

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 11-K

**ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934**

For The Fiscal Year Ended December 31, 2004

OR

**TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934**

Commission File Number 1-13105

Title of the Plan –

ARCH COAL, INC. EMPLOYEE THRIFT PLAN

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

[Table of Contents](#)

FINANCIAL STATEMENTS AND EXHIBIT

Financial Statements And Schedule

Report Of Independent Registered Public Accounting Firm

Statement Of Net Assets Available For Benefits

Statement Of Changes In Net Assets Available For Benefits

Notes To Financial Statements

Schedule Of Assets Held At End Of Year

Exhibit:

23.1 Consent Of Rubin, Brown, Gornstein & Co. LLP Independent Registered Public Accounting Firm

*ARCH COAL, INC.
EMPLOYEE THRIFT PLAN
FINANCIAL STATEMENTS
DECEMBER 31, 2004*

Table of Contents

Contents

	Page
<u>Report Of Independent Registered Public Accounting Firm</u>	1
Financial Statements	
<u>Statement Of Net Assets Available For Benefits</u>	2
<u>Statement Of Changes In Net Assets Available For Benefits</u>	3
<u>Notes To Financial Statements</u>	4-9
Supplementary Information	
<u>Report Of Independent Registered Public Accounting Firm On Supplementary Information</u>	10
<u>Schedule Of Assets Held At End Of Year</u>	11-12
 <u>Consent of Independent Registered Public Accounting Firm</u>	

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 as of December 31, 2004 and 2003 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 examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits at December 31, 2004 and 2003, 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/ Rubin, Brown, Gornstein & Co. LLP

St. Louis, Missouri
June 20, 2005

ARCH COAL, INC. EMPLOYEE THRIFT PLAN

STATEMENT OF NET ASSETS AVAILABLE FOR BENEFITS

	December 31,	
	2004	2003
Assets		
Investments, At Fair Value (Note 3)		
Money market	\$ 2,078,221	\$ 1,985,664
Mutual funds and common/collective fund	164,696,914	142,291,793
Guaranteed investment account	61,236,705	59,292,820
Company stock	15,133,166	15,679,214
Participant loans (Note 4)	11,880,873	10,618,988
Brokerage securities	16,637,272	12,041,905
Total Investments	271,663,151	241,910,384
Receivables		
Employee contributions	—	513,678
Employer contributions	—	371,371
Total Receivables	—	885,049
Net Assets Available For Benefits	\$ 271,663,151	\$ 242,795,433

See the accompanying notes to financial statements.

Page 4

ARCH COAL, INC. EMPLOYEE THRIFT PLAN

STATEMENT OF CHANGES IN NET ASSETS
AVAILABLE FOR BENEFITS

	For The Years Ended December 31,	
	2004	2003
Additions To Net Assets Attributed To:		
Investment Income (Note 3)		
Dividends and interest	\$ 6,290,664	\$ 5,040,693
Net appreciation in fair value of investments	19,449,026	33,730,404
Net Investment Income	25,739,690	38,771,097
Contributions		
Salary deferral contributions	12,890,588	12,578,170
Employer contribution	9,681,067	9,835,130
Employee after-tax contribution	1,122,335	1,107,542
Rollover contribution	413,592	248,317
Total Contributions	24,107,582	23,769,159
Total Additions	49,847,272	62,540,256
Deductions From Net Assets Attributed To:		
Benefits paid directly to participants	20,979,554	16,178,356
Net Increase	28,867,718	46,361,900
Net Assets Available For Benefits - Beginning Of Year	242,795,433	196,433,533
Net Assets Available For Benefits - End Of Year	\$ 271,663,151	\$ 242,795,433

See the accompanying notes to financial statements.

Page 3

ARCH COAL, INC. EMPLOYEE THRIFT PLAN

NOTES TO FINANCIAL STATEMENTS

December 31, 2004 And 2003

1. Description Of The Plan

The Arch Coal, Inc. Employee Thrift Plan (Plan) was established by Arch Coal, Inc. (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 Summary Plan Description 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 all full-time salaried employees, all full-time 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).

Contributions

Participants may elect to defer between 1 percent and 50% of compensation. Highly compensated employees may contribute up to 16%, with the exception of the highly compensated hourly employees at Mingo Logan who may contribute up to 17%. The percentage of employer match or nondiscretionary contribution depends upon the location.

Participant Accounts

Each participant's account is credited with the participant's contributions, the employer's matching contribution, if applicable, or employer non-discretionary 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.

ARCH COAL, INC. EMPLOYEE THRIFT PLAN

Notes To Financial Statements (*Continued*)

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 and consecutive years of service. The hourly employees at Mingo Logan 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 percent 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 is paid ratably through payroll deductions.

Payment Of Benefits

Upon death, termination of service, or attainment of age 70-1/2, a participant may elect to receive either a lump-sum amount equal to the value of the participant's vested interest in his or her account, a single annuity, a joint and survivorship annuity with various survivor options or a series of installment payments.

