# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

**WASHINGTON, DC 20549** 

### **FORM 11-K**

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Annual Report Pursuant to Section 15(d) of the Securities Exchange Act of 1934

For the fiscal year ended December 31, 2012

OR

o Transition Report Pursuant to Section 15(d) of the Securities Exchange Act of 1934

For the transition period from

to

Commission file number: 1-13105

#### Arch Coal, Inc. Employee Thrift Plan

(Full title of the plan and the address of the plan, if different from that of the issuer named below)

Name and Address of the issuer of the Securities Held Pursuant to the Plan —

### Arch Coal, Inc.

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

(Name of issuer of the securities held pursuant to the plan and the address of its principal executive office)

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Report Of Independent Registered Public Accounting Firm

We have audited the accompanying statement of net assets available for benefits of the Arch Coal, Inc. Employee Thrift Plan (the Plan) as of December 31, 2012 and 2011, and the related statement of changes in net assets available for benefits for the years then ended. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The plan is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the plan's control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Plan at December 31, 2012 and 2011, and the changes in net assets available for benefits for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

/s/ RubinBrown LLP St. Louis, Missouri June 26, 2013

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## ARCH COAL, INC. EMPLOYEE THRIFT PLAN STATEMENT OF NET ASSETS AVAILABLE FOR BENEFITS

	December 31,			
	2012			2011
Assets				
Investments, At Fair Value				
Cash	\$	_	\$	114,095,755
Money market fund		2,984,948		2,876,866
Mutual funds		183,527,248		141,841,419
Stable value fund		114,032,035		81,339,807
Company stock		23,324,416		27,824,221
Collective trust funds		184,188,130		109,830,970
Brokerage securities		10,026,856		10,837,571
Total Investments At Fair Value		518,083,633		488,646,609
Receivables				
Notes receivable from participants		29,767,784		30,770,198
			-	
Net Assets Reflecting Investments At Fair Value		547,851,417		519,416,807
· ·				
Adjustment From Fair Value To Contract Value For Fully Benefit-Responsive Investment Contracts		(4,400,632)		(3,717,995)
•				
Net Assets Available For Benefits	\$	543,450,785	\$	515,698,812
				<u> </u>
See the accompanying notes to financial statements.				
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**Total Deductions** 

#### ARCH COAL, INC. EMPLOYEE THRIFT PLAN STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS

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		For The Years Ended December 31,				
	2012	2012				
Additions To Net Assets Attributed To:						
Contributions						
Participant salary deferral	\$ 34,876	,202 \$	25,739,721			
Company	27,299	004	20,470,322			
Participant after-tax	1,820	034	1,455,507			
Rollover	1,772	330	1,115,450			
Total Contributions	65,767	570	48,781,000			
Deductions From Net Assets Attributed To:						
Benefits paid directly to participants	75,412	796	32,079,198			
Administrative fees		608	521,037			

76,084,404

32,600,235

Investment Income (Loss):		
Dividends and interest	9,859,399	7,817,887
Net appreciation (depreciation) in fair value of investments	27,100,271	(39,592,854)
Net Investment Income (Loss)	36,959,670	(31,774,967)
Interest Income On Notes Receivable From Participants	1,109,137	809,020
Transfer Of Assets Into Plan	_	122,954,529
Net Increase	27,751,973	108,169,347
Net Assets Available For Benefits - Beginning Of Year	515,698,812	407,529,465
Net Assets Available For Benefits - End Of Year	\$ 543,450,785	\$ 515,698,812

See the accompanying notes to financial statements.

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#### ARCH COAL, INC. EMPLOYEE THRIFT PLAN NOTES TO FINANCIAL STATEMENTS December 31, 2012 And 2011

#### 1. Description Of The Plan

The Arch Coal, Inc. Employee Thrift Plan (the Plan) was established by Arch Coal, Inc. (the Company) for the benefit of the eligible employees of the Company, its subsidiaries and controlled affiliates.

