

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

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

For the fiscal year ended December 31, 1998.

OR

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.

- A. Full title of the plan and the address of the plan, if different from that of the issuer named below: Arch Coal, Inc. Employee Thrift Plan.
- B. Name of issuer of the securities to be held pursuant to the plan and the address of its principal executive office: Arch Coal, Inc., Suite 300, CityPlace One, St. Louis, Missouri 63141.

FINANCIAL STATEMENTS AND EXHIBITS

Financial Statements and Schedules

Independent Auditors' Reports  
Statements of Net Assets Available for Benefits,  
With Fund Information  
Statement of Changes in Net Assets Available for  
Benefits, With Fund Information  
Notes to Financial Statements  
Schedule of Assets Held for Investment Purposes  
Schedule of Reportable Transactions

Exhibits

- 23.1 - Consent of Ernst & Young LLP, Independent Auditors  
23.2 - Consent of Stone Carlie & Company, L.L.C.,  
Independent Auditors

Arch Coal, Inc. Employee Thrift Plan  
St. Louis, Missouri

Financial Statements  
With Supplemental Schedules  
and Independent Auditors' Reports

Year Ended December 31, 1998

CONTENTS	PAGE
Independent Auditors' Reports.....	1-2
Financial Statements	
Statements of Net Assets Available for Benefits, With Fund Information.....	3-6
Statement of changes in Net Assets Available for Benefits, With Fund Information.....	7-10
Notes to Financial Statements.....	11-21
Supplemental Schedules	
Schedule of Assets Held for Investment Purposes.....	22-23
Schedule of Reportable Transactions.....	24-25

INDEPENDENT AUDITORS' REPORT

To the Administrator  
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, 1998 and the related statement of changes in net assets available for benefits for the year 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 generally accepted auditing standards. 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 benefits of the Plan at December 31, 1998, and the changes in net assets available for benefits for the year then ended in conformity with generally accepted accounting principles.

Our audit was conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The accompanying supplemental schedules of assets held for investment purposes as of December 31, 1998 and reportable transactions for the year then ended are presented for purposes of complying with the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974, and are not a required part of the basic financial statements. The fund information in the statement of net assets available for benefits and the statement of changes in net assets available for benefits is presented for purposes of additional analysis rather than to present the net assets available for benefits and the changes in net assets available for benefits of each fund. The supplemental schedules and fund information have been subjected to the auditing procedures applied in our audit of the basic financial statements and, in our opinion, are fairly stated in all material respects in relation to the basic financial statements taken as a whole.

STONE CARLIE & COMPANY, L.L.C.  
ST. LOUIS, MISSOURI

June 25, 1999

Report of Independent Auditors

To the Administrator  
Arch Coal, Inc. Employee Thrift Plan

We have audited the accompanying statement of net assets available for benefits, with fund information of the Arch Coal, Inc. Employee Thrift Plan as of December 31, 1997. This financial statement is the responsibility of the Plan's management. Our responsibility is to express an opinion on this financial statement based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statement is free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statement. 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 statement referred to above presents fairly, in all material respects, the net assets available for benefits of the Plan at December 31, 1997, in conformity with generally accepted accounting principles.

The fund information in the statement of net assets available for benefits is presented for purposes of additional analysis rather than to present the net assets available for benefits of each fund. The fund information has been subjected to the auditing procedures applied in our audit of the basic financial statement and, in our opinion, is fairly stated in all material respects in relation to the basic financial statement taken as a whole.

Louisville, Kentucky  
June 25, 1998

Ernst & Young LLP

ARCH COAL, INC. EMPLOYEE THRIFT PLAN  
 STATEMENT OF NET ASSETS AVAILABLE FOR BENEFITS, WITH FUND INFORMATION  
 December 31, 1998

	Total	Arch Coal, Inc. Common Stock Fund	ARCO Common Stock Fund	Barclays S&P 500 Equity Index Fund	Primco Stable Value Fund	Twentieth Century Ultra Fund	Twentieth Century International Growth Fund
<b>Assets</b>							
<b>Investments</b>							
Common stock	\$ 24,770,870	\$ 2,787,504	\$20,123,472	-	-	-	-
Mutual funds	103,913,242	-	-	-	-	\$21,471,454	\$6,214,873
Pooled separate account	21,601,010	-	-	-	\$21,601,010	-	-
Investment contracts	19,955,691	-	-	-	19,955,691	-	-
Collective trust	24,096,444	-	-	\$20,826,732	3,269,712	-	-
Participant notes receivable	10,340,684	-	-	-	-	-	-
<b>Total investments</b>	<b>204,677,941</b>	<b>2,787,504</b>	<b>20,123,472</b>	<b>20,826,732</b>	<b>44,826,413</b>	<b>21,471,454</b>	<b>6,214,873</b>
<b>Receivables</b>							
Participant	536,310	13,307	-	66,216	92,435	83,162	25,103
Employer	278,765	6,989	-	32,003	54,606	41,863	13,333
<b>Total receivables</b>	<b>815,075</b>	<b>20,296</b>	<b>-</b>	<b>98,219</b>	<b>147,041</b>	<b>125,025</b>	<b>38,436</b>
<b>Net assets available for benefits</b>	<b>\$205,493,016</b>	<b>\$ 2,807,800</b>	<b>\$20,123,472</b>	<b>\$20,924,951</b>	<b>\$44,973,454</b>	<b>\$21,596,479</b>	<b>\$6,253,309</b>

The accompanying notes are an integral part of these financial statements.

