UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 20549

FORM 8-K

CURRENT REPORT Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of report (Date of earliest event reported): May 22, 2012 (May 22, 2012)

Arch Coal, Inc.

(Exact name of registrant as specified in its charter)

Delaware

1-13105 (Commission File Number) **43-0921172** (I.R.S. Employer Identification No.)

(State or other jurisdiction of incorporation)

CityPlace One One CityPlace Drive, Suite 300 St. Louis, Missouri 63141

(Address, including zip code, of principal executive offices)

Registrant's telephone number, including area code: (314) 994-2700

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

o Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

o Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

o Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

o Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 7.01 Regulation FD Disclosure.

Beginning on May 22, 2012, and at other times thereafter, the attached slides will be presented to various investors by the senior management team of Arch Coal, Inc. The slides from the presentation are attached hereto as Exhibit 99.1 and are hereby incorporated by reference.

A copy of the slides will be available at http://investor.archcoal.com/events.cfm for 30 days.

Item 9	.01	Financial Statements and Exhibits.
(d)	Exhibits	
	The follow	wing exhibit is attached hereto and furnished herewith.
	Exhibit No.	Description
	99.1	Arch Coal, Inc. Investor Presentation Slides
		1

Signatures

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Arch Coal, Inc.

By: /s/ Robert G. Jones Robert G. Jones Senior Vice President–Law, General Counsel and Secretary

2

Exhibit Index

 Exhibit No.
 Description

 99.1
 Arch Coal, Inc. Investor Presentation Slides

 3





Powering the Working World.

The New Arch Coal

JOHN EAVES President & CEO

West Virginia | May 2012





Forward-Looking Information

This presentation contains "forward-looking statements" – that is, statements related to future, not past, events. In this context, forward-looking statements often address our expected future business and financial performance, and often contain words such as "expects," "anticipates," "intends," "plans," "believes," "seeks," or "will." Forward-looking statements by their nature address matters that are, to different degrees, uncertain. For us, particular uncertainties arise from changes in the demand for our coal by the domestic electric generation industry; from legislation and regulations relating to the Clean Air Act and other environmental initiatives; from operational, geological, permit, labor and weather-related factors; from fluctuations in the amount of cash we generate from operations; from future integration of acquired businesses; and from numerous other matters of national, regional and global scale, including those of a political, economic, business, competitive or regulatory nature. These uncertainties may cause our actual future results to be materially different than those expressed in our forward-looking statements. We do not undertake to update our forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required by law. For a description of some of the risks and uncertainties that may affect our future results, you should see the risk factors described from time to time in the reports we file with the Securities and Exchange Commission.

This presentation includes certain non-GAAP financial measures, including Adjusted EBITDA. These non-GAAP financial measures are not measures of financial performance in accordance with generally accepted accounting principles and may exclude items that are significant in understanding and assessing our financial results. Therefore, these measures should not be considered in isolation or as an alternative to net income from operations, cash flows from operations, earnings per fully-diluted share or other measures of profitability, liquidity or performance under generally accepted accounting principles. You should be aware that our presentation of these measures may not be comparable to similarly-titled measures used by other companies. A reconciliation of these financial measures to the most comparable measures presented in accordance with generally accepted accounting principles has been included at the end of this presentation.

ArchCoal[®]

Powering the Working World.

Arch's foundation was built upon three key pillars

	Safety	 Goal is to operate world's safest coal mines Best safety record among major coal peers Unrelenting focus on continuous improvement Safe mines are productive and profitable
	Stewardship	 Best-in-class environmental compliance Award-winning stewardship practices Good corporate citizen in our communities Supplier of clean coal technologies
9	Shareholder Value	 National, diversified U.S. coal producer Low-cost position in core operating regions Very low level of legacy liabilities Focused on improving financial returns

We're focused on earning more from our asset base



Slide 4



Powering the Working World.