The following description of the Plan provides only general information. Participants should refer to the Plan Document for a more complete description of the Plan's provisions.

Certain provisions of the Plan, as described below, do not apply to or have been modified for certain subsidiaries and affiliates of the Company.

#### General

The Plan is a defined contribution plan that covers substantially all salaried employees, nonunion hourly employees, and certain union employees where specified by applicable collective bargaining agreements of the Company, its subsidiaries, and any controlled affiliates that elect to participate in the Plan. It is subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA).

During 2011, the Company completed the acquisition of International Coal Group Inc. (ICG). On December 31, 2011, the assets of the International Coal Group, Inc. 401(k) Savings and Retirement Plan totaling \$122,954,529, consisting of cash totaling \$114,095,755 and notes receivable from participants totaling \$8,858,774, were transferred into the Plan. Employees of ICG became participants of the Plan at that time.

#### Contributions

Participants may elect to defer between 1% and 50% of compensation. Highly compensated employees may contribute up to 16% of compensation. The Company is required to make matching contributions to all participants equal to 100% of the participant salary deferral contributions up to the first 6% of eligible compensation, with the exception of participants who are hourly eligible employees of Mountain Laurel who receive a fixed 8% employer contribution.

The Plan includes an automatic enrollment provision for all eligible employees. The automatic enrollment provides for default salary deferral contributions of 6% of eligible compensation, which will be invested in a target retirement fund. The participant has the option to make changes to the salary deferral percentage and investment allocation at any time.

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#### ARCH COAL, INC. EMPLOYEE THRIFT PLAN

Notes To Financial Statements (Continued)

#### **Participant Accounts**

Each participant's account is credited with the participant's salary deferral contributions; the Company's matching contribution, and Company discretionary contributions, if applicable, and an allocation of Plan earnings. The allocation of earnings is determined by the earnings of the participant's investment selection based on each participant's account balance, as defined in the Plan Document. In addition, each participant's account is charged for applicable Plan expenses. The benefit to which a participant is entitled is the benefit that can be provided from the participant's vested account.

#### Vesting

Participants are fully vested in their salary deferral contributions plus actual earnings. All eligible employees of the Company at December 31, 1997 became fully vested in the Plan. Eligible employees hired subsequent to December 31, 1997 vest in Company contributions and earnings upon the completion of three full years of service. The hourly employees at Mountain Laurel are fully vested after the completion of two full years of service.

All participants become fully vested upon death while employed, total disability, or normal retirement age, regardless of the number of months of participation.

#### **Notes Receivable From Participants**

Active participants, with some exceptions, may borrow from their account a minimum of \$500 or up to a maximum equal to the lesser of \$50,000 or 50% of their vested account balances. Note terms range from one to five years or up to fifteen years for the purchase of a primary residence. The notes are secured by the balance in the participant's account and bear interest at the prime rate listed in the Wall Street Journal on the first day of the month the loan is processed. Principal and interest are paid ratably through weekly and bi-weekly payroll deductions. At December 31, 2012, interest rates on the notes receivable range from 3.25% to 8.50%. The final installments are due at various dates through August 2027.

#### **Payment Of Benefits**

Upon death, termination of service, or attainment of age 70-1/2, a participant may receive a lump-sum amount equal to the value of the participant's vested interest in his or her account. Participant accounts with vested balances of \$1,000 or less will be automatically distributed unless otherwise instructed.

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#### ARCH COAL, INC. EMPLOYEE THRIFT PLAN

Notes To Financial Statements (Continued)

#### **In-Service Withdrawals**

Subject to certain qualifications, upon reaching age 59-1/2 or upon experiencing a qualifying financial hardship, a participant may withdraw of all or part of his or her vested account. Hardship withdrawals will be approved only if they conform to the Plan provisions and established Internal Revenue Service (IRS) safe harbors. A participant may also withdraw all or part of his or her vested portion of Company contributions if he or she has participated in the Plan for at least three consecutive years. A participant may withdraw after-tax participant contributions after he or she has participated in the Plan for 12 months.