ARCH COAL, INC. EMPLOYEE THRIFT PLAN  
STATEMENT OF NET ASSETS AVAILABLE FOR BENEFITS, WITH FUND INFORMATION  
(Continued)  
December 31, 1998

	Benham GNMA Fund	American Century Income and Growth Fund	Franklin Balance Sheet Fund	MAS Value Institutional Fund	J.P. Morgan Diversified Fund	Dodge & Cox Balanced Fund	Schwab Personal Choice Account Fund	Loan Fund
Assets								
Investments								
Common stock	-	-	-	-	-	-	\$1,859,894	-
Mutual funds	\$ 8,171,106	\$30,049,366	\$ 7,610,710	\$10,861,857	\$ 6,634,479	\$12,899,397	-	-
Pooled separate account	-	-	-	-	-	-	-	-
Investment contracts	-	-	-	-	-	-	-	-
Collective trust	-	-	-	-	-	-	-	-
Participant notes receivable	-	-	-	-	-	-	-	\$10,340,684
<b>Total investments</b>	<b>8,171,106</b>	<b>30,049,366</b>	<b>7,610,710</b>	<b>10,861,857</b>	<b>6,634,479</b>	<b>12,899,397</b>	<b>1,859,894</b>	<b>10,340,684</b>
Receivables								
Participant Employer	18,246 9,531	103,771 51,650	28,320 13,922	40,240 21,325	23,389 11,422	42,121 22,121	-	-
<b>Total receivables</b>	<b>27,777</b>	<b>155,421</b>	<b>42,242</b>	<b>61,565</b>	<b>34,811</b>	<b>64,242</b>	<b>-</b>	<b>-</b>
<b>Net assets available for benefits</b>	<b>\$ 8,198,883</b>	<b>\$30,204,787</b>	<b>\$ 7,652,952</b>	<b>\$10,923,422</b>	<b>\$ 6,669,290</b>	<b>\$12,963,639</b>	<b>\$1,859,894</b>	<b>\$10,340,684</b>

The accompanying notes are an integral part of these financial statements.

ARCH COAL, INC. EMPLOYEE THRIFT PLAN  
STATEMENT OF NET ASSETS AVAILABLE FOR BENEFITS, WITH FUND INFORMATION  
December 31, 1997

	Total	Arch Coal, Inc. Common Stock Fund	INVESCO Intermediate Government Bond Fund	INVESCO Select Income Fund	INVESCO High Yield Bond Fund	INVESCO Total Return Fund
	-----	-----	-----	-----	-----	-----
<b>Assets</b>						
<b>Investments</b>						
Common stock	\$ 91,195	\$ 91,195	-	-	-	-
Mutual funds	68,685,454	-	\$ 8,091,573	\$ 7,346,224	\$ 2,904,865	\$19,123,491
Pooled separate account	2,020,411	-	-	-	-	-
Investment contracts	6,007,769	-	-	-	-	-
Collective trust	13,820,591	-	-	-	-	-
Participant notes receivable	4,786,256	-	-	-	-	-
<b>Total investments</b>	<b>95,411,676</b>	<b>91,195</b>	<b>8,091,573</b>	<b>7,346,224</b>	<b>2,904,865</b>	<b>19,123,491</b>
<b>Cash</b>	<b>126,492</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Net assets available for benefits</b>	<b>\$95,538,168</b>	<b>\$ 91,195</b>	<b>\$ 8,091,573</b>	<b>\$ 7,346,224</b>	<b>\$ 2,904,865</b>	<b>\$19,123,491</b>
	=====	=====	=====	=====	=====	=====

The accompanying notes are an integral part of these financial statements.



ARCH COAL, INC. EMPLOYEE THRIFT PLAN  
STATEMENT OF NET ASSETS AVAILABLE FOR BENEFITS, WITH FUND INFORMATION  
(Continued)  
December 31, 1997

	INVESCO Industrial Income Fund	INVESCO Dynamics Fund	INVESCO International Growth Fund	INVESCO Emerging Growth Fund	Capital Preservation Fund	Loan Fund
	-----	-----	-----	-----	-----	-----
Assets						
Investments						
Common stock	-	-	-	-	-	-
Mutual funds	\$13,716,282	\$11,694,364	\$ 1,727,160	\$ 3,458,050	\$ 623,445	-
Pooled separate account	-	-	-	-	2,020,411	-
Investment contracts	-	-	-	-	6,007,769	-
Collective trust	-	-	-	-	13,820,591	-
Participant notes receivable	-	-	-	-	-	\$ 4,786,256
	-----	-----	-----	-----	-----	-----
Total investments	13,716,282	11,694,364	1,727,160	3,458,050	22,472,216	4,786,256
	-----	-----	-----	-----	-----	-----
Cash	-	-	-	-	126,492	-
	-----	-----	-----	-----	-----	-----
Net assets available for benefits	\$13,716,282	\$11,694,364	\$ 1,727,160	\$ 3,458,050	\$22,598,708	\$ 4,786,256
	=====	=====	=====	=====	=====	=====

The accompanying notes are an integral part of these financial statements.

