

1-14601

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549



02044260

FORM 11-K

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



(Mark One)

- ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 [NO FEE REQUIRED, EFFECTIVE OCTOBER 7, 1996].

For the fiscal year ended December 31, 2001

OR

- TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 [NO FEE REQUIRED]

For the transition period from _____ to _____

PROCESSED

JUL 11 2002

THOMSON FINANCIAL

Commission file number 1-14601

A. Full title of the plan and the address of the plan, if different from that of the issuer named below:

ARCH CHEMICALS, INC. CONTRIBUTING EMPLOYEE OWNERSHIP PLAN

B. Name of issuer of the securities held pursuant to the plan and the address of its principal executive office:

Arch Chemicals, Inc.
501 Merritt 7
Norwalk, Connecticut 06851

Total Pages = 19
Exhibit Index = p.18

REQUIRED INFORMATION

**ARCH CHEMICALS, INC.
CONTRIBUTING EMPLOYEE
OWNERSHIP PLAN**

Financial Statements and Schedules
December 31, 2001

(With Independent Auditors' Report Thereon)



**ARCH CHEMICALS INC. CONTRIBUTING
EMPLOYEE OWNERSHIP PLAN**

Financial Statements and Schedules

December 31, 2001

(With Independent Auditors' Report Thereon)



Stamford Square
3001 Summer Street
Stamford, CT 06905

Independent Auditors' Report

Arch Chemicals Inc. Contributing
Employee Ownership Plan:

We have audited the accompanying statements of net assets available for plan benefits of the Arch Chemicals Inc. Contributing Employee Ownership Plan as of December 31, 2001, and the related statement of changes in net assets available for plan benefits for the period March 1, 2001 through December 31, 2001. 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 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 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 plan benefits of the Arch Chemicals Inc. Contributing Employee Ownership Plan as of December 31, 2001, and the changes in net assets available for plan benefits for the period March 1, 2001 through December 31, 2001, in conformity with accounting principles generally accepted in the United States of America.

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) and Schedule of Reportable Transactions are presented for the purpose of additional analysis and are not a required part of the basic financial statements but are supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. These supplemental schedules are the responsibility of the Plan's management. The supplemental schedules have been subjected to the auditing procedures applied in the audits 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.

KPMG LLP

June 21, 2002



KPMG LLP, KPMG LLP, a U.S. limited liability partnership, is
a member of KPMG International, a Swiss association.

**ARCH CHEMICALS INC. CONTRIBUTING
EMPLOYEE OWNERSHIP PLAN**

Statement of Net Assets Available for Plan Benefits

December 31, 2001

Assets:

Investments	\$ 131,616,311
Employer contribution receivable	74,938
Employee contribution receivable	253,409
Securities sold and not yet settled	<u>17,998</u>
Total assets	<u>131,962,656</u>

Liabilities:

Total liabilities	<u>—</u>
Net assets available for plan benefits	<u>\$ 131,962,656</u>

See accompanying notes to financial statements.

**ARCH CHEMICALS INC. CONTRIBUTING
EMPLOYEE OWNERSHIP PLAN**

Statement of Changes in Net Assets Available for Plan Benefits

For the period March 1, 2001 to December 31, 2001

Investment income:	
Dividends	\$ 2,329,574
Net depreciation in fair value of investments	(5,721,034)
Interest	366,892
Total investment loss	<u>(3,024,568)</u>
Interest from participant loans	<u>250,151</u>
Contributions:	
Employee	6,904,474
Employer	2,552,683
Total contributions	<u>9,457,157</u>
Net transfers in from other plans	<u>132,733,569</u>
Total additions	<u>139,416,309</u>
Administrative expense	19,347
Withdrawals in cash and stock	7,434,306
Total deductions	<u>7,453,653</u>
Net increase	131,962,656
Net assets available at March 1, 2001	<u>—</u>
Net assets available at December 31, 2001	<u>\$ 131,962,656</u>

See accompanying notes to financial statements.

**ARCH CHEMICALS INC. CONTRIBUTING
EMPLOYEE OWNERSHIP PLAN**

Notes to Financial Statements

December 31, 2001

(1) Summary of Significant Accounting Policies

(a) Basis of Presentation

The accompanying financial statements have been prepared on the accrual basis and present net assets available for plan benefits and changes in net assets available for plan benefits at fair value.

