

ARCH COAL INC  
Form 11-K  
June 26, 2009

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, DC 20549**

**FORM 11-K**

(Mark One)

**Annual Report Pursuant to Section 15(d) of the Securities Exchange Act of 1934  
For the fiscal year ended December 31, 2008**

**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)

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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***ARCH COAL, INC.***  
***EMPLOYEE THRIFT PLAN***  
***FINANCIAL STATEMENTS***  
***DECEMBER 31, 2008***

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**Report of Independent Registered Public Accounting Firm**

To The Pension Committee

Arch Coal, Inc. Employee Thrift Plan

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, 2008 and 2007, 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. An audit includes 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 internal 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 at December 31, 2008 and 2007, 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.

As discussed in Note 3 to the financial statements, the Company adopted Statement of Financial Accounting Standards No. 157, *Fair Value Measurements*, as of January 1, 2008.

/s/ RubinBrown LLP

St. Louis, Missouri

June 26, 2009

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

|   | <b>December 31,</b>   |                       |
|---|-----------------------|-----------------------|
|   | <b>2008</b>           | <b>2007</b>           |
| <b>Assets</b>   |                       |                       |
| <b>Investments, At Fair Value (Note 3)</b>  |                       |                       |
| Money market  | \$ 1,660,650          | \$ 2,855,837          |
| Mutual funds  | 143,106,710           | 212,749,496           |
| Guaranteed investment account   | 58,563,311            | 55,425,773            |
| Company stock   | 22,387,100            | 32,456,196            |
| Brokerage securities  | 7,772,231             | 14,211,712            |
| Participant loans (Note 4)  | 13,661,732            | 13,068,103            |
| <b>Net Assets Reflected At Fair Value</b>   | <b>247,151,734</b>    | <b>330,767,117</b>    |
| <b>Receivables</b>  |                       |                       |
| Employer contributions receivable   | 613,354               |                       |
| Employer correction contribution receivable (Note 8)  |                       | 2,000,000             |
| Employee contributions receivable   | 793,456               |                       |
| <b>Total Receivables</b>  | <b>1,406,810</b>      | <b>2,000,000</b>      |
| <b>Adjustment From Fair Value To Contract Value For Fully Benefit-Responsive Investment Contracts</b> | <b>2,246,423</b>      | <b>(431,713)</b>      |
| <b>Net Assets Available For Benefits</b>  | <b>\$ 250,804,967</b> | <b>\$ 332,335,404</b> |

See the accompanying notes to financial statements.

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

|   | <b>For The Years<br/>Ended December 31,</b> |                      |
|---|---|----------------------|
|   | <b>2008</b>                                 | <b>2007</b>          |
| <b>Additions To Net Assets Attributed To:</b>                 |   |                      |
| <b>Contributions</b>  |   |                      |
| Salary deferral   | \$ 21,569,194                               | \$ 18,822,753        |
| Employer  | 15,540,598                                  | 16,777,799           |
| Employee after-tax  | 1,464,768                                   | 1,267,997            |
| Rollover  | 886,051                                     | 1,493,489            |
| <b>Total Contributions</b>                                    | <b>39,460,611</b>                           | <b>38,362,038</b>    |
| <b>Deductions From Net Assets Attributed To:</b>              |   |                      |
| Benefits paid directly to participants                        | 21,808,914                                  | 34,206,968           |
| Administrative fees   | 12,300                                      | 11,156               |
| <b>Total Deductions</b>                                       | <b>21,821,214</b>                           | <b>34,218,124</b>    |
| <b>Investment Income (Loss) (Note 3)</b>                      |   |                      |
| Dividends and interest  | 9,239,721                                   | 18,661,425           |
| Net appreciation (depreciation) in fair value of investments  | (108,409,555)                               | 7,391,119            |
| <b>Net Investment Income (Loss)</b>                           | <b>(99,169,834)</b>                         | <b>26,052,544</b>    |
| <b>Net Increase (Decrease)</b>                                | <b>(81,530,437)</b>                         | <b>30,196,458</b>    |
| <b>Net Assets Available For Benefits    Beginning Of Year</b> | <b>332,335,404</b>                          | <b>302,138,946</b>   |
| <b>Net Assets Available For Benefits    End Of Year</b>       | <b>\$ 250,804,967</b>                       | <b>\$332,335,404</b> |

See the accompanying notes to financial statements.