ARCH COAL, INC. EMPLOYEE THRIFT PLAN  
STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS,  
WITH FUND INFORMATION  
Year Ended December 31, 1998

	Total	Arch Coal, Inc. Common Stock Fund	ARCO Common Stock Fund	Barclays S&P 500 Equity Index Fund	Primco Stable Value Fund	Twentieth Century Ultra Fund
	-----	-----	-----	-----	-----	-----
Additions to net assets attributed to:						
Investment income						
Realized and unrealized gains(losses)	\$ 8,818,097	\$(1,155,885)	\$(3,986,260)	\$ 2,934,739	-	\$ 4,542,093
Interest and dividend income	4,694,440	82,677	458,203	-	\$2,162,194	-
Net investment income	13,512,537	(1,073,208)	(3,528,057)	2,934,739	2,162,194	4,542,093
Contributions						
Participant	12,801,026	269,118	-	1,566,476	2,236,043	1,808,948
Employer	7,357,213	141,429	-	893,833	1,820,822	928,101
Total contributions	20,158,239	410,547	-	2,460,309	4,056,865	2,737,049
Total additions	33,670,776	(662,661)	(3,528,057)	5,395,048	6,219,059	7,279,142
Deductions from net assets attributed to:						
Benefits paid to participants	16,285,931	190,125	541,128	1,377,106	7,858,544	650,738
Administrative expenses	40,137	332	1,634	4,164	10,775	4,711
Total deductions	16,326,068	190,457	542,762	1,381,270	7,869,319	655,449
Net increase (decrease) prior to transfers	17,344,708	(853,118)	(4,070,819)	4,013,778	(1,650,260)	6,623,693
Interfund transfers, net	-	1,245,890	(2,706,416)	10,606,601	(396,044)	9,385,184
Transfers from other plans	91,224,911	2,323,833	26,900,707	6,304,572	24,421,050	5,587,602
Loan principal and interest repayments	(3,729,133)	-	-	-	-	-
New loans issued to participants	5,114,362	-	-	-	-	-
Net increase (decrease)	109,954,848	2,716,605	20,123,472	20,924,951	22,374,746	21,596,479
Net assets available for benefits,						
Beginning of year	95,538,168	91,195	-	-	22,598,708	-
End of year	\$205,493,016	\$ 2,807,800	\$20,123,472	\$20,924,951	\$44,973,454	\$21,596,479
	=====	=====	=====	=====	=====	=====

The accompanying notes are an integral part of these financial statements.

ARCH COAL, INC. EMPLOYEE THRIFT PLAN  
STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS,  
WITH FUND INFORMATION (Continued)  
Year Ended December 31, 1998

	Twentieth Century International Growth Fund	Benham GNMA Fund	American Century Income and Growth Fund	Franklin Balance Sheet Fund	MAS Value Institutional Fund	J.P. Morgan Diversified Fund
	-----	-----	-----	-----	-----	-----
Additions to net assets attributed to:						
Investment income						
Realized and unrealized gains(losses)	\$ 646,647	\$ (28,962)	\$ 5,006,098	\$ (201,855)	\$ (288,464)	\$ 730,436
Interest and dividend income	10,428	366,264	304,624	118,100	5,629	135,307
	-----	-----	-----	-----	-----	-----
Net investment income	657,075	337,302	5,310,722	(83,755)	(282,835)	865,743
	-----	-----	-----	-----	-----	-----
Contributions						
Participant	592,330	384,307	2,328,507	744,655	1,148,371	562,325
Employer	318,908	220,556	1,195,812	396,808	602,106	255,945
	-----	-----	-----	-----	-----	-----
Total contributions	911,238	604,863	3,524,319	1,141,463	1,750,477	818,270
	-----	-----	-----	-----	-----	-----
Total additions	1,568,313	942,165	8,835,041	1,057,708	1,467,642	1,684,013
	-----	-----	-----	-----	-----	-----
Deductions from net assets attributed to:						
Benefits paid to participants	368,259	382,389	1,635,234	308,843	896,267	426,330
Administrative expenses	1,475	1,427	5,934	1,948	2,569	1,306
	-----	-----	-----	-----	-----	-----
Total deductions	369,734	383,816	1,641,168	310,791	898,836	427,636
	-----	-----	-----	-----	-----	-----
Net increase (decrease) prior to transfers	1,198,579	558,349	7,193,873	746,917	568,806	1,256,377
	-----	-----	-----	-----	-----	-----
Interfund transfers, net	2,993,948	6,023,493	15,543,654	4,670,793	6,562,995	3,754,007
Transfers from other plans	2,060,782	1,617,041	7,467,260	2,235,242	3,791,621	1,658,906
Loan principal and interest repayments	-	-	-	-	-	-
New loans issued to participants	-	-	-	-	-	-
	-----	-----	-----	-----	-----	-----
Net increase (decrease)	6,253,309	8,198,883	30,204,787	7,652,952	10,923,422	6,669,290
	-----	-----	-----	-----	-----	-----
Net assets available for benefits, Beginning of year	-	-	-	-	-	-
	-----	-----	-----	-----	-----	-----
End of year	\$ 6,253,309	\$ 8,198,883	\$30,204,787	\$ 7,652,952	\$10,923,422	\$ 6,669,290
	=====	=====	=====	=====	=====	=====

The accompanying notes are an integral part of these financial statements.