#### **Forfeited Accounts**

Forfeited amounts of Company contributions are used to offset future Company contributions to the Plan. At December 31, 2012 and 2011, forfeited amounts that were available to reduce future Company contributions were \$529,830 and \$300,227, respectively. During the Plan years ended December 31, 2012 and 2011, \$1,304,971 and \$584,897, respectively, in forfeited funds were used to offset Company contributions.

#### **Investment Options**

Upon enrollment in the Plan, a participant may direct contributions in a number of investment options offered by the Plan.

#### **Administrative Expense**

Generally, all expenses related to the administration of the Plan are paid from Plan assets.

#### Reclassifications

Certain balances within the 2011 financial statements have been reclassified to conform to the 2012 financial statement presentation.

### 2. Summary Of Significant Accounting Policies

#### **Basis Of Accounting**

The financial statements of the Plan are prepared under the accrual basis of accounting.

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#### ARCH COAL, INC. EMPLOYEE THRIFT PLAN

Notes To Financial Statements (Continued)

#### **Estimates And Assumptions**

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of additions to and deductions from net assets during the reporting period. Actual results could differ from those estimates.

#### **Investment Valuation And Income Recognition**

The Plan's investments are reported at fair value. Fair value is the price that would be received in an asset sale or paid to transfer a liability in an orderly transaction between market participants at the measurement date. See Note 3 for a discussion of fair value measurements.

Investment income is recorded as earned on the accrual basis. Purchases and sales of securities are recorded on a trade-date basis. Dividends are recorded on the ex-dividend date.

Investment contracts held by a defined-contribution plan are required to be reported at fair value. However, contract value is the relevant measurement attribute for that portion of the net assets available for benefits of a defined-contribution plan attributable to fully benefit-responsive investment contracts because contract value is the amount participants would receive if they were to initiate permitted transactions under the terms of the Plan. The Plan invests in fully-benefit responsive investment contracts through its investment in the Invesco Stable Value Fund. The Statement of Net Assets Available for Benefits presents the fair value of the investment contracts, as well as the adjustment of the fully benefit-responsive investment contracts from fair value to contract value. The Statement of Changes in Net Assets Available for Benefits is prepared on a contract value basis.

#### **Notes Receivable From Participants**

Notes receivable from participants are measured at their unpaid principal balance plus any accrued but unpaid interest. Delinquent participant notes are reclassified as distributions based upon the terms of the Plan Document.

#### **Payment Of Benefits**

Benefits are recorded when paid.

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#### ARCH COAL, INC. EMPLOYEE THRIFT PLAN

Notes To Financial Statements (Continued)

#### 3. Investments

The Company has established a Retirement Committee to oversee the activities of the Plan and has appointed the Vice President - Human Resources as the Plan Administrator. Mercer Fiduciary Trust Company is the Trustee for the Plan and Mercer HR Services is the Plan's Recordkeeper.

Investments consist of the following at:

estinents consist of the following at.		
	D	ecember 31,
	2012	2011
Cash And Cash Equivalents		
Cash	\$	— \$ 114,095,755 <sup>3</sup>
Money Market Funds	2,984,9	
Total Cash And Cash Equivalents	2,984,9	
Total Cash And Cash Equivalents	2,504,5	110,572,021
Mutual Funds		
American Century Income and Growth Fund	15,518,4	<b>12</b> 16,090,329
Growth Fund of America	32,737,9	
Investment Company of America	4,866,3	<b>15</b> 8,487,637
Royce Special Equity Fund	5,667,1	<b>86</b> 2,966,172
Dodge & Cox Balanced Fund	55,330,2	<b>14</b> * 45,847,093
Franklin Templeton Balance Sheet Fund	12,039,8	9,840,584
Artio International Equity Fund	13,483,9	7,886,081
PIMCO Total Return Fund	34,624,8	<b>65</b> * 24,630,768
Jennison Mid Cap Growth Fund	9,258,5	6,065,929
Total Mutual Funds	183,527,2	<b>48</b> 141,841,419
Stable Value Fund		
(At Contract Value)	109,631,4	<b>.03</b> * 77,621,812
(in contract value)		77,021,012
Company Stock	23,324,4	27,824,221
Collective Trust Funds		
Wells Fargo Dow Jones Target Today	1,447,7	
Wells Fargo Dow Jones Target 2010	4,046,1	
Wells Fargo Dow Jones Target 2015	5,266,4	
Wells Fargo Dow Jones Target 2020	26,320,0	
Wells Fargo Dow Jones Target 2025	10,031,5	
Wells Fargo Dow Jones Target 2030	16,951,9	
Wells Fargo Dow Jones Target 2035	11,681,4	
Wells Fargo Dow Jones Target 2040	17,978,1	
Wells Fargo Dow Jones Target 2045	15,008,4	, ,
Wells Fargo Dow Jones Target 2050	14,588,4	<b>44</b> 9,020,724