Arch Chemicals Inc. (Arch) Contributing Employee Ownership Plan (the Plan or CEOP) operates as an employee stock ownership plan (ESOP), and is designed to comply with Section 4975 (e)(7) and the regulations thereunder of the Internal Revenue Code of 1986, and is subject to the applicable provisions of the Employee Retirement Income Security Act of 1974 (ERISA).

(b) Use of Estimates

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 and changes therein, and disclosure of contingent assets and liabilities. Actual results could differ from those estimates.

(c) Investment Valuation and Income Recognition

The Plan's investments are stated at fair value. When available, quoted market prices are used to value investments. Commingled holdings, which include the Barclays Global Investors Equity Index Fund, are valued by the issuing investment manager.

Purchases and sales of securities are recorded on a trade-date basis. All income is determined on a full accrual basis. Bond interest accrues daily and dividends are recorded on the ex-dividend date.

(d) Payment of Withdrawals

Withdrawals are recorded when paid.

(e) Trust Fund Management

As of December 31, 2001, J.P. Morgan Chase & Co. is the Trustee of the Plan. Under the terms of the Trust Agreement between the Trustee and Arch, the Trustee is responsible for the safekeeping of Plan assets in the trust funds and the maintenance of records relating to receipts and disbursements from the trust funds. The Trustee invests funds in compliance with the terms of the Plan and makes payments from the trust funds as directed by participants and Arch. In general, all expenses of the Plan, trustee fees, commissions, and management fees will be incorporated into the fees associated with each Fund.

(f) Recordkeeper

J.P Morgan/American Century Retirement Plan Services is the Recordkeeper for the Plan.

**ARCH CHEMICALS INC. CONTRIBUTING
EMPLOYEE OWNERSHIP PLAN**

Notes to Financial Statements

December 31, 2001

(2) Description of Plan

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

(a) General

The Plan is a defined contribution plan with a cash or deferred arrangement and is intended to satisfy the qualification requirements under Sections 401(a) and 401(k) of the Internal Revenue Code of 1986, as amended (the "Code"). In addition, a portion of the Plan is intended to qualify as an employee stock ownership plan ("ESOP") under Section 4975(e)(7) of the Code. The Plan consists of several separate investment funds as described below.

On February 8, 1999, Olin Corporation (Olin) completed the spin-off of its specialty chemical businesses as Arch. Under the terms of the spin-off, Olin distributed to its holders of common stock as of the close of business on February 1, 1999 one Arch common share for every two shares of Olin common stock.

Effective as of the spin-off of Arch, the Olin Corporation Contributing Employee Ownership Plan (Olin CEOP) was converted into a multiple employer plan covering employees of Olin and its affiliated companies, and employees of Arch and its affiliated companies (collectively the Employers). The Olin CEOP was administered as a single plan.

On January 22, 2001, Arch adopted an Arch single employer plan, called the Arch Chemicals, Inc. Contributing Employee Ownership Plan (Arch CEOP) and effective March 1, 2001, is no longer a participating employer in the Olin CEOP. As of March 1, 2001, all Arch participant balances were transferred to the Arch CEOP. As a result, \$121,819,016 was recorded as a transfer into the Plan.

There were two additional transfers to the Arch CEOP during 2001 relating to plans of former employees of two companies acquired by Arch in 2000: Hickson USA Retirement Plan (Hickson Plan) and Brooks Industries 401(k) Plan (Brooks Plan). Assets of the Hickson Plan in the amount of \$10,084,305 were transferred into the Plan on April 1, 2001 and assets of the Brooks Plan in the amount of \$830,248 were transferred into the Plan on July 1, 2001.

