant defeasance”), upon the deposit with the trustee (or other qualifying trustee), in trust for such purpose, of money certain U.S. government obligations and/or, in the case of debt securities denominated in U.S. dollars, certain state and local government obligations which through the payment of principal and interest in accordance with their terms will provide money, in an amount sufficient to pay the principal of (and premium, if any) and interest on such debt security, on the scheduled due dates.

In the case of defeasance or covenant defeasance, the holders of such debt securities will be entitled to receive payments in respect of such debt securities solely from such trust. Such a trust may only be established if, among other things, we have delivered to the trustee an opinion of counsel (as specified in the indentures) to the effect that the holders of the debt securities affected thereby will not recognize income, gain or loss for Federal income tax purposes as a result of such defeasance or 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 defeasance or covenant defeasance had not occurred. Such opinion of counsel, in the case of defeasance under clause (A) above, must refer to and be based upon a ruling of the Internal Revenue Service or a change in applicable Federal income tax law occurring after the date of the indentures.

Record Dates

The indentures will provide that in certain circumstances we may establish a record date for determining the holders of outstanding debt securities of a series entitled to join in the giving of notice or the taking of other action under the applicable indenture by the holders of the debt securities of such series.

Subordinated Debt Securities

Subordinated debt securities will be subordinate, in right of payment, to all senior debt. Senior debt is defined to mean, with respect to us, the principal, premium, if any, and interest on the following:

- all indebtedness of ours, whether outstanding on the date of issuance or thereafter created, incurred or assumed, which is for money borrowed, or evidenced by a note or similar instrument given in connection with the acquisition of any business, properties or assets, including securities;
- any indebtedness of others of the kinds described in the preceding clause for the payment of which we are responsible or liable (directly or indirectly, contingently or otherwise) as guarantor or otherwise; and
- amendments, renewals, extensions and refundings of any indebtedness described above, unless in any instrument or instruments evidencing or securing such indebtedness or pursuant to which the same is outstanding, or in any such amendment, renewal, extension or refunding, it provides that such indebtedness is not senior or prior in right of payment to the subordinated debt securities.

Upon any distribution of our assets upon our dissolution, winding up, liquidation or reorganization, the payment of the principal of, premium, if any, and interest, if any, on the subordinated debt securities will be subordinated, to the extent provided in the subordinated debt indenture, in right of payment to the prior payment in full of all of our senior debt. Our obligation to make payment of the principal of, premium, if any, and interest, if any, on the subordinated debt securities will not otherwise be affected. In addition, no payment on account of principal and premium, if any, sinking fund or interest, if any, may be made on the subordinated debt securities at any time unless full payment of all amounts due in respect of the principal and premium, if any, sinking fund and interest, if any, on our senior debt has been made or duly provided for in money or money’s worth.

Notwithstanding the foregoing, unless all of our senior debt has been paid in full, in the event that any payment or distribution made by us is received by the trustee or the holders of any of the subordinated debt securities, such payment or distribution must be paid over to the holders of our senior debt or a person acting on their behalf, to be applied toward the payment of all our senior debt remaining unpaid until all the senior

debt has been paid in full. Subject to the payment in full of all of our senior debt, the rights of the holders of our subordinated debt securities will be subrogated to the rights of the holders of our senior debt.

By reason of this subordination, in the event of a distribution of our assets upon our insolvency, certain of our general creditors may recover more, ratably, than holders of our subordinated debt securities.

Governing Law

The laws of the State of New York will govern each indenture and will govern the debt securities.

“Street Name” and Other Indirect Holders

Investors who hold securities in accounts at banks or brokers generally will not be recognized by us as legal holders of debt securities. This is called holding in “street name.” Instead, we would recognize only the bank or broker, or the financial institution that the bank or broker uses to hold its securities. These intermediary banks, brokers and other financial institutions pass along principal, interest and other payments on the debt securities, either because they agree to do so in their customer agreements or because they are legally required to do so. If you hold debt securities in “street name,” you should check with your own institution to find out, among other things:

- how it handles payments and notices;
- whether it imposes fees or charges;
- how it would handle voting if applicable;
- whether and how you can instruct it to send you debt securities registered in your own name so you can be a direct holder as described below; and
- if applicable, how it would pursue rights under your debt securities if there were a default or other event triggering the need for holders to act to protect their interests.