Northern Trust Collective S&P 500 Equity		
Index Fund	60,867,695*	51,685,282*
Total Collective Trust Funds	 184,188,130	 109,830,970
Brokerage Securities	10,026,856	10,837,571
	\$ 513,683,001	\$ 484,928,614

<sup>\*</sup>Investment represents 5% or more of net assets at the end of the respective Plan year.

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#### ARCH COAL, INC. EMPLOYEE THRIFT PLAN

Notes To Financial Statements (Continued)

During 2012 and 2011, the Plan's investments, including gains and losses on investments bought and sold, as well as held during the year, appreciated (depreciated) in value as follows:

	 2012	 2011
Mutual funds	\$ 19,982,289	\$ (9,683,540)
Company stock	(13,615,918)	(29,830,923)
Collective trust funds	21,518,095	1,038,753
Brokerage securities	(784,195)	(1,117,144)
	\$ 27,100,271	\$ (39,592,854)

#### **Stable Value Fund**

The Plan invests in the Invesco Stable Value Fund (the Fund), a benefit-responsive investment managed exclusively for the Plan by Invesco Institutional, N.A. (Invesco). Invesco maintains the contributions in a managed account, which is credited with earnings on the underlying investments and charged for participant withdrawals and administrative expenses. The Fund's key objectives are to provide preservation of principal, maintain a stable interest rate, and provide daily liquidity at contract value for participant withdrawals and transfers in accordance with the provisions of the Plan.

The Fund invests in synthetic guaranteed investment contracts (GICs), which are wrap contracts paired with an underlying investment or investments, usually a portfolio, owned by the Plan, of common collective trust funds. The Fund purchases wrapper contracts from financial services institutions. Synthetic GICs credit a stated interest rate for a specified period of time. Investment gains and losses are amortized over the expected duration through the calculation of the interest rate applicable to the Plan on a prospective basis. Synthetic GICs provide for a variable crediting rate, which typically resets monthly and quarterly, and the issuer of the wrap contract provides assurance that future adjustments to the crediting rate cannot result in a crediting rate less than zero. The crediting rate is primarily based on the current yield-to-maturity of the covered investments, plus or minus amortization of the difference between the market value and contract value of the covered investments over the duration of the covered investments at the time of the computation. The crediting rate is most affected by the change in the annual effective yield-to-maturity of the underlying securities, but is also affected by the difference between the contract value and the market value of the covered investments. Depending on the change in duration from reset period to reset period, the magnitude of the impact to the crediting rate of the contract to market difference is heightened or lessened.

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#### ARCH COAL, INC. EMPLOYEE THRIFT PLAN

Notes To Financial Statements (Continued)

As described in Note 2, because the Fund is fully benefit-responsive, contract value is the relevant measurement attribute for that portion of the net assets available for benefits attributable to the Fund. Participants may ordinarily direct the withdrawal or transfer of all or a portion of their investment at contract value.

