UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM 10-Q

(Mark One) X QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934	
For the quarterly period ended 31 March 1999	
0R	
$ _ $ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934	
For the transition period from to	
Commission file number 1-4534	
AIR PRODUCTS AND CHEMICALS, INC.	
(Exact Name of Registrant as Specified in Its Charter)	
Delaware 23-1274455	
(State of Other Jurisdiction of Incorporation or Organization) (I.R.S. Employer Identification No	.)
7201 Hamilton Boulevard, Allentown, Pennsylvania 18195-1501	
(Address of Principal Executive Offices) (Zip Code)	
Registrant's Telephone Number, Including Area Code 610-481-4911	
Indicate by check X whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to su filing requirements for the past 90 days. Yes X No	
Indicate the number of shares outstanding of each of the issuer's classe of common stock, as of the latest practicable date.	S
Class Outstanding at 6 May 1999	
Common Stock, \$1 par value 229,304,812	
AIR PRODUCTS AND CHEMICALS, INC. AND SUBSIDIARIES	
INDÉX Page N	o.
Part I. Financial Information	
Consolidated Balance Sheets - 31 March 1999 and 30 September 1998	
Consolidated Income - Three Months and Six Months Ended 31 March 1999 and 1998 4	
Consolidated Statement of Comprehensive Income - Three Months and Six Months Ended 31 March 1999 and 1998 5	

	Summary by Business Segments - Three Months and Six Months Ended 31 March 1999 and 1998	7
	Summary by Geographic Regions - Three Months and Six Months Ended 31 March 1999 and 1998	8
	Notes to Consolidated Financial Statements	9
	Management's Discussion and Analysis	11
ar	t II. Other Information	
	Item 1. Legal Proceedings	20
	Item 4. Submission of Matters to a Vote of Security-Holders	20
	Item 6. Exhibits and Reports on Form 8-K	21
	Signatures	22

REMARKS:

The consolidated financial statements of Air Products and Chemicals, Inc. and its subsidiaries (the "Company" or "Registrant") included herein have been prepared by the Company, without audit, pursuant to the rules and regulations of the Securities and Exchange Commission. Certain information and footnote disclosures normally included in financial statements prepared in accordance with generally accepted accounting principles have been condensed or omitted pursuant to such rules and regulations. In the opinion of the Company, the accompanying statements reflect all adjustments necessary to present fairly the financial position, results of operations and cash flows for those periods indicated, and contain adequate disclosure to make the information presented not misleading. Such adjustments are of a normal, recurring nature unless otherwise disclosed in the notes to consolidated financial statements. However, the results for the periods indicated herein reflect certain adjustments, such as the valuation of inventories on the LIFO cost basis, which can only be finally determined on an annual basis. It is suggested that these consolidated condensed financial statements be read in conjunction with the financial statements and notes thereto included in the Company's latest annual report on Form 10-K.

Results of operations for any three month period are not necessarily indicative of the results of operations for a full year.

AIR PRODUCTS AND CHEMICALS, INC. AND SUBSIDIARIES CONSOLIDATED BALANCE SHEETS

(Millions of dollars, except per share)

(Millions of dollars, except per share)		
ACCETC	31 March	20 Contembor
ASSETS	1999 (Unaudited)	30 September 1998
CURRENT ASSETS	A 05 5	A 04 F
Cash and cash items Trade receivables, less allowances for doubtful accounts	\$ 85.5 889.2	\$ 61.5 881.1
Inventories	432.9	428.6
Contracts in progress, less progress billings	143.0	94.1
Other current assets	164.8	176.4
TOTAL CURRENT ASSETS	1,715.4	1,641.7
INVESTMENT IN NET ASSETS OF AND ADVANCES TO		
UNCONSOLIDATED AFFILIATES	441.5	362.0
VIII VIII VIII VIII VIII VIII VIII VII		
OTHER INVESTMENTS AND ADVANCES	24.7	18.4
PLANT AND EQUIPMENT, at cost	9,744.2	9,489.5
Less - Accumulated depreciation	4,833.1	4,703.4
PLANT AND EQUIPMENT, net	4,911.1	4,786.1
GOODWILL	343.0	324.9
OTHER NONCURRENT ASSETS	357.9	356.5
TOTAL ASSETS	\$7,793.6	\$7,489.6
TOTAL MOSETO	======	======
LIABILITIES AND SHAREHOLDERS' EQUITY		
CURRENT LIABILITIES		
Payables, trade and other	\$ 513.6	\$ 478.7
Accrued liabilities	306.5	332.8
Accrued income taxes	30.7	30.9
Short-term borrowings Current portion of long-term debt	288.3 201.7	270.1 153.1
out term portion of long term debt		
TOTAL CURRENT LIABILITIES	1,340.8	1,265.6
LONG-TERM DEBT	2,231.7	2,274.3
DEFERRED INCOME AND OTHER NONCURRENT		
LIABILITIES	590.6	570.9
		