Our obligations, as well as the obligations of the trustee under the indentures and those of any third parties employed by us or the trustee under either of the indentures, run only to persons who are registered as holders of debt securities issued under the applicable indenture. As noted above, we do not have obligations to you if you hold in “street name” or other indirect means, either because you choose to hold debt securities in that manner or because the debt securities are issued in the form of global securities as described below. For example, once we make payment to the registered holder, we have no further responsibility for the payment even if that holder is legally required to pass the payment along to you as a “street name” customer but does not do so.

Book-Entry Securities

The following description of book-entry securities will apply to any series of debt securities issued in whole or in part in the form of one or more global securities except as otherwise described in the related prospectus supplement or in an Exchange Act Report.

Book-entry securities of like tenor and having the same date will be represented by one or more global securities deposited with and registered in the name of a depository that is a clearing agent registered under the Exchange Act. Beneficial interests in book-entry securities will be limited to institutions that have accounts with the depository, or “participants,” or persons that may hold interests through participants.

Ownership of beneficial interests by participants will only be evidenced by, and the transfer of that ownership interest will only be effected through, records maintained by the depository. Ownership of beneficial interests by persons that hold through participants will only be evidenced by, and the transfer of that ownership interest within such participant will only be effected through, records maintained by the participants. The laws of some jurisdictions require that certain purchasers of securities take physical delivery of such securities in definitive form. Such laws may impair the ability to transfer beneficial interests in a global security.

Payment of principal of and any premium and interest on book-entry securities represented by a global security registered in the name of or held by a depositary will be made to the depositary, as the registered owner of the global security. Neither we, the trustee nor any agent of ours or the trustee will have any responsibility or liability for any aspect of the depositary's records or any participant's records relating to or payments made on account of beneficial ownership interests in a global security or for maintaining, supervising or reviewing any of the depositary's records or any participant's records relating to the beneficial ownership interests. Payments by participants to owners of beneficial interests in a global security held through such participants will be governed by the depositary's procedures, as is now the case with securities held for the accounts of customers registered in "street name," and will be the sole responsibility of such participants.

A global security representing a book-entry security is exchangeable for definitive debt securities in registered form, of like tenor and of an equal aggregate principal amount registered in the name of, or is transferable in whole or in part to, a person other than the depositary for that global security, only if (a) the depositary notifies us that it is unwilling or unable to continue as depositary for that global security or the depositary ceases to be a clearing agency registered under the Exchange Act, (b) there shall have occurred and be continuing an event of default with respect to the debt securities of that series or (c) other circumstances exist that have been specified in the terms of the debt securities of that series. Any global security that is exchangeable pursuant to the preceding sentence shall be registered in the name or names of such person or persons as the depositary shall instruct the trustee. It is expected that such instructions may be based upon directions received by the depositary from its participants with respect to ownership of beneficial interests in such global security.

Except as provided above, owners of beneficial interests in a global security will not be entitled to receive physical delivery of debt securities in definitive form and will not be considered the holders thereof for any purpose under the indentures, and no global security shall be exchangeable, except for a security registered in the name of the depositary. This means each person owning a beneficial interest in such global security must rely on the procedures of the 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 indentures. We understand that under existing industry practices, if we request any action of holders or an owner of a beneficial interest in such global security desires to give or take any action that a holder is entitled to give or take under the indentures, the depositary would authorize the participants holding the relevant beneficial interests to give or take such action, and such participants would authorize beneficial owners owning through such participant to give or take such action or would otherwise act upon the instructions of beneficial owners owning through them.

Description of Other Securities

We will set forth in the applicable prospectus supplement a description of any warrants, purchase contracts, units or depositary shares that may be offered pursuant to this prospectus.