ARCH COAL, INC. EMPLOYEE THRIFT PLAN  
STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS,  
WITH FUND INFORMATION (Continued)  
Year Ended December 31, 1998

	Dodge & Cox Balanced Fund	Schwab Personal Choice Account Fund	Loan Fund	INVESCO Intermediate Government Bond Fund	INVESCO Select Income Fund	INVESCO High Yield Bond Fund
	-----	-----	-----	-----	-----	-----
Additions to net assets attributed to:						
Investment income						
Realized and unrealized gains(losses)	\$ 365,220	\$ 254,290	-	-	-	-
Interest and dividend income	457,365	13,777	\$ 579,872	-	-	-
	-----	-----	-----	-----	-----	-----
Net investment income	822,585	268,067	579,872	-	-	-
	-----	-----	-----	-----	-----	-----
Contributions						
Participant	1,159,946	-	-	-	-	-
Employer	582,893	-	-	-	-	-
	-----	-----	-----	-----	-----	-----
Total contributions	1,742,839	-	-	-	-	-
	-----	-----	-----	-----	-----	-----
Total additions	2,565,424	268,067	579,872	-	-	-
	-----	-----	-----	-----	-----	-----
Deductions from net assets attributed to:						
Benefits paid to participants	1,325,536	-	325,432	-	-	-
Administrative expenses	3,862	-	-	-	-	-
	-----	-----	-----	-----	-----	-----
Total deductions	1,329,398	-	325,432	-	-	-
	-----	-----	-----	-----	-----	-----
Net increase (decrease) prior to transfers	1,236,026	268,067	254,440	-	-	-
Interfund transfers, net	8,786,077	1,591,827	-	(8,091,573)	(7,346,224)	(2,904,865)
Transfers from other plans	2,941,536	-	3,914,759	-	-	-
Loan principal and interest repayments	-	-	(3,729,133)	-	-	-
New loans issued to participants	-	-	5,114,362	-	-	-
	-----	-----	-----	-----	-----	-----
Net increase (decrease)	12,963,639	1,859,894	5,554,428	(8,091,573)	(7,346,224)	(2,904,865)
	-----	-----	-----	-----	-----	-----
Net assets available for benefits, Beginning of year	-	-	4,786,256	8,091,573	7,346,224	2,904,865
	-----	-----	-----	-----	-----	-----
End of year	\$ 12,963,639	\$ 1,859,894	\$10,340,684	-	-	-
	=====	=====	=====	=====	=====	=====

The accompanying notes are an integral part of these financial statements.

ARCH COAL, INC. EMPLOYEE THRIFT PLAN  
STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS,  
WITH FUND INFORMATION (Continued)  
Year Ended December 31, 1998

	INVESCO Total Return Fund -----	INVESCO Industrial Income Fund -----	INVESCO Dynamics Fund -----	INVESCO International Growth Fund -----	INVESCO Emerging Growth Fund -----
Additions to net assets attributed to:					
Investment income					
Realized and unrealized gains(losses)	-	-	-	-	-
Interest and dividend income	-	-	-	-	-
Net investment income	-	-	-	-	-
Contributions					
Participant	-	-	-	-	-
Employer	-	-	-	-	-
Total contributions	-	-	-	-	-
Total additions	-	-	-	-	-
Deductions from net assets attributed to:					
Benefits paid to participants	-	-	-	-	-
Administrative expenses	-	-	-	-	-
Total deductions	-	-	-	-	-
Net increase (decrease) prior to transfers	-	-	-	-	-
Interfund transfers, net	\$(19,123,491)	\$(13,716,282)	\$(11,694,364)	\$(1,727,160)	\$(3,458,050)
Transfers from other plans	-	-	-	-	-
Loan principal and interest repayments	-	-	-	-	-
New loans issued to participants	-	-	-	-	-
Net increase (decrease)	(19,123,491)	(13,716,282)	(11,694,364)	(1,727,160)	(3,458,050)
Net assets available for benefits,					
Beginning of year	19,123,491	13,716,282	11,694,364	1,727,160	3,458,505
End of year	-	-	-	-	-

The accompanying notes are an integral part of these financial statements.

ARCH COAL, INC. EMPLOYEE THRIFT PLAN  
NOTES TO FINANCIAL STATEMENTS  
DECEMBER 31, 1998 and 1997

NOTE 1 - DESCRIPTION OF PLAN

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

The following description of the Plan reflects 1998 plan amendments and provides only general information. Participants should refer to the Summary Plan Description, copies of which are available from the Company, 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 established by the Company under the provisions of Section 401(a) of the Internal Revenue Code (IRC), which includes a qualified deferred arrangement as described in Section 401(k) of the IRC, for the benefit of eligible employees. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA).

The Company has established a Pension Committee to oversee the activities of the Plan and has appointed the Senior Vice President - Law and Human Resources as Plan Administrator. Chase Manhattan Bank is the Plan's trustee. INVESCO Retirement Plan Services was the Plan Trustee through December 31, 1997. American Century Retirement Plan Services is the Plan's recordkeeper.

Eligibility

Participation in the Plan is open to 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.

NOTE 1 - DESCRIPTION OF PLAN (Continued)

Participant Accounts

Individual accounts are maintained for each participant to reflect the participant's share of the Plan's income, the Company's contribution and the participant's contribution. Allocations are based on participant account balances, as defined.

Contributions

Participants may contribute up to 16% of compensation, as defined by the Plan, on a pre-tax, after-tax, or combined basis. The Company matches 100% of the first 6% of compensation contributed by each participant. Participant and Company contributions are made with each weekly or biweekly payroll. Contributions to the plan, including employee and employer contributions, are subject to various limitations imposed by the Internal Revenue Code.