Certain events limit the ability of the Plan to transact at contract value with the issuer. Such events include the following: (1) material, adverse amendments to the Plan documents (including complete or partial Plan termination or merger with another plan), or (2) the decision by the Company to withdraw all assets from the funds and reinvest in another investment vehicle. The Plan Administrator does not believe that the occurrence of any such value event, which would limit the Plan's ability to transact at contract value with participants, is probable.

The investment contracts included in the Fund had an average yield of 0.80% and 1.46% for the years ended December 31, 2012 and 2011, respectively. The average crediting interest rate was 1.78% and 2.77% at December 31, 2012 and 2011, respectively.

#### **Collective Trust Funds**

The Plan invests in a collective trust fund of which the primary objective is to approximate the risk and return of the S&P 500 Index. This index is commonly used to represent the large cap segment of the U.S. equity market. The Plan does not have any unfunded commitments relating to its investments or any significant restrictions on redemptions. Participant-directed redemptions can be made on any business day and do not have a redemption notice period.

#### **Target Date Funds**

The Plan invests in collective trust funds in which the primary objective is to approximate the risk and return of the Dow Jones Target Index Funds. The funds invest in a combination of equity, fixed income and money market securities using an asset allocation strategy. The Plan does not have any unfunded commitments relating to their investments or any significant restrictions on redemptions. Participant-directed redemptions can be made on any business day and do not have a redemption notice period.

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#### ARCH COAL, INC. EMPLOYEE THRIFT PLAN

Notes To Financial Statements (Continued)

#### **Fair Value Measurements**

The Plan follows current accounting standards, which establish a framework for measuring fair value. The framework provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value are described below:

Level 1 Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Plan has the ability to access.

Level 2 Inputs to the valuation methodology include:

- · Quoted prices for similar assets or liabilities in active markets;
- · Quoted prices for identical or similar assets or liabilities in inactive markets;
- · Inputs other than quoted prices that are observable for the asset or liability;
- · Inputs that are derived principally from or corroborated by observable market data by correlation or other means.

If the asset or liability has a specified (contractual) term, the Level 2 input must be observable for substantially the full term of the asset or liability.

Level 3 Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

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#### ARCH COAL, INC. EMPLOYEE THRIFT PLAN

Notes To Financial Statements (Continued)

The asset's or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs.

Following is a description of the valuation methodologies used for assets measured at fair value:

#### **Money Market Fund And Mutual Funds**

Valued at the net asset value (NAV) of shares held by the Plan at year end, based on quoted market prices.

#### **Stable Value Fund**

Valued at NAV based on the market value of the underlying investment assets divided by the number of units outstanding at the end of the Plan year. The fund seeks to provide preservation of principal, maintain a stable interest rate and provide daily liquidity at contract value for participant withdrawals and transfers in accordance with the provisions of the Plan.

#### **Collective Trust Funds**

Valued at NAV as determined by the Trustee based on the market value of the underlying investment assets divided by the number of units outstanding at the end of the Plan year.

#### **Company Stock And Brokerage Securities**

Valued at the closing price reported on the active market on which the individual securities are traded.

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#### ARCH COAL, INC. EMPLOYEE THRIFT PLAN

Notes To Financial Statements (Continued)

The following tables set forth by level, within the fair value hierarchy, the Plan's investments at fair value as of:

