

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, 2002

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 City Place Drive, Suite 300
St. Louis, Missouri 63141

FINANCIAL STATEMENTS AND EXHIBITS

Financial Statements and Schedule

Independent Auditors' Report

Statement of Net Assets Available for Plan Benefits

Statement of Changes in Net Assets Available for Plan Benefits

Notes to Financial Statements

Schedule of Assets Held

Exhibits:

- 23 Consent of Rubin, Brown, Gornstein & Co. LLP, Independent Auditors
- 99.1 Statement Under Oath of Principal Executive Officer Regarding Facts and Circumstances Relating to Exchange Act Filings executed by Steven F. Leer
- 99.2 Statement Under Oath of Principal Financial Officer Regarding Facts and Circumstances Relating to Exchange Act Filings executed by Robert J. Messey

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ARCH COAL, INC.
EMPLOYEE THRIFT PLAN
FINANCIAL STATEMENTS
DECEMBER 31, 2002

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INDEPENDENT AUDITORS' REPORT

To the Audit Committee
Arch Coal, Inc. Employee Thrift Plan
St. Louis, Missouri

We have audited the accompanying statement of net assets available for plan benefits of the Arch Coal, Inc. Employee Thrift Plan as of December 31, 2002 and 2001 and the related statement of changes in net assets available for plan 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 audit.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America. 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 audit provides 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 plan benefits at December 31, 2002 and 2001, 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 17, 2003

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

	DECEMBER 31,	
	2002	2001
ASSETS		
INVESTMENTS, AT FAIR VALUE (NOTE 3)		
Money market	\$ 1,564,190	\$ 1,543,086
Mutual funds and common/collective fund	106,587,507	119,599,522
Guaranteed investment account	55,380,598	50,853,111
Company stock	15,495,457	16,289,419
Participant loans (Note 4)	9,618,429	9,924,227
Brokerage securities	7,787,352	8,809,499
TOTAL INVESTMENTS		
	196,433,533	207,018,864
NET ASSETS AVAILABLE FOR PLAN BENEFITS		
	\$ 196,433,533	\$ 207,018,864

See the accompanying report letter and notes to financial statements.

ARCH COAL, INC. EMPLOYEE THRIFT PLAN

STATEMENT OF CHANGES IN NET ASSETS
AVAILABLE FOR PLAN BENEFITS
FOR THE YEAR ENDED DECEMBER 31, 2002

	FOR THE YEARS ENDED DECEMBER 31,	
	2002	2001

ADDITIONS TO NET ASSETS ATTRIBUTED TO:		
INVESTMENT INCOME (LOSS) (NOTE 3)		
Dividends and interest	\$ 5,314,719	\$ 5,501,477
Net depreciation in fair value of investments	(26,599,478)	(21,381,000)

NET INVESTMENT INCOME (LOSS)	(21,284,759)	(15,879,523)

CONTRIBUTIONS		
Salary deferral contributions	13,252,073	12,433,338
Employer contribution	10,224,095	9,677,607
Employee after-tax contribution	1,301,353	1,413,284
Rollover contribution	417,482	710,788

TOTAL CONTRIBUTIONS	25,195,003	24,235,017

TOTAL ADDITIONS	3,910,244	8,355,494

DEDUCTIONS FROM NET ASSETS ATTRIBUTED TO:		
Benefits paid directly to participants	14,495,575	17,362,250

NET DECREASE	(10,585,331)	(9,006,756)

NET ASSETS AVAILABLE FOR PLAN BENEFITS - BEGINNING OF YEAR	207,018,864	216,025,620

NET ASSETS AVAILABLE FOR PLAN BENEFITS - END OF YEAR	\$ 196,433,533	\$ 207,018,864
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See the accompanying report letter and notes to financial statements.

NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2002 AND 2001

1. DESCRIPTION OF THE PLAN

The Arch Coal, Inc. Employee Thrift 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 profit sharing 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 percent of compensation, depending upon the location of the employee. Highly compensated employees may contribute up to 16%, with the exception of those employed at Mingo Logan who may contribute 17%. The percentage of employer match or nondiscretionary contribution also 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.

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.

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 day 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, 2002 and 2001, forfeited amounts available to reduce future Company contributions were \$273,997 and \$185,074, respectively.

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.