We expect continued strength in met coal markets – based on projected growth in global steel consumption



Arch's organic growth plans are focused on higher-return met expansions

- Leer mine adds 3.5 million tons, starting in mid-2013
- 414 million tons of low-cost met reserves support incremental and greenfield expansion, should market conditions warrant





We're securing port capacity to become a strategic supplier in seaborne coal markets

🔵 Ports 🛛 🛨 Offices



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U.S. Coal Consumption

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Coal will continue to play a dominant role in domestic power markets



- Coal consumption could be flat in U.S. power markets through 2015
- Other fuels (natural gas) may grow, but they have limitations
- Some coal basins will see demand grow (PRB and ILB)
- Appalachia will increasingly serve the global metallurgical and export thermal market

Our growth pipeline positions Arch for incremental returns







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Arch has historically deployed capital to expand its footprint and fund future growth opportunities

West

East

Adjusted EBITDA* (in millions) \$921 \$753 \$314 20% 50%

2008

\$?

2011

Arch Coal Timeline

1998

1998	2000	2004	0 2005	0 2008/2009	0 2010	• 2011/2012
Acquired assets/LBA to gain presence in PRB/ WBIT	Divested non-core assets to reduce debt	Acquired assets, reserves to strengthen western position; sold CAPP reserves to NRP	Divested high-cost CAPP thermal mines	Opened Mountain Laurel; acquired Jacobs Ranch	Increased Illinois interest	Acquired ICG; pursuing export strategy

*Adjusted EBITDA reconciled at the end of the presentation

Thermal

Met &

Export

Thermal

2015

Arch is the most diversified U.S. coal producer, and the No. 2 reserve holder in the nation



*Pro forma reserves at 12/31/11

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Arch's domestic sales span the U.S. and are balanced along product/geographic lines

Arch Coal serves 188 power plants and other end users in 39 states



Arch is one of the top five largest coal producers in the world



Arch has a leading, low-cost western thermal portfolio with meaningful available capacity

Southern Powder River Basin

(2011 production, in millions of tons)



Western Bituminous Region

(2011 production, in millions of tons)



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 Arch has a strong position in the PRB, the nation's largest coal supply basin

- High-Btu, low-sulfur product
- Available, excess capacity of 35 million tons versus 2011 levels
- Expect PRB to expand domestically
- Pursuing export growth off West Coast
- Arch is the leading producer in the Western Bituminous Region
 - Supply to remain constrained in region
 - Targeting exports via Gulf/West Coast

Slide 17

Powering the Working World.

Arch's low-cost Appalachian operations are geared toward met markets



Central App Production as % of Appalachia*



Metallurgical Production as % of Appalachia*





Arch's leadership position in the coal industry will drive future value creation

- Enhancing our global metallurgical and thermal coal franchise
 - Emphasizing higher-return projects like Leer mine
 - Expanding access to the global coal trade
- Maintaining leadership position in U.S. coal industry, with a low-cost, competitive thermal coal portfolio
 - Most diversified U.S. coal producer
 - Represent 15 percent of U.S. coal supply
 - Second largest coal reserve holder in nation
- Building financial strength and flexibility
 - Exercising capital discipline
 - Keeping legacy liabilities low

Slide 19

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Reconciliation of Non-GAAP Measures

Adjusted EBITDA

Adjusted EBITDA is defined as net income attributable to the Company before the effect of net interest expense, income taxes, depreciation, depletion and amortization, the amortization of acquired sales contracts, net, and other non-operating expenses and accounting changes. Adjusted EBITDA may also be adjusted for items that may not reflect the trend of future results.

Adjusted EBITDA is not a measure of financial performance in accordance with generally accepted accounting principles, and items excluded to calculate Adjusted EBITDA are significant in understanding and assessing our financial condition. Therefore, Adjusted EBITDA should not be considered in isolation, nor as an alternative to net income, income from operations, cash flows from operations or as a measure of our profitability, liquidity or performance under generally accepted accounting principles. We believe that Adjusted EBITDA presents a useful measure of our ability to incur and service debt based on our ongoing operations. Furthermore, analogous measures are used by industry analysts to evaluate operating performance. In addition, acquisition and financing related expenses are excluded to make results more comparable between periods. Investors should be aware that our presentation of Adjusted EBITDA may not be comparable to similarly titled measures used by other companies. The table below shows how we calculate Adjusted EBITDA.