			December	r 31, 2012			
	Level 1		Level 2	Level 3	Level 3		Total
\$	2 984 948	\$		\$	_	\$	2,984,948
Ψ	2,304,340	Ψ		Ψ		Ψ	2,304,340
	47,663,697		_		_		47,663,697
			_		_		55,330,214
			_		_		18,350,237
	, ,		_		_		27,558,235
			_		_		34,624,865
	183,527,248						183,527,248
			122 220 425				123,320,435
	_						60,867,695
		_					184,188,130
	<u> </u>		104,100,130				104,100,130
	_		114,032,035		_		114,032,035
	23,324,416		_		_		23,324,416
	10,026,856						10,026,856
\$	219,863,468	\$	298,220,165	\$	_	\$	518,083,633
_	Level 1		Level 2	r 31, 2011 Level 3			Total
\$	2 876 866	\$	_	\$	_	\$	2,876,866
Ψ	2,070,000	Ψ		Ψ		Ψ	2,070,000
	29 058 927		_		_		29,058,927
			<u> </u>		_		45,847,093
			_		_		16,373,718
			_		_		25,930,913
			_		_		24,630,768
	141,841,419						141,841,419
			58 1/15 688				58,145,688
							51,685,282
							109,830,970
		_	103,030,370	<u> </u>		_	103,030,370
	_		81,339,807		_		81,339,807
	27,824,221		_		_		27,824,221
	10,837,571				_		10,837,571
	10,007,071						
	\$ \$ \$	\$ 2,984,948  47,663,697 55,330,214 18,350,237 27,558,235 34,624,865 183,527,248	\$ 2,984,948 \$  47,663,697 55,330,214 18,350,237 27,558,235 34,624,865 183,527,248	Level 1       Level 2         \$ 2,984,948       \$ —         47,663,697       —         55,330,214       —         18,350,237       —         27,558,235       —         34,624,865       —         183,527,248       —         —       60,867,695         —       184,188,130         —       114,032,035         23,324,416       —         —       10,026,856         —       Evel 1         Level 2       Evel 2         \$ 2,876,866       \$ —         29,058,927       —         45,847,093       —         16,373,718       —         25,930,913       —         24,630,768       —         141,841,419       —         —       58,145,688         —       51,685,282         —       109,830,970         —       81,339,807         27,824,221       —	Level 1     Level 2     Level 3       \$ 2,984,948     \$ — \$       47,663,697     —       55,330,214     —       18,350,237     —       27,558,235     —       34,624,865     —       183,527,248     —       —     123,320,435       —     60,867,695       —     184,188,130       —     114,032,035       23,324,416     —       10,026,856     —       =     —       becember 31, 2011     Level 1       Level 1     Level 2       Level 3     Level 3       \$ 2,876,866     \$ —       \$ 2,876,866     \$ —       \$ 2,876,866     \$ —       \$ 2,876,866     \$ —       \$ 2,876,866     \$ —       \$ 2,876,866     \$ —       \$ 2,876,866     \$ —       \$ 2,876,866     \$ —       \$ 2,876,866     \$ —       \$ 2,876,866     \$ —       \$ 2,876,866     \$ —       \$ 2,876,866     \$ —       \$ 2,876,866     \$ —       \$ 2,876,866     \$ —       \$ 2,876,866     \$ —       \$ 2,876,866     \$ —       \$ 2,876,866     \$ —       \$ 2,876,866     \$ —    <	Level 1     Level 2     Level 3       \$ 2,984,948     \$ — \$ —       47,663,697     — — —       55,330,214     — — —       18,350,237     — — —       27,558,235     — — —       34,624,865     — — —       183,527,248     — — —       — — 60,867,695     — —       — — 114,032,035     — —       23,324,416     — — — —       10,026,856     — — —       — — — —     114,032,035     — —       Evel 1     Level 2     Level 3       \$ 2,876,866     \$ — \$ —     —       29,058,927     — — —     —       45,847,093     — — —     —       16,373,718     — — —     —       25,930,913     — — —     —       24,630,768     — — —     —       141,841,419     — — —     —       — — —     51,685,282     — —       — — —     109,830,970     —       — — —     81,339,807     — —       — — —     27,824,221     — —	Level 1     Level 2     Level 3       \$ 2,984,948     \$ — \$ — \$     \$       47,663,697     — — — — — — — — — — — — — — — — — — —

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#### ARCH COAL, INC. EMPLOYEE THRIFT PLAN

Notes To Financial Statements (Continued)

There have been no changes in the methodologies used at December 31, 2012 or 2011.

#### 4. Plan Termination

Although it has not expressed intent to do so, the Company has the right under the Plan to discontinue its contributions at any time and to terminate the Plan, subject to the provisions of ERISA. In the event of Plan termination, participants will become 100% vested in their accounts.