Forfeited Accounts

Forfeited amounts of employer contributions are used to offset future Company matching contributions of the Plan. At December 31, 2004 and 2003, forfeited amounts available to reduce future Company contributions were \$39,409 and \$32,660, respectively.

ARCH COAL, INC. EMPLOYEE THRIFT PLAN

Notes To Financial Statements (*Continued*)

2. Summary Of Significant Accounting Policies

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 revenues and expenses during the reporting period. Actual results could differ from those estimates.

Basis Of Accounting

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

Investment Valuation And Income Recognition

Investments in mutual funds are valued at reported net asset value at December 31 as determined by the fund manager.

Investment income is recorded as earned on the accrual basis.

Payment Of Benefits

Benefits are recorded when paid.

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. Putnam Fiduciary Trust Company is the trustee for the Plan and Putnam Investments is the Plan recordkeeper.

ARCH COAL, INC. EMPLOYEE THRIFT PLAN

Notes To Financial Statements (Continued)

Investments at fair value as of December 31, 2004 and 2003 consist of the following:

	December 31,	
	2004	2003
Putnam Money Market Fund	\$ 2,078,221	\$ 1,985,664
Mutual Funds And Common/Collective Fund		
American Century Income and Growth Fund	33,023,173*	31,939,049*
Barclay's Lifepath 2010	—	1,231,653
Barclay's Lifepath 2020	—	659,003
Barclay's Lifepath 2030	—	460,762
Barclay's Lifepath 2040	—	513,702
Dodge & Cox Balanced Fund	22,148,939*	17,197,822*
Fidelity Diversified International Equity Fund	12,285,398*	—
Fidelity Small Cap Fund	2,747,420	—
Franklin Templeton Balance Sheet Fund	20,582,889*	14,344,200*
Investment Company of America	1,414,736	807,633
PIMCO Total Return Fund	15,641,715*	14,780,880*
Putnam Asset Allocation: Balanced Fund	1,733,323	623,708
Growth Fund of America	18,556,267*	—
Putnam Growth Opportunities Fund	—	18,255,101*
Putnam International Equity Fund	—	10,363,034*
Putnam OTC Emerging Growth Fund	—	2,642,801
Putnam S&P 500 Index	22,702,828*	20,739,632*
Putnam Vista Fund	9,704,941	7,732,813
Wells Fargo 2010	1,882,094	—
Wells Fargo 2020	1,004,852	—
Wells Fargo 2030	564,358	—
Wells Fargo 2040	703,981	—
Total Mutual Funds And Common/Collective Fund	164,696,914	142,291,793
Arch Coal, Inc. Common Stock	15,133,166*	15,679,214*
Putnam Direct Personal Choice Retirement Account	16,637,272	12,041,905
Invesco Stable Value Fund	61,236,705*	59,292,820*
Participant Loans	11,880,873	10,618,988*
	\$ 271,663,151	\$ 241,910,384

*Investment represents 5% or more of net assets at the beginning of the respective Plan year.

ARCH COAL, INC. EMPLOYEE THRIFT PLAN

Notes To Financial Statements (Continued)

Changes In Net Assets Available For Benefits:

	For The Years Ended December 31,	
	2004	2003
Investment Income		
Dividends and interest	\$ 6,290,664	\$ 5,040,693
Net appreciation in fair value of investments	19,449,026	33,730,404
Net Investment Income	\$25,739,690	\$38,771,097

Interest income on the Invesco Stable Value Fund is calculated and credited daily based on the aggregate contract yield of the underlying investments. The investment contracts included in this fund had an average yield of 4.56% and 4.32% for the years ended December 31, 2004 and 2003, respectively. The average crediting interest rate was 4.59% and 4.58% at December 31, 2004 and 2003, respectively. The fair value of the investment contract was \$61,236,705 and \$59,292,820 at December 31, 2004 and 2003, respectively.

4. Participants Loans

Notes receivable are secured by participants' vested balances. The notes are due in bi-weekly payments including principal and interest at varying rates reflective of the prime rate as of the time of issue. The final installments are due at various dates.

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.

ARCH COAL, INC. EMPLOYEE THRIFT PLAN

Notes To Financial Statements (*Continued*)

6. 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 and the Plan's tax counsel believe the Plan is correctly designed and operated with the applicable requirements of the Internal Revenue Code. Therefore, the Plan Administrator believes the Plan was qualified and the related trust tax exempt.

7. Plan Amendments

Effective May 5, 2004, the Plan was amended to provide the hourly employees at Coal Mac (a division of Arch Coal, Inc.) 100% matching contributions on their salary deferrals, up to the first 6% of compensation. Prior to the amendment, these participants received a 50% match.

Effective August 20, 2004, the Plan was amended to exclude the former Triton employees from participation in the Plan. The former Triton employees continued to participate in the Triton Coal Company, LLC 401(k) Plan until its merger into the Arch Coal, Inc. Employee Thrift Plan on January 1, 2005.