Vesting

Participants are fully vested in their contributions and all earnings thereon. 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 thereon upon the completion of three full and consecutive years of service.

All participants become fully vested upon death while employed, total disability or at normal retirement age (age 65), regardless of the number of months of participation.

Forfeitures of terminated participants' nonvested amounts are used to reduce the Company's future contributions. Restoration of such forfeitures to reemployed participants is made in accordance with the Plan's provisions.

Withdrawals

Upon death, disability, retirement, or termination of employment, a participant may elect to withdraw the value of the participant's vested interest in his or her account. The normal form of payment is a lump-sum distribution. Alternative forms of payment include annuity purchase, installments, and direct rollover.

Withdrawals (Continued)

Active participants can make hardship withdrawals of pre-tax employee contributions in certain circumstances and can make withdrawals of vested employer contributions, after-tax employee contributions, or rollover contributions on a non-hardship basis. All such withdrawals are subject to various restrictions and may be subject to income tax penalties.

Loans to Participants

Participants who have been in the Plan for at least 12 months may borrow a portion of their account in accordance with the provisions of the Plan. No loan shall be made if, immediately after the loan, the unpaid balance of all loans to the participant would exceed the lesser of \$50,000 or 50% of the vested portion of the participant's account.

The maximum loan repayment period for loans not used for the acquisition of a participant's personal residence is five years. If a loan is used for the acquisition of a participant's primary residence, the maximum repayment period is 15 years. All outstanding participant loans must be repaid upon the participant's termination of employment with the Company.

Loans are secured by assignment of the participant's account and the participant's collateral promissory note for the amount of the loan. Interest rates are based on the prime rate on the first working day of the month in which the loans are made.

Investment Options

Participants direct contributions, including Company matching contributions, into one or more investment options in 1% increments. Participants may change their investment elections daily. A description of each investment option available at December 31, 1998 is provided below:

- o Arch Coal, Inc. Common Stock Fund - Funds are invested in Arch Coal, Inc. common stock.



Investment Options (Continued)

- o ARCO Common Stock Fund - Funds are invested in common stock of the Atlantic Richfield Company (Arco). This fund option is only available to former employees of Arco who became employees of the Company through the Company's acquisition of Arco's coal operations, as further described in Note 3. No contributions or transfers into this fund option are allowed. Furthermore, this fund option is temporary and participants must transfer any remaining balances to other options on or before December 31, 2003.
  
- o Primco Stable Value Fund - This fund, formerly known as the Capital Preservation Fund, invests in long-term investment contracts issued by a variety of insurance carriers, a collective trust, a pooled separate account, and a money market fund. The objective of this fund is to generate current income, while providing protection against loss of capital. The investment contracts included in this fund had average yields of 6.01% and 7.39% for the years ended December 31, 1998 and 1997, respectively. The average crediting interest rates were 5.54% and 7.34% for December 31, 1998 and 1997, respectively. The fair value of guaranteed insurance contracts approximates contract value at December 31, 1998 and 1997.
  
- o American Century Benham GNMA Fund - This fund invests in mortgage-backed Ginnie Mae certificates. The investment objective is to generate current interest income while limiting exposure to loss of capital.
  
- o Dodge & Cox Balanced Fund - This fund invests in a combination of stocks and bonds and seeks to provide current income and the opportunity for long-term growth.
  
- o J.P. Morgan Diversified Fund - This fund invests in a combination of stocks and bonds and seeks to provide current income and the opportunity for long-term growth.
  
- o American Century Income and Growth Fund - This fund invests primarily in dividend-paying common stocks and seeks to provide current income and long-term growth.

NOTE 1 - DESCRIPTION OF PLAN (Continued)

Investment Options (Continued)

- o MAS Value Institutional Fund - This fund invests primarily in common stocks and seeks long-term growth by following a value-oriented investment approach.
- o Franklin Balance Sheet Fund - This fund invests in common stocks, preferred stocks, and debt securities and seeks high total return and long-term growth by following a value-oriented investment approach.
- o Barclays S & P 500 Equity Index Fund - This fund invests in a broad portfolio of common stocks and seeks to track the performance of the Standard & Poor's 500 Index.
- o Twentieth Century Ultra Fund - This fund invests primarily in common stocks with above-average growth potential and above-average price volatility.
- o Twentieth Century International Growth Fund - This fund invests primarily in common stocks of foreign companies and seeks long-term growth subject to the volatility inherent in international investing.
- o Schwab Personal Choice Account - This is an option wherein a plan participant can make self-directed investments directly in equity and debt securities through a Charles Schwab & Company brokerage account. Participants are limited to investing 25% of their account balances through this option.

Administrative Expenses

The Company pays the salaries and related benefits of employees who administer the Plan. Participants pay loan fees. All other administrative expenses are paid by the Plan. Administrative expenses do not include investment advisory fees, which directly reduce net investment income.

Plan Termination

Although it has not expressed any 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 set forth in ERISA. In the event of Plan termination, participants will become fully vested in their accounts. The net assets of the Plan will be allocated to provide benefits to participants as prescribed by ERISA.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

The accompanying financial statements are prepared on the accrual basis of accounting.

Investment Valuation

Investments of the Plan are stated at fair value. Publicly traded Securities are valued at their quoted market prices. Investments in mutual funds are valued at published market value on the last business day of the plan year. Investment contracts are stated at contract value (which represents cost plus accumulated interest, less funds to pay certain benefits and loans to participants) because they are fully benefit responsive. The fair value of the participation units owned by the Plan in the collective trust funds and pooled separate accounts are based on quoted redemption values on the last business day of the plan year.