8

**ARCH CHEMICALS INC. CONTRIBUTING
EMPLOYEE OWNERSHIP PLAN**

Notes to Financial Statements

December 31, 2001

(b) Contributions

Employees of the Employer and certain subsidiaries of the Employer are eligible to participate in the Plan and may elect to have their contributions invested in the following funds:

American Century Brokerage Fund	PIMCO Total Return Fund
American Century International Growth IST Fund	Arch Common Stock
American Century Premium Money Market Fund	* Pre-Mixed Portfolio - Aggressive
Barclays Global Investors Equity Index Fund	* Pre-Mixed Portfolio - Conservative
Gabelli Westwood Equity Fund	* Pre-Mixed Portfolio - Moderate
Managers Special Equity Fund	Putnam Growth Opportunities Fund
MS Institutional Fund Trust Mid Cap Value Portfolio	

* This fund is a blended fund that has been created specifically for the Plan and is composed of multiple fund options available under the Plan. Prior to the preparation of financial reports, the balances of these funds are allocated back to the underlying funds.

The Olin Common Stock Fund and Arch Common Stock Fund are parties-in-interest.

The maximum allowable pre-tax and after-tax contribution for employees is 15% and 18% of eligible pay, respectively. Under the Internal Revenue Service Code regulating the average percentage deferred under the Plan, the maximum allowable pre-tax contribution for employees whose base salary is in excess of \$85,000 during 2001 was 15% of base pay up to the ceiling of \$10,500.

A participant's contribution of up to 6% of eligible pay is eligible for an Employer matching contribution. The Employers contribution rate is currently 100% on the first \$25 each month and 50% on the balance up to 6% of eligible pay.

Arch matching contributions are invested in the Arch Common Stock Fund.

Arch's performance match is based on Arch's actual earnings per share (EPS) as a percent of the target EPS. Arch had no performance match for the year ended December 31, 2001.

(c) Olin Common Stock Fund

Only Participants who were Participants in the Olin CEOP at the time of the spin-off of Arch from Olin may have account balances that are invested in the Olin Common Stock Fund. Such Participants may retain existing investments in the Olin Common Stock Fund, but no new investments or transfers may be made in or to this fund. Participants may transfer any portion of their Olin Common Stock Fund balances to any of the other funds offered by the Plan. Any

**ARCH CHEMICALS INC. CONTRIBUTING
EMPLOYEE OWNERSHIP PLAN**

Notes to Financial Statements

December 31, 2001

dividends issued on the stock held in the Olin Common Stock Fund are automatically reinvested into the Arch Common Stock Fund.

(d) Arch Common Stock Fund

As of February 8, 1999, the specialty chemical businesses of Olin were spun off into a new publicly traded company known as Arch Chemicals, Inc. In order to effect the spin-off, a stock dividend was issued to Olin shareholders, including the Olin CEOP, in an amount equal to one share of Arch common stock for each two shares of Olin common stock then outstanding. These shares were deposited in the unitized Arch Common Stock Fund in the Olin CEOP.

As of the spin-off, each Plan participant having an account balance containing Olin common stock was credited with an opening account balance in the Arch Common Stock Fund. The amount credited to each participant's initial Arch Common Stock Fund account balance was calculated by (i) dividing the value of such participant's Olin Common Stock Fund account by the total value of all participants' accounts in the Olin Common Stock Fund, and then (ii) multiplying the percentage determined under (i), above, by the value of the Arch common stock the Plan trustee received as a stock dividend.

Dividends paid to participants can only be invested in the stock fund of the participant's respective employer. Currently, all company allocations made on behalf of participants are being invested in the Arch Common Stock Fund.

The balances in all Arch employees' accounts of the Arch Common Stock Fund were transferred to the Plan on March 1, 2001.

The number of units in the Arch Common Stock Fund to be credited to a participant's account is determined by dividing the participant's contribution plus the amount of employer matching contributions attributable to such contribution for the preceding pay cycle by the unit value of a unit as of the close of business on the date on which the contributions were credited. Additional units are credited to a participant's account to reflect payment of dividends on the common shares credited to that account based on the value of a unit as of the day the dividend is credited.

(e) Vesting and Benefit Provision

Participants are fully vested in their contributions to the Plan.

All participants become 100% vested in the Employers contribution upon the completion of two years of service in the Plan or as a result of death, disability or retirement. Non-bargaining and certain bargaining participants can become partially vested in accordance with the schedule set forth below:

<u>Years of Plan service</u>	<u>Percentage vested</u>
Less than one year	0%
One year but fewer than two	50%
Two or more years	100%

**ARCH CHEMICALS INC. CONTRIBUTING
EMPLOYEE OWNERSHIP PLAN**

Notes to Financial Statements

December 31, 2001

On termination of service for any reason, a participant may elect to receive his or her entire vested balance, in either a lump-sum amount, or in annual installments up to fifteen years.