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

Investments at fair value as of December 31, 2002 and 2001 consist of the following:

	DECEMBER 31,	
	2002	2001
PUTNAM MONEY MARKET FUND	\$ 1,564,190	\$ 1,543,086
MUTUAL FUNDS AND COMMON COLLECTIVE FUND		
American Century Income and Growth Fund	23,606,930*	28,146,653*
Barclay's Lifepath 2010	599,395	160,372
Barclay's Lifepath 2020	554,161	488,589
Barclay's Lifepath 2030	223,176	130,407
Barclay's Lifepath 2040	238,111	201,744
Dodge & Cox Balanced Fund	12,219,588*	--
Franklin Templeton Balance Sheet Fund	10,406,097	9,063,457
Investment Company of America	67,188	--
PIMCO Total Return Fund	13,867,234*	10,070,589
Putnam Balanced Fund	63,475	14,858,769*
Putnam Growth Opportunities Fund	14,182,019*	19,755,092*
Putnam International Growth Fund	7,833,417	9,152,343
Putnam OTC Emerging Growth Fund	1,304,682	1,589,311
Putnam S&P 500 Index	16,023,021*	18,990,294*
Putnam Vista Fund	5,399,013	6,991,902
TOTAL MUTUAL FUNDS AND COMMON/COLLECTIVE FUND	106,587,507	119,599,522
ARCH COAL, INC. COMMON STOCK	15,495,457*	16,289,419
PUTNAM DIRECT PERSONAL CHOICE RETIREMENT ACCOUNT	7,787,352	8,809,499
PRIMCO STABLE VALUE FUND	55,380,598*	50,853,111*
PARTICIPANT LOANS	9,618,429	9,924,227
	\$ 196,433,533	\$ 207,018,864

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

CHANGES IN NET ASSETS AVAILABLE FOR PLAN BENEFITS:

	FOR THE YEAR ENDED DECEMBER 31,	
	2002	2001
Investment Income (Loss):		
Dividends and interest	\$ 5,314,719	\$ 5,501,477
Net depreciation in fair value of investments	(26,599,478)	(21,381,000)
Net Investment Income (Loss)	\$ (21,284,759)	\$ (15,879,523)

Interest income on the Primco 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 4.51% and 5.52% for the years ended December 31, 2002 and 2001, respectively. The average crediting interest rate was 5.52% and 5.87% at December 31, 2002 and 2001, respectively. The fair value of the investment contract was \$55,380,598 and \$50,853,111 at December 31, 2002 and 2001, 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.

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 during 2002 to incorporate language required by the passing of certain laws, commonly referred to as "EGTRRA." 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.

INDEPENDENT AUDITORS' REPORT ON SUPPLEMENTARY INFORMATION

Our audit was made for the purpose of forming an opinion on the basic financial statements taken as a whole. The schedule of assets held is presented for purposes of additional analysis and is not a required part of the basic financial statements, but is supplementary data required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Income Security Act of 1974. Such information 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 17, 2003

ARCH COAL, INC. EMPLOYEE THRIFT PLAN

E.I.N. 43-0921172 PLAN 006
 SCHEDULE OF ASSETS HELD
 DECEMBER 31, 2002

IDENTITY OF ISSUER	DESCRIPTION OF INVESTMENT	CURRENT VALUE
MONEY MARKET		
Putnam Investments	Putnam Money Market Fund	\$ 1,564,190
MUTUAL FUNDS AND COMMON/COLLECTIVE FUND		
American Fund Corporation	American Century Income and Growth Fund	23,606,930
American Fund Corporation	Investment Company of America	67,188
Barclay Global Investors	Barclay's Lifepath 2010	599,395
Barclay Global Investors	Barclay's Lifepath 2020	554,161
Barclay Global Investors	Barclay's Lifepath 2030	223,176
Barclay Global Investors	Barclay's Lifepath 2040	238,111
Dodge & Cox Funds	Dodge & Cox Balanced Fund	12,219,588
Franklin Investments	Franklin Templeton Balance Sheet Fund	10,406,097
PIMCO Investments	PIMCO Total Return Fund	13,867,234
Putnam Investments	Putnam Balanced Fund	63,475
Putnam Investments	Putnam Growth Opportunities Fund	14,182,019
Putnam Investments	Putnam OTC Emerging Growth Fund	1,304,682
Putnam Investments	Putnam International Growth Fund	7,833,417
Putnam Investments	Putnam S&P 500 Index	16,023,021
Putnam Investments	Putnam Vista Fund	5,399,013
TOTAL MUTUAL FUNDS AND COMMON/COLLECTIVE FUND		106,587,507
COMMON STOCK		
Arch Coal, Inc.	Common stock	15,495,457
PARTICIPANT DIRECTED BROKERAGE ACCOUNTS		
Putnam	Putnam Direct Personal Choice Retirement Account (Participants Directed Brokerage Accounts)	7,787,352
BALANCE CARRIED FORWARD		131,434,506