	Year Ended December 31,		per si,
	1998	2008	2011
		(in millions)	
Net income	\$ 30.3	\$355.2	\$142.8
Income tax expense (benefit)	(5.1)	41.8	(7.6)
Interest expense, net	61.4	64.3	226.9
Depreciation, depletion and amortization	169.8	293.5	466.6
Amortization of acquired sales contracts, net	34.6	(0.7)	(22.1)
Acquisition and transition costs	-	-	54.7
Acquisition related costs — inventory write up*	-	-	9.5
DD&A - Equity method investees	21.3	-	-
Bridge financing costs related to ICG	-	-	49.5
Net loss resulting from early retirement of debt	1.5	-	2.0
Net income attributable to noncontrolling interest	(0.2)	(0.9)	(1.2)
Adjusted EBITDA	\$ 313.6	\$ 753.2	\$ 921.1



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Future Outlook for Coal

DECK SLONE

Senior Vice President – Strategy & Public Policy

West Virginia | May 2012

It's a global coal market after all



Roughly 85% of the world's 7 billion people live in emerging economies. The burgeoning middle class in developing countries will drive global economic growth and electricity demand.



Sources: Organization for Economic Co-operation and Development, Goldman Sachs

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China and India are projected to import 1.5 billion tonnes of coal by 2030

Significant growth in seaborne coal export supply will be required to meet the growing demands of the industrial revolution in Asia.



Nations around the world are building coal plants to fuel electricity needs

New Coal-Fueled Generation Coming Online by 2015

Capacity under construction, in GW, from 2012-2015



Sources: ACI and Platts International, estimates based on plants currently under construction or planned

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Traditional supply sources are struggling to keep pace with demand, making U.S. coal increasingly competitive



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With the Panama Canal expansion, the U.S. will play a larger role in filling Asian demand



- Approximately 30% of the 108 million tons of U.S. exports in 2011 went into the Asia-Pacific market
- By 2015, the U.S. will have shipping capabilities through the Gulf to load super panamax-size vessels and baby capes, helping to improve competitiveness of U.S. coal in that high-growth market

Slide 6

Opportunities in the Atlantic Basin are promising



ArchCoal Powering the Working World. Planned U.S. port expansions will support a more than doubling of coal exports over the next five years or so **U.S. Exports** (in millions of tons) Ridley** 4 Actual 270 West Coast East Coast Westshore** 4 Projected **CNX** Marine Capacity MBT 15 10 Pier IX SSA Marine 15 PA Other Northwest 10 CSX/Curtis Bay CA 2 Great Lakes 8 Deepwater 10 Southwest Midwest Other Texas 5 108 8 81 Mobile 18 **Gulf** Coast Southeast United Other AL 66 31 Charleston 8

Sources: ACI, NMA, Port Terminal Presentations

2010A* 2011A* Projected

*Includes overland shipments to Canada/Mexico **Capacity available for U.S. sourced volumes

Mid-streaming



Opportunities in Metallurgical Coal Markets

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After months of sluggishness, met coal markets may be poised for recovery



- U.S. steel capacity utilization has risen significantly since 2009
- Chinese steel production is rebounding steadily, up nearly 3% year-to-date through April

The rise of mega-cities will drive steel consumption trends over the next decade



Growth in seaborne coal demand should outpace supply over the next four years

Cumulative deficit of nearly

300 Million

short tons from 2013-2016

Projected Deficit in Seaborne Coal Supply Trade



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Arch has considerable cost advantages versus new coal development projects around the world

As pressures mount in the fastest growing supply regions, U.S. coal should become even more competitive on the global stage. With Arch's exceptional reserve base, we expect far lower capital requirements for incremental met and thermal volumes.





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Power generators have historically shifted their fuel focus every few years ... and that will continue

1	Late 1990s	 Natural gas plants in favor due to perceived "gas bubble" Nuclear viewed as politically infeasible Coal's growth limited to higher utilization at existing base
2	Early 2000s	 As natural gas prices rose, it fell out of favor Coal became the fuel of choice, with 100 GW to be built Nuclear still on the sidelines
3	Mid 2000s	 Climate concerns tempered coal's growth Natural gas viewed as too expensive and too volatile Nuclear and renewables gained significant traction
4	Late 2000s	 Nuclear renaissance gave way to Great Recession Shale gas emerged, natural gas back in the spotlight Limitations of renewables became more apparent
5	Early 2010s	 Shale gas bubble hurts renewable build-out Fukushima disaster sets back nuclear indefinitely Coal's growth limited but when will sentiment change?