Participant notes receivable are valued at their outstanding balances, which approximates fair value.

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

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

NOTE 3 - PLAN MERGERS AND ASSET TRANSFERS

On January 1, 1998, the Company merged three similar plans sponsored by the Company and its subsidiaries into the Plan and amended the Plan to reflect this merger. The value of assets transferred is based on the value of the assets of the merged plans as of December 31, 1997.

Effective June 1, 1998, in connection with the Company's acquisition of the domestic coal related operations of Arco, certain Arco defined contribution plan assets allocated to former Arco employees who became employees of the Company and its affiliates as a result of the acquisition were transferred to the Plan. The Plan was amended to reflect and allow this asset transfer.

NOTE 3 - PLAN MERGERS AND ASSET TRANSFERS (Continued)

The assets transferred to the Plan as a result of these plan mergers and asset transfers during the year ended December 31, 1998 are as follows:

Transfer from	Assets Transferred
-----	-----
Ashland Coal, Inc. Employee Thrift Plan	\$29,108,983
Mingo Logan Coal Company Retirement Plan and Mingo Logan Hourly Employees Savings Plan	7,799,114
Coal Mac, Inc. Savings and Retirement Plan	4,767,169
Arco Thrift and Savings Plans	49,549,645
	=====
	\$91,224,911
	=====

NOTE 4 - INVESTMENTS

The Plan's investments are held by a trust fund and are presented in the following table.

	December 31,	
	-----	-----
	1998	1997
	-----	-----
Investments at fair value determined by quoted market price:		
Common stocks		
Arch Coal, Inc., 160,738 and 9,668 shares	\$ 2,787,504	\$ 91,195
Atlantic Richfield Company, 308,325 shares	20,123,472	-
Schwab Personal Choice Accounts, various investments	1,859,894	-
	-----	-----
	24,770,870	91,195
	-----	-----
Mutual funds		
Twentieth Century Ultra Fund, 642,666 shares	21,471,454	-
Twentieth Century International Growth Fund, 648,734 shares	6,214,873	-
Benham GNMA Fund, 764,369 shares	8,171,106	-

## NOTE 4 - INVESTMENTS (Continued)

	December 31,	
	----- 1998 -----	----- 1997 -----
Mutual Funds (continued)		
American Century Income and Growth Fund, 1,027,329 shares	\$30,049,366	-
Franklin Balance Sheet Fund, 240,845 shares	7,610,710	-
MAS Value Institutional Fund, 750,647 shares	10,861,857	-
J.P. Morgan Diversified Fund, 427,755 shares	6,634,479	-
Dodge & Cox Balanced Fund, 197,783 shares	12,899,397	-
INVESCO Intermediate Government Bond Fund, 644,747 shares	-	\$ 8,091,573
INVESCO Select Income Fund, 1,101,383 shares	-	7,346,224
INVESCO High Yield Bond Fund, 288,228 shares	-	2,904,865
INVESCO Total Return Fund, 657,391 shares	-	19,123,491
INVESCO Industrial Income Fund, 919,938 shares	-	13,716,282
INVESCO Dynamics Fund, 837,705 shares	-	11,694,364
INVESCO International Growth Fund, 128,318 shares	-	1,727,160
INVESCO Emerging Growth Fund, 308,479 shares	-	3,458,050
INVESCO Treasurer's Fund, 623,445 shares	-	623,445
	----- 103,913,242 -----	----- 68,685,454 -----

## NOTE 4 - INVESTMENTS (Continued)

December 31,

	1998	1997
Collective trust funds		
I.R.T. Stable Value Fund	-	\$13,820,591
Barclay S&P 500 Equity Index Fund, 711,053 units	\$20,826,732	-
Chase Manhattan Bank Pooled Cash Investment Fund	3,269,712	-
	24,096,444	13,820,591
Investments at Contract Value		
Pooled separate account		
John Hancock Mutual Life	5,240,652	2,020,411
Allstate Life Insurance Co. #77071-IOT	1,048,644	-
Bankers Trust Delaware #98-936IOT	6,237,925	-
State Street Bank & Trust #98239	6,043,218	-
Transamerica Life & Annuity #76863	3,030,571	-
	21,601,010	2,020,411
Investment contracts		
Allstate Life Insurance Co. #77057	8,070,916	-
Commonwealth Life Insurance, #00128TR-1	-	992,408
Commonwealth Life Insurance, #00128TR-2	-	947,123
Commonwealth Life Insurance, #00128TR-3	1,025,478	999,611
Commonwealth Life Insurance, #00128TR-4	518,639	521,357
Commonwealth Life Insurance, #00128TR-5	240,378	502,380
Commonwealth Life Insurance, #00128TR-6	515,330	516,254
Commonwealth Life Insurance, #00128TR-7	1,025,994	1,027,185
Commonwealth Life Insurance, #00128TR-10	1,027,171	-

NOTE 4 - INVESTMENTS (Continued)

	December 31,	
	1998	1997
Investment Contracts (continued)		
Commonwealth Life Insurance, #00128TR-12	\$ 1,019,159	-
Commonwealth Life Insurance, #00128TR-13	1,012,274	-
Commonwealth Life Insurance, #00128TR-14	953,315	-
State Street Bank & Trust #98012	2,533,139	-
United of Omaha Life Insurance, #11491	501,348	\$ 501,451
Business Men's Assurance MBIA #1325	1,512,550	-
	-----	-----
	19,955,691	6,007,769
	-----	-----
Investments at estimated fair value		
Participant notes receivable, 8-9%	10,340,684	4,786,256
	-----	-----
	\$204,677,941	\$95,411,676
	=====	=====

NOTE 5 - TAX STATUS OF THE PLAN

The plan obtained its latest determination letter on August 9, 1996, 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. However, the plan administrator and the plan's tax counsel believe that the plan is currently designed and being operated in compliance with the applicable requirements of the Internal Revenue Code. Therefore, no provision for income taxes has been included in the plan's financial statements.