**ARCH COAL, INC. EMPLOYEE THRIFT PLAN**  
**NOTES TO FINANCIAL STATEMENTS**  
**December 31, 2008 And 2007**

**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 Agreement 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, which has been adopted by Arch Coal, Inc., is a defined contribution plan, which includes a 401(k) provision. The Plan 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).

On June 29, 2007, the Company completed the sale of its Mingo Logan subsidiary's Ben Creek mining complex to Alpha Natural Resources, LLC. The divestiture of the complex resulted in the termination of 215 employees, who became eligible to withdraw their balances from the Plan.

**Contributions**

Participants may elect to defer between 1% and 50% of compensation. Highly compensated employees may contribute up to 16%, with the exception of the highly compensated hourly employees at Mingo Logan and Mountain Laurel who may contribute up to 17%. The employer is required to make matching contributions equal to 100% of participant contributions up to the first 6% of eligible compensation.

Effective March 1, 2008, the Plan was amended to allow highly compensated hourly employees at Mingo Logan and Mountain Laurel to contribute up to 16% of eligible compensation.

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

### Notes To Financial Statements (*Continued*)

The Plan includes an automatic enrollment provision for all eligible employees. The automatic enrollment provided for default deferral contributions of 6% of eligible compensation. The contributions will be invested in both equity and fixed income investments. The participant has the option to make changes to the deferral percentage and investment allocation at any time.

### **Participant Accounts**

Each participant's account is credited with the participant's contributions; the employer's matching contribution, if applicable, or employer nondiscretionary contribution, 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 agreement. The benefit to which a participant is entitled is the benefit that can be provided from the participant's account.

### **Vesting**

Participants are fully vested in their 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 Mingo Logan and Mountain Laurel are fully vested after the completion of two full and consecutive 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.

### **Participant Loans**

Active participants, with some exceptions, may borrow from their fund accounts a minimum of \$500 or up to a maximum equal to the lesser of \$50,000 or 50% of their vested account balances. Loan terms range from one to five years or longer for the purchase of a primary residence. The loans 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 payroll deductions.

### **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.



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

Notes To Financial Statements (*Continued*)

**Forfeited Accounts**

Forfeited amounts of employer contributions are used to offset future Company matching contributions of the Plan. At December 31, 2008 and 2007, forfeited amounts that became available to reduce future Company contributions were \$861,806 and \$418,932, respectively. During the Plan years ended December 31, 2008 and 2007, \$618,407 and \$192,487, 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.

**Withdrawals**

Subject to certain qualifications, participants may take an in-service withdrawal of their after-tax or company matching contributions. A participant who has reached age 59-1/2 or experienced a qualifying financial hardship may withdraw 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 safe harbors.

**2. Summary Of Significant Accounting Policies**

**Basis Of Accounting**

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

**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.

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

Notes To Financial Statements (*Continued*)

### **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.

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

The Plan's investments are reported at fair value. Fair value is the price that would be received to sell an asset 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.

As described in Financial Accounting Standards Board Staff Position, FSP AAG INV-1 and SOP 94-4-1, *Reporting of Fully Benefit-Responsive Investment Contracts Held by Certain Investment Companies Subject to the AICPA Investment Company Guide and Defined-Contribution Health and Welfare and Pension Plans* (the FSP), 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. As required by the FSP, 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.

### **Payment Of Benefits**

Benefits are recorded when paid.

**ARCH COAL, INC. EMPLOYEE THRIFT PLAN**Notes To Financial Statements (*Continued*)**3. Investments**

The Company has established a Pension 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 Recordkeeper.