All distributions from other than the Olin Common Stock Fund, or Arch Common Stock Fund are paid in cash. Distributions from the Olin Common Stock Fund, or Arch Common Stock Fund, at the election of the distributee, can be paid in common stock with any fractional interest in a share of common stock paid in cash.

(f) *Transfers Between Funds*

Participants may elect to transfer balances attributable to employee contributions from any fund to any other fund, except such participants may not transfer balances to the Olin Common Stock Fund. Participants may transfer balances daily, with no limitation on the frequency. A participant may elect to transfer any percentage of the balance in the fund from which the transfer is made.

(g) *Loan Provision*

All employees who are participants in the Plan are eligible to borrow from the Plan. Participants may borrow from the Plan an amount equal to up to one-half of their vested account balance. The minimum loan amount is \$500 and the maximum aggregate loan amount is \$50,000. Under the Plan, employees may have up to a maximum of five outstanding loans at any time. The loans are funded from the participants' accounts, reducing the account balance by the loan amount and have been reflected as transfers between funds in the financial statements. The term of the loans may be up to five years. The interest rate on these loans is fixed at the current prime rate at the time the loan is borrowed. The rates ranged from 5.00% to 9.5% in 2001.

(h) *Plan Termination*

Although it has not expressed any intent to do so, the Employer have the right under the Plan to discontinue their 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 CHEMICALS INC. CONTRIBUTING
EMPLOYEE OWNERSHIP PLAN**

Notes to Financial Statements

December 31, 2001

(3) Forfeitures of Employer Contributions

Any forfeitures of Employer contributions, equivalent to the market value of forfeited shares plus dividends not reinvested, will be applied to reduce subsequent employer contributions used to make company allocations. For the Plan period ended December 31, 2001 there were no significant forfeitures.

(4) Investments

The Plan's investments which exceeded 5% of net assets available for plan benefits as of December 31, 2001 are as follows:

Description of Investment	December 31 2001
American Century Premium Money Market Fund	\$ 13,834,458
Barclays Global Investors Fund	18,549,846
PIMCO Total Return Fund	13,660,923
Putnam Growth Opportunities Fund	10,501,388
Olin Corporation Common Stock*	14,918,910
Arch Chemicals Common Stock*	32,594,792

* Includes nonparticipant-directed

(5) Nonparticipant-directed Investments

Information about the net assets and the significant components of the changes in net assets for investment options which include nonparticipant-directed investments are as follows:

	December 31 2001
Net assets:	
Olin Corporation Common Stock Fund	\$ 14,918,910
Arch Chemicals Common Stock Fund	32,594,792
	\$ 47,513,702

**ARCH CHEMICALS INC. CONTRIBUTING
EMPLOYEE OWNERSHIP PLAN**

Notes to Financial Statements

December 31, 2001

	<u>December 31 2001</u>
Olin Common Stock Fund Net Assets at March 1, 2001	\$ <u> —</u>
Changes in net assets to the Olin Common Stock Fund:	
Transfers into the Plan	22,973,698
Contributions	—
Dividends	572,622
Net depreciation	(2,545,027)
Benefits paid to participants	(987,220)
Administrative expense	(102)
Loans issued	(60,141)
Other disbursements	(380)
Securities sold and not settled	(10,053)
Transfers to participants – directed investments	<u>(5,024,487)</u>
Net increase	<u>14,918,910</u>
Olin Common Stock Fund Net Assets at December 31, 2001	\$ <u>14,918,910</u>
Arch Common Stock Fund Net Assets at March 1, 2001	\$ <u> —</u>
Changes in net assets to the Arch Common Stock Fund:	
Transfers into the Plan	37,636,239
Contributions	3,173,929
Dividends	809,168
Net depreciation	4,377,895
Loan repayments (principal and interest)	311,483
Benefits paid to participants	(1,697,691)
Administrative expense	(1,635)
Loans issued	(269,317)
Other disbursements	(645)
Securities sold and not settled	(1,033)
Transfers to participants – directed investments	<u>(11,743,601)</u>
Net increase	<u>32,594,792</u>
Arch Common Stock Fund Net Assets at December 31, 2001	\$ <u>32,594,792</u>