EPA regulations will force coal plant retirements by 2018, but the impact on coal use could be muted



Incremental increases in natural gas prices should allow coal to move back into the money

Cumulative Loss to Natural Gas since 2008 (in millions of tons)



Price assumptions per ton: PRB: \$15, WBIT: \$40, CAPP: \$75

Heat rate assumptions: single cycle gas: 11,000, combined cycle gas: 7,000, PRB coal plant: 10,000

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Population growth and a renaissance in manufacturing could drive power demand

U.S. power demand could be set for a rebound as underlying changes in population and the economy drive electricity demand.

U.S. Industrial Load (in megawatt hours)





Population Growth (in millions of people)

U.S. population growth will drive residential/commercial power needs. Since 2000, per capita growth in these power segments was 6%.

Coal's story has long been driven by supply constraints

Appalachian thermal coal is in long-term secular decline. Arch expects thermal output in the region to decline by another 30 million tons or more in 2012.



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U.S. coal market is evolving ... with fewer, stronger players





Arch is well positioned in an evolving coal landscape

- Global demand drivers are strong
- International coal consumption is expected to increase dramatically
- Arch should regain lost volumes as domestic consumption normalizes
- Arch is poised to capitalize on favorable trends to create shareholder value



Executing Our Strategic Vision

Jeff Strobel

Vice President — Business Development & Strategy

West Virginia | May 2012

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Arch has built a strong, low-cost thermal coal portfolio with Montana significant expansion potential Unused capacity at Arch's existing thermal operations Carbon plus future organic growth Basin projects could support meaningful expansion in Paw Paw production by 2020, reducing replacement South Hilight capital needs Lost Prairie Excess Thermal reserves Capacity in PRB Available, excess production capacity (in millions of tons) 35 Slide 3

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M&A remains a part of our strategy, but we're focused on extracting value from our existing asset base

- Always disciplined and opportunistic, while concentrating on long-term strategic potential of assets and reserves
- Currently focused on optimizing asset base
 - Unlocking hidden value of assets and reserves
 - Potentially divesting non-core assets and reserves
- Continue to evaluate smaller, strategic additions that could complement our existing portfolio

As always, we're actively managing the portfolio

Arch has historically been a buyer and seller of assets utilizing a portfolio approach

Arch is currently considering the potential divestiture of non-core assets and reserves

2004

Monetized held-in-fee reserves and used the proceeds to fund the acquisition of North Rochelle, re-deploying capital in a more strategic direction for the company

2005

Sold four operations and reserves to private equity firm, lowering our risk by reducing legacy liabilities, strengthening our balance sheet and sharpening our focus on core assets in the CAPP region



Future Plans

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Arch's export strategy is paving the way for the future

Proven Coal Reserves

861 billion metric tonnes in 2010 (marked Russia W Europe 23% United States China India 29% 14% 7% Indonesia Colombia 2% South Afric Australia 40/

Source: 2010 BP Statistical Review

We're aggressively expanding our East Coast coal export network

East Coast ports will facilitate exports of Appalachian metallurgical and thermal coal

- 22% interest in DTA in Newport News
 - In discussions to expand the 20million-tpy facility
- Throughput rights at Lamberts Point and Baltimore ports
- In negotiations with partners to secure throughput capacity at other ports
- Potential to move coal through the Gulf as well



Slide 8

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We're building our Gulf Coast export network to liberate eastern and western coal into the seaborne coal trade

Gulf opportunities geared toward moving thermal coal into Atlantic and Pacific markets

- Long-term throughput arrangement with Kinder Morgan at river-served IMT in New Orleans and rail-served Deepwater in Houston
- Access to river docks in Illinois, barge and stevedoring capacity for mid-streaming in Gulf
- Pursuing opportunities along Gulf Coast and Texas for increased export optionality as Panama Canal expands



U.S. coal — and Arch Coal — will play an increasingly important role in the Pacific Basin