**Investments, At Fair Value**

|  | <b>December 31,</b> |                     |
|--|---------------------|---------------------|
|  | <b>2008</b>         | <b>2007</b>         |
| <b>Money Market</b>                                  | <b>\$ 1,660,650</b> | <b>\$ 2,855,837</b> |
| <b>Mutual Funds</b>                                  |                     |                     |
| American Century Income and Growth Fund              | 15,712,585 *        | 26,975,227 *        |
| Growth Fund of America                               | 15,671,703 *        | 27,844,828 *        |
| Investment Company of America                        | 4,420,739           | 3,787,854           |
| Black Rock Small Cap Core Equity Fund                | 1,985,880           | 3,279,890           |
| Dodge & Cox Balanced Fund                            | 18,083,515 *        | 27,707,522 *        |
| Franklin Templeton Balance Sheet Fund                | 9,443,162           | 20,148,075 *        |
| Julius Baer International Equity Fund                | 11,562,049          | 25,451,843 *        |
| PIMCO Total Return Fund                              | 21,721,712 *        | 16,826,961          |
| Putnam Asset Allocation: Balanced Fund               | 13,842,042 *        | 18,557,507          |
| Putnam S&P 500 Index                                 | 20,053,231 *        | 24,396,716 *        |
| Putnam Vista Fund                                    | 3,955,676           | 10,891,592          |
| Wells Fargo Advantage Outlook 2010                   | 1,211,344           | 1,875,639           |
| Wells Fargo Advantage Outlook 2020                   | 1,812,897           | 2,220,572           |
| Wells Fargo Advantage Outlook 2030                   | 1,513,526           | 1,419,013           |
| Wells Fargo Advantage Outlook 2040                   | 2,116,649           | 1,366,257           |
| <b>Total Mutual Funds</b>                            | <b>143,106,710</b>  | <b>212,749,496</b>  |
| <b>Guaranteed Investment Account (At Fair Value)</b> | <b>58,563,311 *</b> | <b>55,425,773 *</b> |
| <b>Company Stock</b>                                 | <b>22,387,100 *</b> | <b>32,456,196 *</b> |
| <b>Brokerage Securities</b>                          | <b>7,772,231</b>    | <b>14,211,712 *</b> |
| <b>Participant Loans</b>                             | <b>13,661,732 *</b> | <b>13,068,103</b>   |

**\$ 247,151,734**

\$ 330,767,117

\* Investment  
represents 5%  
or more of net  
assets.

**ARCH COAL, INC. EMPLOYEE THRIFT PLAN**Notes To Financial Statements (*Continued*)

During 2008 and 2007, 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:

|                      | 2008                    | 2007                |
|----------------------|-------------------------|---------------------|
| Mutual funds         | \$ (76,070,878)         | \$ (5,187,032)      |
| Company stock        | (25,481,582)            | 11,405,856          |
| Brokerage securities | (6,857,095)             | 1,172,295           |
|                      | <b>\$ (108,409,555)</b> | <b>\$ 7,391,119</b> |

The Plan has entered into a benefit-responsive investment contract (investment contract) with Invesco Ltd (Invesco) which maintains the contributions in a managed account. The account is credited with earnings on the underlying investments and charged for participant withdrawals and administrative expenses. The investment contract issuer is not contractually obligated to repay the principal and a specified interest rate to the Plan. However, the underlying assets of the fund carry guaranteed rates of interest.

As described in Note 2, because the investment contract is fully benefit-responsive, contract value is the relevant measurement attribute for that portion of the net assets available for benefits attributable to the investment contract. Contract value, as reported to the Plan by Invesco, represents contributions made under the investment contract, plus earnings, less participant withdrawals and administrative expenses. Participants may ordinarily direct the withdrawal or transfer of all or a portion of their investment at contract value.

There are no reserves against contract value for credit risk of the investment contract issuer. Interest income on the Invesco Stable Value Fund is calculated and credited daily based on the aggregate contract yield of the underlying investments. Interest rates are reset on a monthly basis. The investment contracts included in this fund had an average yield of 3.91% and 4.88% for the years ended December 31, 2008 and 2007, respectively. The average crediting interest rate was 4.46% and 4.96% at December 31, 2008 and 2007, respectively.

Certain events limit the ability of the Plan to transact at contract value with the issuer. Such events include the following: (1) amendments to the Plan documents (including complete or partial Plan termination or merger with another plan), or (2) the decision by the Plan Sponsor 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.