Description of Capital Securities

Common Stock

Under our certificate of incorporation, we are authorized to issue up to 260,000,000 shares of our common stock. As of March 9, 2009, we had 142,917,031 shares of common stock issued and outstanding and had an aggregate 2,047,980 of additional shares of common stock available for issuance under our various stock compensation plans.

The applicable prospectus supplement relating to an offering of common stock or other securities convertible or exchangeable for, or exercisable into, common stock, or the settlement of which may result in the issuance of common stock, will describe the relevant terms, including the number of shares offered, any initial offering price and market price and dividend information, as well as, if applicable, information on other related securities.

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The following summary is not complete and is not intended to give full effect to provisions of statutory or common law. You should refer to the applicable provisions of the following:

- the Delaware General Corporation Law, as it may be amended from time to time;
- our certificate of incorporation, as it may be amended or restated from time to time; and
- our restated and amended bylaws, as they may be amended or restated from time to time.

Dividends. The holders of our common stock are entitled to receive dividends when, as and if declared by our Board of Directors, out of funds legally available for their payment subject to the rights of holders of our preferred stock.

Voting Rights. The holders of our common stock are entitled to one vote per share on all matters submitted to a vote of stockholders.

Rights Upon Liquidation. In the event of our voluntary or involuntary liquidation, dissolution or winding up, the holders of common stock will be entitled to share equally in any of our assets available for distribution after the payment in full of all debts and distributions and after the holders of all series of our outstanding preferred stock have received their liquidation preferences in full.

Miscellaneous. The outstanding shares of common stock are fully paid and nonassessable. The holders of common stock are not entitled to preemptive or redemption rights. Shares of common stock are not convertible into shares of any other class of capital stock.

Preferred Stock

Our board of directors determines the rights, qualifications, restrictions and limitations relating to each series of our preferred stock at the time of issuance. Our certificate of incorporation authorizes our board of directors, without further stockholder action, to provide for the issuance of up to 10,000,000 shares of preferred stock, in one or more series, and to fix the designations, terms, and relative rights and preferences, including the dividend rate, voting rights, conversion rights, redemption and sinking fund provisions and liquidation values of each of these series, except that the holders of preferred stock:

- will not be entitled to more than the lesser of one vote per \$100 of liquidation value or one vote per share when voting as a class with the holders of shares of other capital stock; and
- will not be entitled to vote on any matter separately as a class, except to the extent required by law or as specified with respect to each series with respect to any amendment or alteration of the provisions of the certificate of incorporation that would adversely affect the powers, preferences or special rights of the applicable series of preferred stock, or our failure to pay dividends on any series of preferred stock in full for any six quarterly dividend payment periods, whether or not consecutive, in which case the number of directors may be increased by two and the holders of outstanding shares of preferred stock then similarly entitled will be entitled to elect the two additional directors until full accumulated dividends on all of those shares of preferred stock have been paid.

As of March 9, 2009, we had no shares of preferred stock issued and outstanding.

Shares of our preferred stock may have dividend, redemption, voting and liquidation rights taking priority over our common stock, and shares of preferred stock may be convertible into our common stock. We may amend from time to time our restated certificate of incorporation to increase the number of authorized shares of preferred stock. We also may designate additional shares of preferred stock as preferred stock.

The particular terms of any series of preferred stock offered under this prospectus will be described in a prospectus supplement relating to that series of preferred stock. Those terms may include:

- the title and liquidation preference per share of the preferred stock and the number of shares offered;
- the purchase price of the preferred stock;

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- the dividend rate (or method of calculation), the dates on which dividends will be paid and the date from which dividends will begin to accumulate;
- any redemption or sinking fund provisions of the preferred stock;
- any conversion provisions of the preferred stock;
- the voting rights, if any, of the preferred stock; and
- any additional dividend, liquidation, redemption, sinking fund and other rights, preferences, privileges, limitations and restrictions of the preferred stock.