NOTE 6 - TRANSACTIONS WITH PARTIES-IN-INTEREST

The Company engages the services of a third-party service provider to assist it in carrying out certain administrative and recordkeeping functions under the Plan. The Plan has investments in the common stock of the Company as well as in mutual funds and a collective trust sponsored by the third-party service provider of the Plan.

NOTE 7 - YEAR 2000 ISSUE (UNAUDITED)

The Company has developed a plan to modify its internal information technology to be ready for the year 2000 and is converting critical data processing systems. The project also includes determining whether third-party service providers have reasonable plans in place to become year 2000 compliant. The Company currently expects the project to be substantially complete by the third quarter of 1999. The Company does not expect this project to have a significant effect on plan operations.



SUPPLEMENTAL SCHEDULES

ARCH COAL, INC. EMPLOYEE THRIFT PLAN

Line 27(a) - SCHEDULE OF ASSETS HELD FOR  
INVESTMENT PURPOSES  
December 31, 1998

Identity of Issue, Borrower, Lessor, or Similar Party	Description of Investment Including Maturity Date, Rate of Interest, Par or Maturity Value	Cost	Current Value
Common stock:			
Arch Coal, Inc. Stock Fund	160,738 shares	\$ 3,796,016	\$ 2,787,504
Atlantic Richfield Company Stock Fund	308,325 shares	24,126,431	20,123,472
Schwab	various	1,605,604	1,859,894
		-----	-----
		29,528,051	24,770,870
		-----	-----
Mutual funds:			
Twentieth Century Ultra Fund	642,666 shares	18,948,618	21,471,454
Twentieth Century International Growth Fund	648,734 shares	5,395,695	6,214,873
Benham GNMA Fund	764,369 shares	8,185,031	8,171,106
American Century Income and Growth Fund	1,027,329 shares	26,237,333	30,049,366
Franklin Balance Sheet Fund	240,845 shares	8,113,716	7,610,710
MAS Value Institutional Fund	750,647 shares	12,847,404	10,861,857
J.P. Morgan Diversified Fund	427,755 shares	6,058,505	6,634,479
Dodge & Cox Balanced Fund	197,783 shares	13,260,046	12,899,397
		-----	-----
		99,046,348	103,913,242
		-----	-----
Investment contracts:			
Allstate Life Insurance Co.		8,070,916	8,070,916
Commonwealth Life Insurance Company, contract #00128TR3		1,025,478	1,025,478
Commonwealth Life Insurance Company, contract #00128TR4		518,639	518,639
Commonwealth Life Insurance Company, contract #00128TR5		240,378	240,378
Commonwealth Life Insurance Company, contract #00128TR6		515,330	515,330
Commonwealth Life Insurance Company, contract #00128TR7		1,025,994	1,025,994
Commonwealth Life Insurance Company, contract #00128TR10		1,027,171	1,027,171
Commonwealth Life Insurance Company, contract #00128TR12		1,019,159	1,019,159
Commonwealth Life Insurance Company, contract #00128TR13		1,012,274	1,012,274
Commonwealth Life Insurance Company, contract #00128TR14		953,315	953,315
State Street Bank & Trust		2,533,139	2,533,139
United of Omaha Life Insurance		501,348	501,348
Business Men's Assurance MBIA		1,512,550	1,512,550
		-----	-----
		19,955,691	19,955,691
		-----	-----

See independent auditors' report.

ARCH COAL, INC. EMPLOYEE THRIFT PLAN

Line 27(a) - SCHEDULE OF ASSETS HELD FOR  
INVESTMENT PURPOSES (Continued)  
December 31, 1998

Identity of Issue, Borrower, Lessor, or Similar Party	Description of Investment Including Maturity Date, Rate of Interest, Par or Maturity Value	Cost	Current Value
-----			
Collective trust:			
Barclay S&P 500 Equity Index Fund	711,053 units	\$ 17,990,212	\$20,826,732
Chase Manhattan Bank Pooled Cash Investment Fund	3,368,882 units	3,269,712	3,269,712
		-----	-----
		21,259,924	24,096,444
		-----	-----
Pooled separate account:			
John Hancock Mutual Life		5,240,652	5,240,652
Allstate Life Insurance Co.		1,048,644	1,048,644
Bankers Trust Delaware		6,237,925	6,237,925
State Street Bank & Trust		6,043,218	6,043,218
Transamerica Life & Annuity		3,030,571	3,030,571
		-----	-----
		21,601,010	21,601,010
		-----	-----
Loans to participants	8-9%	-	10,340,684
		-----	-----
		\$191,391,024	\$204,677,941
		=====	=====