**ARCH CHEMICALS INC. CONTRIBUTING
EMPLOYEE OWNERSHIP PLAN**

Notes to Financial Statements

December 31, 2001

(6) Federal Income Taxes

Arch applied for a determination letter on February 28, 2002 from the District Director of Internal Revenue stating that the Plan is a qualified plan and the Trust thereunder is exempt from Federal income taxes under the Internal Revenue Code. A determination letter had not yet been received, however the Sponsor believes the Plan is qualified and that the Trust is exempt from Federal income taxes.

**ARCH CHEMICALS INC. CONTRIBUTING
EMPLOYEE OWNERSHIP PLAN**

Schedule H, line 4i – Schedule of Assets (Held at End of Year)

December 31, 2001

<u>Identity of issuer, borrower, lessor or similar party</u>	<u>Description of investment including maturity date, rate of interest, par or maturity value</u>	<u>Cost</u>	<u>Current value</u>
* Various	Participant Loan Fund (interest ranging from 5.00% - 9.50%)	\$ —	4,112,890
* American Century	Premium Money Market Fund	13,834,458	13,834,458
PIMCO	Total Return Fund	13,808,659	13,660,923
Gabelli	Westwood Equity Fund	4,762,562	4,507,621
Barclays	Global Investors Fund	19,760,469	18,549,846
Putnam	Growth Opportunities Fund	12,616,827	10,501,388
Morgan Stanley	Institutional Fund Trust Mid Cap Value Portfolio	5,247,732	5,244,620
Managers Funds	Special Equity Fund	6,510,459	6,475,378
* American Century	International Growth Fund	7,151,538	5,956,556
* American Century	Brokerage Account	1,265,841	1,258,929
* Olin Corporation	Olin Corporation Common Stock, Par value \$1.00	17,260,630	14,918,910
* Arch Chemicals, Inc.	Arch Chemicals, Inc. Common Stock, Par value \$1.00	28,475,194	32,594,792
Total investments		<u>\$ 130,694,369</u>	<u>131,616,311</u>

*Party-in-interest to the Plan

ARCH CHEMICALS INC. CONTRIBUTING
EMPLOYEE OWNERSHIP PLAN

Schedule H, line 4j - Schedule of Reportable Transactions
Year ended December 31, 2001

Identity of party involved	Description of asset	Purchase price	Selling price	Lease rental	Expense incurred with transaction	Cost of asset	Current value of asset on transaction date	Net gain or (loss)
Series of Transactions								
* Arch Chemicals, Inc.	* Arch Chemicals, Inc. common stock par value \$1.00	3,520,256	—	—	—	3,520,256	3,520,256	—
		—	3,939,959	—	—	3,929,733	3,939,959	10,226

* Party-in-interest to the Plan

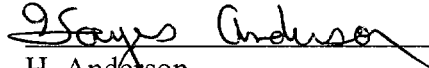
SIGNATURES

The Plan. 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 its behalf by the undersigned hereunto duly authorized.


Date: June 25, 2002

ARCH CHEMICALS, INC. CONTRIBUTING
EMPLOYEE OWNERSHIP PLAN


By: Members of the Arch CEOP
Administrative Committee



H. Anderson



W.P. Bush



L.S. Mercede



R.A. Barnes

EXHIBIT INDEX

Exhibit No.

Description

23

Consent of Auditors

19

Consent of Independent Auditors

Board of Directors
Arch Chemicals, Inc.:

We consent to the incorporation by reference in the registration statement (No. 333-54098) filed on Form S-8 of Arch Chemicals, Inc. of our report dated June 21, 2002, relating to the statements of net assets available for plan benefits of the Arch Chemicals, Inc. Contributing Employee Ownership Plan as of December 31, 2001 and the related statement of changes in net assets available for plan benefits for the period from March 1, 2001 to December 31, 2001, and related schedules, which report appears in the December 31, 2001 annual report on Form 11-K of the Arch Chemicals, Inc. Contributing Employee Ownership Plan.

KPMG LLP

Stamford, Connecticut
June 25, 2002