If the terms of any series of preferred stock being offered pursuant to this prospectus differ materially from the terms set forth in this prospectus, the definitive terms will be disclosed in an applicable prospectus supplement. The summary in this prospectus is not complete. You should refer to the applicable Certificate of Amendment to our Restated Certificate of Incorporation or certificate of designations, as the case may be, establishing a particular series of preferred stock, in either case which will be filed with the Secretary of State of the State of Delaware and the SEC in connection with an offering of preferred stock.

Preferred Stock Purchase Rights. On March 3, 2000, we entered into a rights agreement with First Chicago Trust Company of New York, as rights agent, which is a stockholder rights plan providing for a dividend of one preferred stock purchase right for each outstanding share of our common stock. We issued the dividend to stockholders of record on March 20, 2000, and holders of shares of common stock issued since that date are issued rights with their shares. The rights trade automatically with shares of common stock and become exercisable only under certain circumstances as described below. The rights are designed to protect our interests and the interests of our stockholders against coercive takeover tactics. The purpose of the rights is to encourage potential acquirors to negotiate with our board of directors prior to attempting a takeover and to provide our board with leverage in negotiating on behalf of all stockholders the terms of any proposed takeover. The rights may have certain anti-takeover effects. The rights should not, however, interfere with any merger or other business combination approved by our board of directors.

Until a right is exercised, the holder of a right will not have any rights as a stockholder, including, without limitation, the right to vote or to receive dividends. Upon becoming exercisable, each right will entitle its holder to purchase from us two one-hundredths of a share of Series One Junior Preferred Stock, par value \$0.01 per share, at a purchase price of \$42.00 per right, subject to adjustment. In general, the rights will not be exercisable until the earlier of (a) the close of business on the tenth business day after the date that we learn that a person or group or an affiliate or associate of the person or group has acquired, or has obtained the right to acquire, beneficial ownership of 20% or more of our outstanding common stock and (b) the close of business on the tenth business day following the commencement of, or first public disclosure of an intent to commence, a tender or exchange offer for 20% or more of our outstanding common stock. Below we refer to the earlier of those dates as the “distribution date” and the person or group acquiring at least 20% of our common stock as an “acquiring person.” You should assume that any of the following provisions that refer to an acquiring person also apply to any associate or affiliate of the acquiring person as well.

If, after the distribution date, any acquiring person acquires 20% or more of our outstanding voting stock without the prior approval of our board of directors, each right will entitle its holder to acquire the number of shares of our common stock that is equal to the result obtained by multiplying the then current purchase price by the number of one one-hundredths of a share of preferred stock for which a right is then exercisable and dividing that product by 50% of the then current per-share market price of our common stock.

If any acquiring person acquires more than 20% but less than 50% of the outstanding shares of our common stock subsequent to the distribution date without prior written consent of our board of directors, each right may be exchanged by our board of directors for one share of our common stock. In the event that, following the distribution date, we are acquired in a merger or other business combination in which we are not the surviving corporation, or in which 50% or more of our assets or assets representing 50% or more of our revenues or cash flow are sold in one or several transactions without the prior written consent of our board of directors, each right will entitle its holder to receive the number of shares of the acquiring company’s common

stock as is equal to the result obtained by multiplying the then current purchase price by the number of one one-hundredths of a share of preferred stock for which the right is then exercisable and dividing that product by 50% of the then current market price per share of the common stock of the acquiring company.

Any rights that are at any time beneficially owned by an acquiring person will be null and void, and any holder of such rights, including any purported transferee or subsequent holder, will be unable to exercise the rights.

The rights will expire at the close of business on March 20, 2010, unless redeemed or exchanged before that time. At any time prior to the earlier of (a) the time a person or group becomes an acquiring person and (b) the expiration date, our board of directors may exchange all or part of the then outstanding and exercisable rights for shares of our common stock at an exchange ratio of one share of common stock per right or redeem the rights in whole, but not in part, at a price of \$0.01 per right. The exchange rate and redemption price are subject to adjustment as provided in the rights agreement.

The preceding summary is not complete and is not intended to give full effect to provisions of statutory or common law. You should refer to the applicable provisions of the rights agreement and the form of right certificate, which are incorporated by reference to Exhibit 1 to our Form 8-A, filed with the SEC on March 9, 2000. That Form 8-A is available by the means described under "Where You Can Find More Information."