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

Notes To Financial Statements (*Continued*)

The contract permits the company or Invesco to terminate the agreement upon 90-days notice to the other party.

**Fair Value Measurements**

Effective January 1, 2008, the Plan has adopted Statement of Financial Accounting Standards (FAS) No. 157, *Fair Value of Measurements*, which establishes a framework for measuring fair value. That 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 hierarchy under FAS 157 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.

**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. There have been no changes in the methodologies used at December 31, 2008 or 2007.

**Company Stock And Brokerage Securities**

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

**Mutual Funds And Money Market**

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

**Participant Loans**

Valued at amortized cost, which approximates fair value.

**Guaranteed Investment Account**

Valued at fair value by discounting the related cash flows based on current yields of similar instruments with comparable durations considering the credit-worthiness of the issuer.

The method described above may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while the Plan believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

**ARCH COAL, INC. EMPLOYEE THRIFT PLAN**Notes To Financial Statements (*Continued*)

The following table sets forth by level, within the fair value hierarchy, the Plan's assets at fair value as of December 31, 2008:

|                               | <b>Level 1</b> | <b>Level 2</b> | <b>Level 3</b> | <b>Total</b>   |
|-------------------------------|----------------|----------------|----------------|----------------|
| Money market                  | \$ 1,660,650   | \$             | \$             | \$ 1,660,650   |
| Mutual funds                  | 143,106,710    |                |                | 143,106,710    |
| Guaranteed investment account |                | 58,563,311     |                | 58,563,311     |
| Company stock                 | 22,387,100     |                |                | 22,387,100     |
| Brokerage securities          | 7,772,231      |                |                | 7,772,231      |
| Participant loans             |                |                | 13,661,732     | 13,661,732     |
| <br>                          |                |                |                |                |
| Total assets at fair value    | \$ 174,926,691 | \$ 58,563,311  | \$ 13,661,732  | \$ 247,151,734 |

The table below sets forth a summary of changes in the fair value of the Plan's Level 3 assets for the year ended December 31, 2008.

|   | <b>Participant<br/>Loans</b> |
|---|------------------------------|
| Balance, beginning of year                        | \$ 13,068,103                |
| Purchases, sales, issuances and settlements (net) | 593,629                      |
| Balance, end of year                              | \$ 13,661,732                |

**4. Participant Loans**

Participant loans are secured by participants' vested balances. The loans are due in bi-weekly payments including principal and interest at varying rates reflective of the prime rate as of the time of issue. At December 31, 2008, the interest rates on the participant loans range from 4% to 9.5%. The final installments are due at various dates through November 2023.



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

Notes To Financial Statements (*Continued*)

**5. 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.

**6. Income Tax Status**

The Plan obtained its latest determination letter on September 26, 2002 in which the Internal Revenue Service 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.

**7. Employer Correction Contribution Receivable**

During 2008, the Company found that 64 participants did not have the correct contribution deducted from their pay and deposited into their account for various years between 2001 and 2007. At that time, management had estimated these corrections plus earnings would be approximately \$2,000,000. The actual correction for employee deferrals, Company match, and earnings amounted to \$812,890 and were deposited into the participants' accounts in October 2008. In addition, the Company determined that the employer match had not been calculated correctly for 88 participants for that same period. The shortfall in employer match and earnings totaled \$44,775 and was deposited into the participants' accounts in October 2008.

**ARCH COAL, INC. EMPLOYEE THRIFT PLAN**Notes To Financial Statements (*Continued*)**8. Reconciliation Of Financial Statements To Form 5500**

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

|  | <b>December 31,<br/>2008</b> | 2007  |
|--|------------------------------|---|
| Net assets available for benefits per the financial statements                                   | <b>\$ 250,804,967</b>        | \$ 332,335,404  |
| Adjustment from contract value to fair value for fully benefit-responsive contracts              | <b>(2,246,423)</b>           | 431,713   |
| Net assets available for benefits per the Form 5500  | <b>\$ 248,558,544</b>        | \$ 332,767,117  |
|  |                              | <b>For The<br/>Year Ended<br/>December 31,<br/>2008</b> |
| Net decrease per the financial statements  |                              | \$ 81,530,437   |
| Adjustment from contract value to fair value for fully benefit-responsive contracts prior year   |                              | (431,713)   |
| Adjustment from contract value to fair value for fully benefit-responsive contracts current year |                              | (2,246,423)   |
| Net decrease per the Form 5500   |                              | \$ 78,852,301   |