- 38% stake in Millennium Bulk Terminal, proposed port project in Longview, WA
 - Permit submitted for 25-million-tpy facility, scalable up to 44 million tonnes
- Secured throughput capacity at Ridley to penetrate Asian market
- Exporting Western Bituminous coal through ports in California
- Continue to pursue opportunities along the west coast of North America to unlock the vast potential of western U.S. coal in seaborne markets



Slide 10





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Successful reductions in criteria pollutants since 1970



Beyond expanding our coal business, we're making select investments to expand the market for coal

- Arch has dedicated \$50+ million to date to advance U.S. clean coal technologies
 - U.S. Department of Energy, National Carbon Capture Center
 - Washington University, Consortium for Clean Coal Utilization
 - University of Wyoming, School of Energy Resources
 - DKRW, Mine-Mouth Coal-to-Liquids Facility
 - ADA, Environmental Solutions
 - Tenaska, Inc., Trailblazer Energy Center



Slide 13

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Coal conversion could create future market opportunities

- Global success in converting coal into higher-value products
- In China alone there are over 50 operating coal conversion plants using proven technology for production of fuels and chemicals with at least 10 more currently in development and construction
- Current oil prices and hedging strategies are at levels that support coal conversion into transportation fuels





We'll also continue to evaluate strategic opportunities for growth that enhance shareholder value

Portfolio Optimization

- Consider bolt-on asset or reserve plays that add incremental value and solidify leadership position in core markets
- Enhance asset portfolio to optimize value

Profitable Partnerships

- Consider equity stakes in core and new market regions to enhance strategic positioning
- Make select investments aimed at expanding markets for coal (port capacity, technology)

Leveraging Competencies

- Leverage strong safety and stewardship reputation and diverse mining expertise
- Expand core competency in thermal markets and growing presence in met markets



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Building Financial Strength

John Drexler

Senior Vice President & Chief Financial Officer

West Virginia | May 2012

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Arch has substantially enhanced its liquidity and financial flexibility

$\sim^{\$}$ 1 Billion available liquidity



- Completed a refinancing of \$2 billion secured facility
 - \$1.4 billion term loan
 - \$600 million revolving credit facility
- Arch has no long-term debt maturities until 2016

Secured \$1.4 billion term loan, strengthened cash position



Flexible, low-cost source of funds

- Proceeds from conventional term loan used to redeem AWR bonds and eliminate borrowings under credit facility
- Strong investor interest allowed upsizing
- 6-year term, pre-payable with modest prepayment penalties in first two years
- All-in yield of 6%
- No financial maintenance covenants

*Pro-forma as of March 31, 2012, considering the effect of refinancing and redeeming AWR bond and revolver borrowings

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Slide 3

Amended \$600 million revolving credit facility, relaxed covenant obligations

- Unanimous approval from Arch's 34 banks, with key relationship banks leading the charge
- Financial maintenance covenants relaxed until mid-2014
 - Allows Arch to manage the business appropriately in current market
 - Partnered with banks to set achievable minimum performance targets
 - Minimum EBITDA replaces Debt to TTM EBITDA through June 2014
 - Strong support from bank group through the refinancing demonstrates their view of the inherent value of Arch's asset base



Further streamlined capital and reporting structure

- In the process of redeeming the AWR notes
- All remaining debt will be held at the parent level
 - All operating subsidiaries and assets will be used to secure revolver and term loan
 - All operating subsidiaries will guarantee unsecured notes
- Simplifies SEC reporting requirements

Arch has ample liquidity to manage through the current cycle without raising additional equity

- Focused on improving shareholder return by reducing costs, capital expenditures and production targets to match market demand
- Made tough decision to reduce dividend to preserve capital at the bottom of the market cycle
- Accounts receivable securitization program provides an additional cost-effective source for short-term borrowings and letters of credit
- Considering potential divestiture of non-core assets and reserves



Arch maintains very low legacy liabilities versus major peers

Annual Expense of Legacy Liabilities

(12/31/11, in millions)



Legacy Liabilities of Largest U.S. Coal Companies (12/31/11, in millions)



Sources: ACI estimates, public data

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Slide 8

As markets strengthen, Arch's free cash flow generation will improve substantially