Additional Series of Preferred Stock. The preferred stock will be preferred over our common stock as to payment of dividends. Before any dividends or distributions (other than dividends or distributions payable in common stock) on our common stock will be declared and set apart for payment or paid, the holders of shares of each series of preferred stock will be entitled to receive dividends when, as and if declared by our board of directors. We will pay those dividends either in cash, shares of common stock or preferred stock or otherwise, at the rate and on the date or dates established. With respect to each series of preferred stock, the dividends on each share of the series will be cumulative from the date of issue of the share unless another date is determined relating to the series. Accruals of dividends will not bear interest.

The preferred stock will be preferred over our common stock as to assets so that the holders of each series of preferred stock will be entitled to be paid, upon our voluntary or involuntary liquidation, dissolution or winding up and before any distribution is made to the holders of common stock, the established amount. However, in this case the holders of preferred stock will not be entitled to any other or further payment. If upon any liquidation, dissolution or winding up our net assets are insufficient to permit the payment in full of the respective amounts to which the holders of all outstanding preferred stock are entitled, our entire remaining net assets will be distributed among the holders of each series of preferred stock in amounts proportional to the full amounts to which the holders of each series are entitled.

All shares of any series of preferred stock will be redeemable to the extent determined with respect to that series. All shares of any series of preferred stock will be convertible into shares of our common stock or into shares of any other series of our preferred stock to the extent determined with respect to that series.

Except as otherwise indicated, the holders of preferred stock will be entitled to one vote for each share of preferred stock held by them on all matters properly presented to stockholders. The holders of common stock and the holders of all series of preferred stock will vote together as one class.

In the event of a proposed merger or tender offer, proxy contest or other attempt to gain control of us and not approved by our board of directors, it would be possible for the board to authorize the issuance of one or more series of preferred stock with voting rights or other rights and preferences which would impede the success of the proposed merger, tender offer, proxy contest or other attempt to gain control of us. This authority may be limited by applicable law, our certificate of incorporation, as it may be amended or restated from time to time, and the applicable rules of the stock exchanges upon which the common stock is listed. The consent of our stockholders would not be required for any such issuance of preferred stock.

Special Charter Provisions. Our amended and restated certificate of incorporation provides that:

- our board of directors is classified into three classes;
- subject to the rights of holders of our preferred stock, if any, the affirmative vote of the holders of not less than two-thirds of the shares of common stock voting thereon is required in order to:
 - adopt an agreement or plan of merger or consolidation;
 - authorize the sale, lease or exchange of all or substantially all of our property or assets; or
 - authorize the disposition of Arch Coal or the distribution of all or substantially all of our assets to our stockholders;
- subject to the rights of holders of our preferred stock, if any, certain provisions of the restated certificate may be amended only by the affirmative vote of the holders of at least two-thirds of the shares of common stock voting on the proposed amendment;
- subject to the rights of holders of our preferred stock, if any, all actions required to be taken or which may be taken at any annual or special meeting of our stockholders must be taken at a duly called annual or special meeting of stockholders and cannot be taken by a consent in writing without a meeting; and
- special meetings of the stockholders may be called at any time by our board of directors and may not be called by any other person or persons or in any other manner.

Plan of Distribution

We may offer the offered securities in one or more of the following ways, or any other way set forth in an applicable prospectus supplement from time to time:

- to or through underwriting syndicates represented by managing underwriters;
- through one or more underwriters without a syndicate for them to offer and sell to the public;
- through dealers or agents;
- to investors directly in negotiated sales or in competitively bid transactions; or
- to holders of other securities in exchanges in connection with acquisitions.

The prospectus supplement for each series of securities we sell will describe the offering, including:

- the name or names of any underwriters;
- the purchase price and the proceeds to us from that sale;
- any underwriting discounts and other items constituting underwriters' compensation, which in the aggregate will not exceed eight percent of the gross proceeds of the offering;
- any commissions paid to agents;
- the initial public offering price and any discounts or concessions allowed or reallocated or paid to dealers; and
- any securities exchanges on which the securities may be listed.