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

Our audits were 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 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, 2009

**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, 2008**

| <b>Identity Of Issuer</b>      | <b>Description Of Investment</b>  | <b>Current Value</b> |
|--------------------------------|---|----------------------|
| <b>Money Market</b>            |   |                      |
| Federated                      | Prime Obligation Money Market Fund  | \$ 1,660,650         |
| <b>Mutual Funds</b>            |   |                      |
| American Century               | American Century Income and Growth Fund   | 15,712,585           |
| American Fund Corporation      | Growth Fund of America  | 15,671,703           |
| American Fund Corporation      | Investment Company of America   | 4,420,739            |
| Black Rock Funds               | Black Rock Small Cap Core Equity Fund   | 1,985,880            |
| Dodge & Cox Funds              | Dodge & Cox Balanced Fund   | 18,083,515           |
| Franklin Investments           | Franklin Templeton Balance Sheet Fund   | 9,443,162            |
| Julius Baer Group              | Julius Baer International Equity Fund   | 11,562,049           |
| PIMCO Investments              | PIMCO Total Return Fund   | 21,721,712           |
| Putnam Investments*            | Putnam Asset Allocation: Balanced Fund  | 13,842,042           |
| Putnam Investments*            | Putnam S&P 500 Index  | 20,053,231           |
| Putnam Investments*            | Putnam Vista Fund   | 3,955,676            |
| Wells Fargo                    | Wells Fargo Advantage Outlook 2010  | 1,211,344            |
| Wells Fargo                    | Wells Fargo Advantage Outlook 2020  | 1,812,897            |
| Wells Fargo                    | Wells Fargo Advantage Outlook 2030  | 1,513,526            |
| Wells Fargo                    | Wells Fargo Advantage Outlook 2040  | 2,116,649            |
| <b>Total Mutual Funds</b>      |   | <b>143,106,710</b>   |
| <b>Company Stock</b>           |   |                      |
| Arch Coal, Inc. *              | Common stock  | 22,387,100           |
| <b>Brokerage Securities</b>    |   |                      |
| Putnam*                        | Putnam Direct Personal Choice Retirement Account<br>(Participant Directed Brokerage Accounts) | 7,772,231            |
| <b>Balance Carried Forward</b> |   | <b>174,926,691</b>   |

\* Represents party-in-interest

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



**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, 2008**

| <b>Identity Of Issuer</b>                  | <b>Description Of Investment</b>   | <b>Current Value</b> |
|--|--|----------------------|
| <b>Balance Brought Forward</b>             |  | \$ 174,926,691       |
| <b>Guaranteed Investment Account</b>       | <b>Invesco</b>   |                      |
| <b>Stable Value Fund</b>                   |  |                      |
| Bank of America NT & SA                    | 01-257   | 13,078,872           |
| ING Life & Annuity                         | 60034  | 13,178,555           |
| JP Morgan Chase Bank                       | 433119-MGC   | 10,245,890           |
| Monumental Life Insurance Co.              | MDA-00589TR  | 8,831,708            |
| State Street Bank & Trust Co.              | 103077   | 10,230,110           |
| State Street Bank & Trust Co.              | MC7930   | 2,998,176            |
| <b>Total Guaranteed Investment Account</b> |  | <b>58,563,311</b>    |
| <b>Participant Loans</b>                   | Bearing interest at 4% -9.5%, due at various dates through November 2023 | 13,661,732           |
|  |  | \$ 247,151,734       |

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

**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/ Sheila B. Feldman  
Sheila B. Feldman  
Plan Administrator

June 26, 2009

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**Exhibit Index**

| Exhibit | Description  |
|---------|--|
| 23.1    | Consent of Independent Registered Public Accounting Firm |