8. Subsequent Events

On August 20, 2004, the Company purchased the equity of Vulcan Coal Holdings, L.L.C. of which Triton Coal Company, LLC (Triton) and Buckskin Coal Company, LLC (Buckskin) were subsidiaries. Subsequently, the assets of Buckskin were sold and the majority of the assets of Triton were transferred to an existing subsidiary of the Company. Triton maintained a defined contribution plan for all employees. Effective January 1, 2005, the Triton Coal Company, LLC 401(k) Plan was merged into the Arch Coal, Inc. Employee Thrift Plan. The former Triton employees continued to participate in the Triton Coal Company, LLC 401(k) Plan until December 31, 2004.

**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/ Rubin, Brown, Gornstein & Co. LLP

June 20, 2005

ARCH COAL, INC. EMPLOYEE THRIFT PLAN

E.I.N. 43-0921172 PLAN 006
SCHEDULE OF ASSETS HELD AT END OF YEAR
December 31, 2004
Page 1 Of 2

Identity Of Issuer	Description Of Investment	Current Value
Money Market		
Putnam Investments	Putnam Money Market Fund	\$ 2,078,221
Mutual Funds And Common/Collective Fund		
American Century	American Century Income and Growth Fund	33,023,173
American Fund Corporation	Investment Company of America	1,414,736
Wells Fargo	Wells Fargo Outlook 2010	1,882,094
Wells Fargo	Wells Fargo Outlook 2020	1,004,852
Wells Fargo	Wells Fargo Outlook 2030	564,358
Wells Fargo	Wells Fargo Outlook 2040	703,981
Dodge & Cox Funds	Dodge & Cox Balanced Fund	22,148,939
Franklin Investments	Franklin Templeton Balance Sheet Fund	20,582,889
PIMCO Investments	PIMCO Total Return Fund	15,641,715
Putnam Investments*	Putnam Asset Allocation: Balanced Fund	1,733,323
American Fund Corporation	Growth Fund of America	18,556,267
Fidelity Investments	Fidelity Small Cap Fund	2,747,420
Fidelity Investments	Fidelity Diversified International Equity Fund	12,285,398
Putnam Investments*	Putnam S&P 500 Index	22,702,828
Putnam Investments*	Putnam Vista Fund	9,704,941
Total Mutual Funds And Common/Collective Fund		164,696,914
Common Stock		
Arch Coal, Inc. *	Common stock	15,133,166
Participant Directed Brokerage Accounts		
Putnam*	Putnam Direct Personal Choice Retirement Account (Participants Directed Brokerage Accounts)	16,637,272
Balance Carried Forward		198,545,573

* 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 006
SCHEDULE OF ASSETS HELD AT END OF YEAR
December 31, 2004
Page 2 Of 2

Identity Of Issuer	Description Of Investment	Current Value
Balance Brought Forward		\$ 198,545,573
Guaranteed Investment Account - Invesco Stable Value Fund		
Bank of America NT & SA	01-257	11,014,004
Bank of America NT & SA Wrapper	01-257	
ING Life & Annuity	60034	7,881,569
ING Life & Annuity Wrapper	60034	
JP Morgan Chase Bank	433119-MGC	10,800,418
JP Morgan Chase Bank Wrapper	433119-MGC	
John Hancock Mutual Life Insurance Co.	9601-GAC	1,477,657
John Hancock Mutual Life Insurance Co. Wrapper	9601-GAC	
Mellon Bank STIF Account	6070002	1,468,054
Monumental Life Insurance Co.	MDA-00589TR	9,156,867
Monumental Life Insurance Co. Wrapper	MDA-00589TR	
State Street Bank & Trust Co.	103077	10,500,935
State Street Bank & Trust Co. Wrapper	103077	
Union Bank of Switzerland	5043	1,027,017
Union Bank of Switzerland	5155	7,910,184
Total Guaranteed Investment Account		61,236,705
Participant Loans	Bearing interest at 4% - 10%, due at various dates through October 2019	11,880,873
		<u>\$ 271,663,151</u>

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

SIGNATURE PAGE

Pursuant to the requirements of the Securities Exchange Act of 1934, the duly authorized Plan Administrator has executed this annual report.

ARCH COAL, INC. EMPLOYEE THRIFT PLAN

Date: July 29, 2005

By: /s/ Sheila Feldman
Sheila Feldman
Plan Administrator

INDEX TO EXHIBIT

Exhibit 23.1 Consent of Rubin, Brown, Gornstein & Co. LLP Independent Registered Public Accounting Firm

Consent Of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8 No. 333-32777) pertaining to the Arch Coal, Inc. Employee Thrift Plan of our report dated June 20, 2005, with respect to the financial statements and supplemental schedule of Arch Coal, Inc. Employee Thrift Plan included in this Annual Report on Form 11-K for the year ended December 31, 2004.

/s/ Rubin, Brown, Gornstein & Co. LLP

June 27, 2005