ILLUSTRATIVE EXAMPLE ONLY	PRB	Metallurgical
Theoretical sales volume (in million tons)	100	8
Theoretical increase in market price	\$2	\$20
Revenue increase (in millions)	\$200	\$160
Sales-sensitive costs	~28%	~15%
EBITDA increase (in millions)	\$145	\$135

- Modest price increases can have a significant impact on EBITDA and free cash flow generation
 - Volume increases and/or cost reductions also can positively impact EBITDA
- Immediate priority for free cash flow will be to maintain adequate cash and reduce leverage

We have optimized the capital structure to weather tough conditions, and will benefit from improving coal markets

Current downturn is primarily cyclical, and Arch's diversified operations and competitive cost position will allow us to emerge as an even stronger player

	Current Focus	As Cycle Turns
Flexible Capital Structure	 Manage capital Control costs Rationalize supply Continue met development Maximize value of asset base 	 Improve leverage Return capital to stakeholders Invest in the business via organic and strategic growth

Slide 10



Striving for Operational Excellence

Paul Lang

Executive Vice President & COO

West Virginia | May 2012

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Arch leads the coal industry in safety and environmental compliance

Lost-Time Safety Incident Rate (per 200,000 employee-hours worked)



ACI Environmental Compliance

(SMCRA violations based on state reports)



In 2011, four of our major mining complexes and facilities achieved *A Perfect Zero* – no reportable injuries and no SMCRA environmental violations

Arch's safety record led the industry in 2011, and we are leading the way again in 2012

- Best in peer group for lost-time and total incident rates in 2011
 - Ranked No. 1 in safety among large, diversified U.S. coal producers
 - 42 individual mines and facilities achieved a perfect safety record
 - Earned 25 national and state awards for safety excellence, including two of three national MSHA Sentinels of Safety awards
- Remain on track in safety leadership in 2012
 - Eight major complexes and facilities completed the first quarter with *A Perfect Zero* in safety and environmental compliance
 - Received six safety awards so far this year for exemplary safety practices at six different mines

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Slide 3

U.S. coal industry has a good record on safety, and is committed to making further improvements



- Incident Rates of Occupational Injuries in U.S. (number of nonfatal incidents per 100 full-time workers in 2010)
- Coal mining has achieved enormous improvements in worker safety
- The industry is intensifying its efforts via the CORE Safety philosophy, which Arch was instrumental in developing with the National Mining Association

Arch is proud to lead the coal industry in environmental performance

2011 Environmental Compliance (SMCRA violations based on state reports*)



- Best in peer group for environmental compliance
 - Ranked No. 1 among major peers
 - 42 of Arch's individual mines and facilities achieved zero SMCRA violations in 2011
- Focused on aligning former ICG operations with Arch's performance

*Totals do not reflect any peer NOVs that may have been vacated during an appeals process

Slide 5





Arch strives for excellence in environmental stewardship

- 2012 awards reflect industry-leading environmental care
 - Eight major complexes and facilities completed the first quarter of 2012 without incurring a SMCRA environmental violation
 - Received four awards for environmental excellence so far in 2012 at four different mines
- Deep commitment to compliance
 - Senior and operational management's compensation tied to the company's safety and environmental performance

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Arch has earned a solid reputation in corporate citizenship

- Good governance provides a foundation for ethical practices and promotes corporate sustainability and shareholder trust
- Named a national Good Neighbor by the U.S. Department of Interior five times
- Arch Coal Foundation established in 2006 with a focus on education
 - Signature Arch Coal Teacher Achievement Awards
 - Biannual Corporate
 Social Responsibility report
- Acting responsibly is a central tenet of our long-term success





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Arch's customer mix by key operating region is balanced and diversified

Arch Customer Mix

(2011, measured by tons sold)







Western Bituminous

Arch has access to all Class I railroads and major inland waterways



- Arch's shipments are roughly balanced along Class I railroads in the East and West
- The company also owns a dock on the Big Sandy River and has access to upriver docks in Illinois that serve to enhance the portfolio of transportation and blending options

Slide 10

Arch's customer base is expanding beyond domestic borders



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Arch is a leading producer of metallurgical and thermal coal in Appalachia