#### 5. Income Tax Status

The Plan obtained its latest determination letter on July 17, 2009 in which the IRS stated that the Plan, as then designed, was in compliance with the applicable requirements of the Internal Revenue Code. The Plan has been amended since receiving the determination letter. The Plan Administrator believes the amendments made will maintain the tax qualification of the Plan and the related trust will continue to be tax exempt.

Accounting principles generally accepted in the United States of America require Plan management to evaluate tax positions taken by the Plan and recognize a tax liability (or asset) if the Plan has taken an uncertain position that more likely than not would not be sustained upon examination by the IRS. The Plan is subject to routine audits by taxing jurisdictions; however, there are currently no audits for any tax periods in progress. The Plan's federal tax returns for tax years 2009 and later remain subject to examination by taxing authorities.

#### 6. Risks And Uncertainties

The Plan invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect participants' account balances and the amounts reported in the Statement of Net Assets Available For Benefits.

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#### ARCH COAL, INC. EMPLOYEE THRIFT PLAN

Notes To Financial Statements (Continued)

#### 7. Related Party Transactions

The Plan's investments include shares of Company common stock. The Company is the Plan Sponsor, and therefore, these transactions qualify as allowable party-in-interest transactions.

#### 8. Reconciliation Of Financial Statements To Form 5500

Following is a reconciliation of net assets available for benefits and net increase per the financial statements to the Form 5500:

	December 31,			
		2012		2011
Net assets available for benefits per the financial statements	\$	543,450,78	<del>\$</del>	515,698,812
Adjustment from contract value to fair value for fully benefit-responsive contracts		<b>4,400,6</b> 3	32	3,717,995
	ф	E 4E 0E4 44		E40 446 00E
Net Assets Available For Benefits Per The Form 5500	\$	547,851,41	17 \$	519,416,807
		For 1 Year F Decemb 201	inded per 31,	
Net increase per the financial statements		\$ 27	,751,973	
Adjustment from contract value to fair value for fully benefit-responsive contracts prior year		(3	,717,995)	
Adjustment from contract value to fair value for fully benefit-responsive contracts current year		4	,400,632	
Net Increase Per The Form 5500		\$ 28	,434,610	

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#### Report Of Independent Registered Public Accounting Firm On Supplementary Information

Our audit was performed for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental schedule of assets held at end of year is presented for purposes of additional analysis and is not a required part of the basic financial statements, but is supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. This supplemental schedule is the responsibility of the Plan's management. The supplemental schedule has been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

/s/ RubinBrown LLP St. Louis, Missouri June 26, 2013

### ARCH COAL, INC. EMPLOYEE THRIFT PLAN E.I.N.: 43-0921172 PLAN NO.: 006 SCHEDULE OF ASSETS HELD AT END OF YEAR Page 1 Of 2