See independent auditors' report

## ARCH COAL, INC. EMPLOYEE THRIFT PLAN

LINE 27(d) - SCHEDULE OF REPORTABLE TRANSACTIONS  
Year Ended December 31, 1998

Identity of Party Involved	Description of Asset	Purchase Price	Selling Price	Cost of Asset	Current Value on Transaction Date	Net Gain (Loss)
Series of Transactions in excess of 5% of the Current Value of Plan Assets at the Beginning of the Year:						
Twentieth Century Ultra Fund	Mutual Fund	\$20,551,999	\$ 4,610,893	\$20,551,999 4,374,463	\$20,551,999 4,610,893	\$ 236,430
Twentieth Century International Growth Fund	Mutual Fund	7,245,702	1,529,079	7,245,702 1,444,197	7,245,702 1,529,079	84,882
Benham GNMA Fund	Mutual Fund	10,287,688	2,463,325	10,287,688 2,468,568	10,287,688 2,463,325	(5,243)
American Century Income & Growth Fund	Mutual Fund	30,419,967	6,124,302	30,419,967 5,701,101	30,419,967 6,124,302	423,201
J.P. Morgan Diversified Fund	Mutual Fund	6,916,658	1,163,040	6,916,658 1,110,927	6,916,658 1,163,040	52,113
Dodge & Cox Balanced Fund	Mutual Fund	17,480,778	5,349,788	17,480,778 5,285,276	17,480,778 5,349,788	64,512
Chase Manhattan Bank Pooled Cash Investment Fund	Collective Trust	66,574,763	63,205,881	66,574,763 63,205,881	66,574,763 63,205,881	-
Transamerica Contract #76862	Pooled Separate Account	6,030,571	3,000,000	6,030,571 3,000,000	6,030,571 3,000,000	-
State Street Bank Contract #98011	Investment Contract	5,755,649	3,222,510	5,755,649 3,222,510	5,755,649 3,222,510	-
Allstate Life Insurance Contract #77056	Investment Contract	12,006,115	3,935,199	12,006,115 3,935,199	12,006,115 3,935,199	-

See independent auditors' report

Page 24

ARCH COAL, INC. EMPLOYEE THRIFT PLAN

LINE 27(d) - SCHEDULE OF REPORTABLE TRANSACTIONS  
Year Ended December 31, 1998

Identity of Party Involved	Description of Asset	Purchase Price	Selling Price	Cost of Asset	Current Value on Transaction Date	Net Gain (Loss)
Single Transaction Exceeding 5% of the Current Value of Plan Assets at the Beginning of the Year:						
INVESCO Intermediate Government Bond Fund	Mutual Fund		\$ 8,091,573	\$ 8,098,148	\$ 8,091,573	\$ (6,575)
INVESCO Select Income Fund	Mutual Fund		7,346,224	7,183,420	7,346,224	162,804
INVESCO Total Return Fund	Mutual Fund		19,123,491	14,148,131	19,123,491	4,975,360
INVESCO Industrial Income Fund	Mutual Fund		13,716,282	12,076,366	13,716,282	1,639,916
INVESCO Dynamics Fund	Mutual Fund		11,694,364	10,926,678	11,694,364	767,686
Twentieth Century Ultra Fund	Mutual Fund	\$ 6,774,814		6,774,814	6,774,814	
American Century Income and Growth Fund	Mutual Fund	11,659,192		11,659,192	11,659,192	
Dodge & Cox Balanced Fund	Mutual Fund	10,546,639		10,546,639	10,546,639	
Chase Manhattan Bank Pooled Cash Investment Fund	Collective Trust Fund	66,574,763	63,205,881	66,574,763 63,205,881	66,574,763 63,205,881	-
Transamerica Contract #76863	Pooled Separate Account	6,000,000		6,000,000	6,000,000	
State Street Bank Contract #98012	Investment Contract	5,705,555		5,705,555	5,705,555	
Allstate Life Insurance Contract #77057	Investment Contract	11,598,905		11,598,905	11,598,905	
State Street Bank Contract #98239	Pooled Separate Account	6,000,000		6,000,000	6,000,000	
Bankers Trust Contract #98-936	Pooled Separate Account	6,000,000		6,000,000	6,000,000	
IRT Stable Value Fund	Collective Trust Fund		13,820,591	13,820,591	13,820,591	-

See independent auditors' report.

SIGNATURES

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 30, 1999

By: /s/ Jeffrey N. Quinn

-----  
Jeffrey N. Quinn,  
Plan Administrator

INDEX TO EXHIBITS

EXHIBIT	ITEM
23.1	Consent of Ernst & Young LLP, Independent Auditors
23.2	Consent of Stone Carlie & Company, L.L.C., Independent Auditors

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 25, 1998, with respect to the statement of net assets available for benefits, with fund information of the Arch Coal, Inc. Employee Thrift Plan as of December 31, 1997 included in this Annual Report (Form 11-K) for the year ended December 31, 1998.

/s/ Ernst & Young LLP

-----  
Ernst & Young LLP

Louisville, Kentucky  
June 28, 1999

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 25, 1999, with respect to the financial statements with supplemental schedules of Arch Coal, Inc. Employee Thrift Plan included in this Annual Report on Form 11-K for the year ended December 31, 1998.

/s/ Stone Carlie & Company, L.L.C.

-----  
Stone Carlie & Company, L.L.C.

St. Louis, Missouri  
June 25, 1999