- Roughly 43% of Arch's volumes in Appalachia are currently sold into met markets or export thermal markets
- Expect Arch's met leverage to increase as organic growth projects come online
- Low-cost, thermal portfolio increasingly geared toward export market

Arch's metallurgical coal build-out will expand platform and upgrade overall product slate

- With the acquisition of ICG, Arch gained lowvol and high-vol A met coal production, immediately upgrading its product slate
- With the build-out of Leer, Shelby Run and other reserves in Tygart Valley, Arch's met coal quality mix will increase further



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Arch's met coal platform will shift toward higher-quality coking coals over time



Arch's Leer mine represents an outstanding growth opportunity

- One of the industry's most promising metallurgical projects
- Construction of coal-handling facilities is 70% complete
- Mining conditions will be similar to our Sentinel operation
- Cash costs expected within Arch's current cost range with anticipated high-vol A realizations in the triple digits



Slide 15

Arch also is focused on cultivating a low-cost, sustainable thermal coal portfolio in Appalachia

- Offering wide range of products
 - Expanding access to ports along the East Coast
- Tackling cost escalation
- Ongoing rationalization of highercost thermal mines
 - Idled five thermal mines, cut back other production in the region
- Reviewing entire asset and reserve portfolio for strategic fit



Slide 16

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Arch is the second largest producer in the southern Powder River Basin



- Highest Btu coal in the southern PRB with largest available, excess capacity
- Offering diverse products to customers (8,800/8,400 Btu and variable sulfur content)
- Excellent reserve base to sustain future growth
- Pursuing opportunities to expand market for PRB coal globally

Powder River Basin is the nation's largest and most cost-competitive coal producing basin



- Growth of PRB coal on a national scale has been impressive over last 10 years
- We could see similar growth of PRB coal in seaborne coal markets this decade



Slide 18

ArchCoal

2010

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Arch is the largest producer in the Western Bituminous Region

2020P



- Operate large longwall mines in mature coal producing region
- Moving high-quality, lowsulfur bituminous coal to eastern and western U.S. markets
- Penetrating seaborne markets into Europe, Africa, South America and Asia
- Undeveloped Carbon Basin reserves provide optionality

Arch's platform in the Illinois Basin provides a compelling future growth opportunity

722 Million



- Viper Mine is low-cost and highly competitive
- Arch owns a 49% equity stake in Knight Hawk, which sold over four million tons in 2011
- Arch has built a large portfolio of low-chlorine assets in the basin, which should yield a significant advantage in the market
- With the construction of Lost Prairie, Arch could have 10+ million tons of production in this basin, destined for domestic and export thermal markets

Sources: ACI, Ventyx

*49% equity interest

Slide 20





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Arch's costs in Appalachia reflect a blend of metallurgical and thermal coal production





- Mix shift toward met coal will trend costs higher overall
- Reducing headcount and shutting higher cost thermal mines should help lower costs, but will be offset by the impact of lower volume levels

Arch is bringing ICG synergies to the bottom line

General & Administrative:

- Eliminated duplicate functions
- Improved purchasing contracts and insurance rates
- Consolidated offices in West Virginia

• Operating:

- Merged Lone Mountain/Powell Mountain
- Updated Leer mine's preparation plant design based on Mountain Laurel
- Upgraded Beckley/Sentinel prep plants
- Combining/rationalizing operations
- Marketing:
 - Expand direct met sales internationally
 - Custom blending to further enhance met product slate
 - Some synergies to come as markets improve and Leer accelerates production



Slide 23

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Arch's costs in the Powder River Basin are highly driven by current operating levels

Cash Cost Per Ton



- Idling equipment and reducing production are taking unwanted tons out of the market
- Going forward, we will balance our production with market indicators and be ready to bring our available capacity back online

Arch's costs in the Western Bituminous Region are a function of complex geology offset by longwall efficiency

Cash Cost Per Ton



*Includes brokered coal, transportation, equipment leases and other fixed overhead ** As given on 5/1/12

Slide 25





Looking ahead, we're tackling cost escalation in all regions

- Plant efficiency projects
- Coal blending and revenue optimization projects
- Automation projects:
 - Semi-autonomous tractors
 - Semi-autonomous drills
- Capital re-deployment
- Dual fuel options on large capacity trucks and fuel efficiency projects
- Underground productivity tracking and equipment feedback
- Blasting fragmentation and cast performance

Slide 26

ArchCoal

Powering the Working World.