**December 31, 2012** 

Identity Of Issuer	Description Of Investment	Current Value
Money Market Fund		
TD Ameritrade	TDAM Money Market Portfolio	2,984,948
Mutual Funds		
American Century	American Century Income and Growth Fund	15,518,412
American Fund Corporation	Growth Fund of America	32,737,951
American Fund Corporation	Investment Company of America	4,866,315
Royce	Royce Special Equity Fund	5,667,186
Dodge & Cox Funds	Dodge & Cox Balanced Fund	55,330,214
Franklin Investments	Franklin Templeton Balance Sheet Fund	12,039,823
Artio Investments	Artio International Equity Fund	13,483,922
PIMCO Investments	PIMCO Total Return Fund	34,624,865
Jennison Investments	Jennison Mid Cap Growth Fund	9,258,560
<b>Total Mutual Funds</b>		183,527,248
Company Stock		
Arch Coal, Inc.*	Common stock	23,324,416
Collective Trust Funds		
Wells Fargo	Wells Fargo Dow Jones Target Today	1,447,763
Wells Fargo	Wells Fargo Dow Jones Target 2010	4,046,108
Wells Fargo	Wells Fargo Dow Jones Target 2015	5,266,458
Wells Fargo	Wells Fargo Dow Jones Target 2020	26,320,025
Wells Fargo	Wells Fargo Dow Jones Target 2025	10,031,586
Wells Fargo	Wells Fargo Dow Jones Target 2030	16,951,995
Wells Fargo	Wells Fargo Dow Jones Target 2035	11,681,474
Wells Fargo	Wells Fargo Dow Jones Target 2040	17,978,142
Wells Fargo	Wells Fargo Dow Jones Target 2045	15,008,440
Wells Fargo	Wells Fargo Dow Jones Target 2050	14,588,444
Northern Trust	Collective Daily S&P 500 Equity Index Fund	60,867,695
Total Collective Trust Funds	• •	184,188,130
Brokerage Securities		
Mercer Securities*	Mercer Securities Account (Participant Directed Brokerage Accounts)	10,026,856
	(	
Balance Carried Forward		404,051,598
	17	
	1/	

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#### ARCH COAL, INC. EMPLOYEE THRIFT PLAN E.I.N.: 43-0921172 PLAN NO.: 006 SCHEDULE OF ASSETS HELD AT END OF YEAR Page 2 Of 2 **December 31, 2012**

Identity Of Issuer Description Of Investment			Current Value
Balance Brought Forward		\$	404,051,598
Stable Value Fund			
Aviva Life	IGT Aviva 1-5 Year Government Fund		18,304,178
Aviva Life	IGT Aviva Core Fixed Income Fund		4,569,730
ING Life & Annuity	IGT Invesco Short-Term Bond Fund		19,664,805
ING Life & Annuity	IGT ING Short Duration		6,173,832
Monumental Life Insurance Co.	IGT Invesco Short-Term Bond Fund		15,677,976
Monumental Life Insurance Co.	IGT Invesco Core Fixed Income Fund		2,606,437
Monumental Life Insurance Co.	IGT BlackRock Core Fixed Income Fund		2,604,008
Monumental Life Insurance Co.	IGT Goldman Sachs Core		2,610,423
Monumental Life Insurance Co.	IGT PIMCO Core Fixed Income Fund		2,603,544
Monumental Life Insurance Co.	Wrapper Contract		32,450
Prudential Insurance Company	IGT Jennison Intermediate Government/Credit Fund		9,164,888

Prudential Insurance Company	IGT Invesco Intermediate Government/Credit Fund	9,176,514
Prudential Insurance Company	IGT PIMCO Intermediate Government/Credit Fund	9,168,836
State Street Bank & Trust Co.	Money Market Fund	11,674,414
<b>Total Stable Value Fund</b>		114,032,035
Plan Participants*	Notes receivable, bearing interest at 3.25% - 9.25%, due at various dates	
•	through August 2027	29,767,784
Total		\$ 547,851,417
* Represents party-in-interest		

The above information is a required disclosure for IRS Form 5500, Schedule H, Part IV, line 4i.

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#### Signatures

Pursuant to the requirements of the Securities Exchange Act of 1934, the trustees (or other persons who administer the employee benefit plan) have duly caused this annual report to be signed on their behalf by the undersigned thereunto duly authorized.

Arch Coal, Inc. Employee Thrift Plan

By: /s/ John Ziegler, Jr.

John Ziegler, Jr. Plan Administrator

June 26, 2013

#### **Table of Contents**

#### **Exhibit Index**

Exhibit	Description
23.1	Consent of Independent Registered Public Accounting Firm

#### Consent Of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in Registration Statement on Form S-8 (No. 333-32777) of Arch Coal, Inc. of our report dated June 26, 2013 with respect to the financial statements and supplemental schedule of the Arch Coal, Inc. Employee Thrift Plan included in this Annual Report on Form 11-K for the year ended December 31, 2012.

/s/ RubinBrown LLP St. Louis, Missouri June 26, 2013