Underwriters

If underwriters are used in a sale, we will execute an underwriting agreement with one or more underwriters regarding those securities. Unless otherwise described in the applicable prospectus supplement, the obligations of the underwriters to purchase these securities will be subject to conditions, and the underwriters must purchase all of these securities if any are purchased.

The securities subject to any underwriting agreement may be acquired by the underwriters for their own account and may be resold by them from time to time in one or more transactions, including negotiated transactions, at a fixed offering price or at varying prices determined at the time of sale. Underwriters may be deemed to have received compensation from us in the form of underwriting discounts or commissions and

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may also receive commissions from the purchasers of these securities for whom they may act as agent. Underwriters may sell these securities to or through dealers. These dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters and commissions from the purchasers for whom they may act as agent. Any initial offering price and any discounts or concessions allowed or re-allowed or paid to dealers may be changed from time to time.

We may authorize underwriters to solicit offers by institutions to purchase the securities subject to the underwriting agreement from us, at the public offering price stated in the applicable prospectus supplement under delayed delivery contracts providing for payment and delivery on a specified date in the future. If we sell securities under these delayed delivery contracts, the applicable prospectus supplement will state that this is the case and will describe the conditions to which these delayed delivery contracts will be subject and the commissions payable for that solicitation.

In connection with underwritten offerings of the securities, the underwriters may engage in over-allotment, stabilizing transactions, covering transactions and penalty bids in accordance with Regulation M under the Exchange Act, as follows:

- Over-allotment transactions involve sales in excess of the offering size, which create a short position for the underwriters.
- Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum.
- Covering transactions involve purchases of the securities in the open market after the distribution has been completed in order to cover short positions.
- Penalty bids permit the underwriters to reclaim a selling concession from a broker/dealer when the securities originally sold by that broker-dealer are repurchased in a covering transaction to cover short positions.

These stabilizing transactions, covering transactions and penalty bids may cause the price of the securities to be higher than it otherwise would be in the absence of these transactions. If these transactions occur, they may be discontinued at any time.

Agents

We also may sell any of the securities through agents designated by us from time to time. We will name any agent involved in the offer or sale of these securities and will list commissions payable by us to these agents in the applicable prospectus supplement. These agents will be acting on a best efforts basis to solicit purchases for the period of their appointment, unless we state otherwise in the applicable prospectus supplement.

Direct Sales

We may sell any of the securities directly to purchasers. In this case, we will not engage underwriters or agents in the offer and sale of these securities.

In addition, debt securities described in this prospectus may be issued upon the exercise of warrants or the settlement of purchase contracts or units.

Indemnification

We may indemnify underwriters, dealers or agents who participate in the distribution of securities against certain liabilities, including liabilities under the Securities Act, and may agree to contribute to payments that these underwriters, dealers or agents may be required to make.

No Assurance of Liquidity

The securities that we offer may be a new issue of securities with no established trading market. Any underwriters that purchase securities from us may make a market in these securities. The underwriters will not be obligated, however, to make a market and may discontinue market-making at any time without notice to holders of the securities. We cannot assure you that there will be liquidity in the trading market for any securities of any series.

Legal Matters

In connection with particular offerings of securities in the future, and if stated in the applicable prospectus supplement or in an Exchange Act Report, the validity of those securities may be passed upon for us by K&L Gates LLP, Pittsburgh, Pennsylvania, and for any underwriters or agents by counsel named in the applicable prospectus supplement or Exchange Act Report.

Experts

The consolidated financial statements of Arch Coal, Inc. appearing in Arch Coal, Inc.'s Annual Report (Form 10-K) for the year ended December 31, 2008 (including schedule appearing therein), have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon, included therein, and incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

17,000,000 Shares



Common Stock

PROSPECTUS SUPPLEMENT

BofA Merrill Lynch

Morgan Stanley

Citi

J.P.Morgan

July , 2009