We're focused on delivering shareholder value

1	Safety & Environmental Excellence	 World's safest coal miners Strong environmental stewardship practices Good corporate citizen translates into reputational value
2	Cost Control	 Improving efficiencies and cutting costs in near term Right-sizing operations and rationalizing supply Evaluating the divestiture of non-core assets
3	Higher Margin Growth	 Pursuing higher-return met projects Aggressively moving to expand coal export network Diversifying and reducing overall risk



Powering the Working World.

Beckley Mine Overview

Joe Tussey President & General Manager, Beckley Mining Complex West Virginia May 2012

Beckley sits in the heart of Arch's Appalachia assets



Slide 2

ArchCoal

systems

Powering the Working World.

The Beckley mine's past and future projects





Beckley has grown production

Tons Produced

(in thousands of tons)



Sources: MSHA and ACI

ArchCoal

Powering the Working World.

Beckley is focused on continuous improvement in safety performance

- Beckley's safety record has improved since the acquisition
- Beckley implemented the BBS program in 2012
- Beckley mine rescue team is among the best in class





ArchCoal[®]

Beckley is committed to responsible environmental stewardship

- Operated without an environmental violation for the past 3.5 years
- Awarded the Greenlands Award by the West Virginia Division of Environmental Protection
- Awarded the "Gold" Good Neighbor Award by U.S. Department of Interior







Our employees are committed to ongoing and meaningful community service projects

Beckley's Community Advisory Panel — in conjunction with local high school students and the community — sponsored an annual cleanup of areas near the community of Eccles



Slide 7



Powering the Working World.

Beckley is a highly productive mine

- Coal Seam: Pocahontas 3 (4.5' avg. seam thickness)
- Reserve Base: ~30 million tons
- Coal Seam Access:
 - Intake Shaft (~800' deep) with elevator
 - Return Shaft (~800' deep) with ventilation fan
 - Slope for material transport
- Three "Super Sections": Each section operates two continuous miners simultaneously
- Operation Schedule:
 - Two Sections: operate 7 days/week
 - One Section: operates 5 days/week
- Processing Facility: 600 tons per hour
- Rail Loadout: Coal is loaded directly on CSX rail line

The Beckley brand is one of the highest quality metallurgical coals available

Quality Metrics	Theoretical Best Quality	Beckley	Peak Downs Benchmark
Moisture	•	•	
Ash	•	•	
Sulfur	•	•	•
Volatile	•	•	
Reflectance	•	•	•
CSR	•	•	•
Fluidity	•		•
Arnu Dilation	•	•	•

Slide 9

ArchCoal

Powering the Working World.



Strong domestic customer base, increasing export opportunities

- Focused on expanding Beckley's customer base internationally
- Opportunities for blending coal at Arch's Dominion Terminal Associates (DTA) facility to create unique customer blends

Beckley 2011 Tons Sold



Beckley follows the room-and-pillar mining method



- Rooms & Pillars
 - Rooms are mined areas
 - Pillars carry load above the coal seam
- Equipment
 - Continuous Miners
 - Shuttle Cars
 - Roof Bolters
 - Scoops
 - Feeders

Slide 11

Beckley's high-tech plant prepares coal for market

- A preparation plant includes conveyor belts, raw coal silo, thickener, crushers, screens, cyclones, spirals, flotation and stacker tubes
- Coal is processed to remove impurities, ensure a consistent quality and enhance suitability for end users



Slide 12

ArchCoal[®]

Powering the Working World.



Beckley's coal is transferred onto trains via the rail loadout

- Beckley has loading capacity of 4,000 tons per hour
- Each train shipment carries approximately 8,000 tons
- Served by CSX rail



Today's tour will include the mine and plant



Underground

- Tour of a 200-million-year-old swamp
- Continuous miners
- Shuttle cars
- Roof bolters
- Conveyor belts



Preparation Plant

- Tour of a coal "factory"
- Coal & rock separated based on different weights
- Heavy media flotation
- Cyclones
- Spirals
- Froth flotation

Slide 14