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
 DECEMBER 31, 2002

IDENTITY OF ISSUER	DESCRIPTION OF INVESTMENT	CURRENT VALUE
BALANCE BROUGHT FORWARD		\$ 131,434,506

GUARANTEED INVESTMENT ACCOUNT -		
PRIMCO STABLE VALUE FUND		
Allstate Life Insurance Company	Synthetic GIC	4,618,294
Allstate Life Insurance Company Wrapper	Synthetic GIC	(2,651,401)
Bank of America NT & SA	103-121E	11,196,578
Bank of America NT & SA Wrapper	103-121E	(173,944)
ING Life Insurance & Annuity Company	103-121E	4,534,176
ING Life Insurance & Annuity Company Wrapper	103-121E	(27,051)
John Hancock Life Insurance	PSA	3,477,562
John Hancock Life Insurance Wrapper	PSA	(282,581)
JP Morgan Chase Bank	103-121E	8,332,045
JP Morgan Chase Bank Wrapper	103-121E	(440,505)
Monumental Life Insurance Company	Synthetic GIC	2,521,723
Monumental Life Insurance Company Wrapper	Synthetic GIC	(168,153)
Monumental Life Insurance Company	103-121E	8,491,357
Monumental Life Insurance Company Wrapper	103-121E	(302,628)
State Street Bank & Trust	Synthetic GIC	2,433,659
State Street Bank & Trust Wrapper	Synthetic GIC	(265,277)
State Street Bank & Trust	103-121E	1,710,384
State Street Bank & Trust Wrapper	103-121E	(108,816)
UBS AG	Synthetic GIC	7,034,163
UBS AG Wrapper	Synthetic GIC	(1,646,789)
Boston Company	Common/Collective Trust	4,279,494
Bus Men's Assur-MBIA Insd	GIC	1,512,771
Security Life of Denver	GIC	1,305,537
TOTAL GUARANTEED INVESTMENT ACCOUNT		55,380,598

PARTICIPANT LOANS	Notes Receivable	9,618,429

		\$ 196,433,533
		=====

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: June 20, 2003

By: /s/ Sheila Feldman

Sheila Feldman
Plan Administrator

INDEX TO EXHIBITS

- Exhibit 23 Consent of Rubin, Brown, Gornstein & Co. LLP, Independent Auditors
- Exhibit 99.1 Statement Under Oath of Principal Executive Officer Regarding Facts and Circumstances Relating to Exchange Act Filings executed by Steven F. Leer
- Exhibit 99.2 Statement Under Oath of Principal Financial Officer Regarding Facts and Circumstances Relating to Exchange Act Filings executed by Robert J. Messey

CONSENT OF INDEPENDENT AUDITORS

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 17, 2003, 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 years ended December 31, 2002 and 2001.

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

Rubin, Brown, Gornstein & Co. LLP

June 20, 2003

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of the Arch Coal, Inc. Employee Thrift Plan (the "Plan") on Form 11-K for the year ending December 31, 2002 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Steven F. Leer, Chief Executive Officer of Arch Coal, Inc., certifies, pursuant to 18 U.S.C. ss. 1350, as adopted pursuant to ss. 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Plan.

/s/ Steven F. Leer

Steven F. Leer
President and Chief Executive Officer
June 20, 2003

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of the Arch Coal, Inc. Employee Thrift Plan (the "Plan") on Form 11-K for the year ending December 31, 2002 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Robert J. Messey, Chief Financial Officer of the Company, certifies, pursuant to 18 U.S.C. ss. 1350, as adopted pursuant to ss. 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Plan.

/s/ Robert J. Messey

Robert J. Messey
Senior Vice President and Chief Financial Officer
June 20, 2003