DEFERRED INCOME TAXES	730.2	703.0
TOTAL LIABILITIES	4,893.3	4,813.8
MINORITY INTERESTS IN SUBSIDIARY COMPANIES	124.3	8.5
THORITT INTERESTS IN SOBSIDITION OF THE THORITTE		
SHAREHOLDERS' EQUITY		
Common stock, par value \$1 per share	249.5	249.4
Capital in excess of par value	335.2	329.2
Retained earnings	3,561.3	3,400.0
Accumulated other comprehensive income Treasury stock, at cost	(283.7) (681.7)	(231.5) (657.0)
Shares in trust	(404.6)	(422.8)
TOTAL SHAREHOLDERS' EQUITY	2,776.0	2,667.3
TOTAL LIADTLITTEC AND CHARCHOLDERS FOUTTY	 ф7 700 б	Ф7 400 6
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	\$7,793.6 ======	\$7,489.6 ======

AIR PRODUCTS AND CHEMICALS, INC. AND SUBSIDIARIES CONSOLIDATED INCOME (Unaudited)

(Millions of dollars, except per share)	Three Months Ended 31 March		31 March 31 March		Three Months Ended Six Months Ended 31 March 31 March		rch
	1999	1998	1999	1998			
SALES AND OTHER INCOME Sales Other income, net	\$1,253.3 4.5	\$1,208.6 4.0(a)	\$2,527.9 9.4	\$2,443.4 (.9)(a)			
	1,257.8	1,212.6	2,537.3	2,442.5			
COSTS AND EXPENSES Cost of sales Selling and administrative Research and development	877.5 168.3 29.3	816.1(b) 163.1(b) 27.0	1,753.1 351.5 61.0	1,647.1(b) 322.7(b) 53.3			
OPERATING INCOME Income from equity affiliates, net of related expenses	182.7 14.1	206.4 7.9	371.7 23.9	419.4 13.6			
Gain on American Ref-Fuel sale and contract settlements Net gain (loss) on formation of polymer				75.2			
venture Interest expense	(.1) 40.4	39.0	31.1 80.8	79.2			
INCOME BEFORE TAXES AND MINORITY INTEREST Income taxes Minority interest (c)	156.3 45.1 4.3	175.3 54.5 .3(a)	345.9 105.0 7.6	429.0 147.3 .7(a)			
NET INCOME	\$106.9 =====	\$120.5 =====	\$ 233.3	\$ 281.0			
BASIC EARNINGS PER COMMON SHARE	\$.51	\$.56	====== \$1.10	====== \$1.29			
DILUTED EARNINGS PER COMMON SHARE	\$.50	\$.55 	\$1.08	\$1.27			
WEIGHTED AVERAGE NUMBER OF COMMON SHARES (in millions)	211.6	215.9	211.5	217.1			
WEIGHTED AVERAGE NUMBER OF COMMON AND COMMON EQUIVALENT SHARES (in millions)	215.1	220.9	215.3	221.8			
DIVIDENDS DECLARED PER COMMON SHARE - Cash	\$.17	\$.15	\$.34	\$.30			

⁽a) The results for the three and six months ended 31 March 1998 have been restated to reflect the current year presentation of minority interest in a separate line item between income taxes and net income.

⁽b) The results for the three and six months ended 31 March 1998 have been restated to reflect the current year presentation of distribution expense in cost of sales.

⁽c) Minority interest primarily includes before-tax amounts.

AIR PRODUCTS AND CHEMICALS, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME (Unaudited)

(Millions of dollars)	Three Months Ended 31 March		31 March	
	1999	1998	1999	
NET INCOME	\$106.9	\$120.5	\$233.3	\$281.0
OTHER COMPREHENSIVE INCOME, net of tax				
Foreign currency translation adjustments	(80.6)	(47.9)	(56.3)	(80.7)
Unrealized gains on investments: Unrealized holding gains arising during the period	. 2	4.1	4.1	1.7
Less: reclassification adjustment for gains included in net income				
Net unrealized gains on investments		4.1		1.7
TOTAL OTHER COMPREHENSIVE INCOME	(80.4)	(43.8)		(79.0)
COMPREHENSIVE INCOME	\$26.5 =====	\$76.7 =====	\$181.1 =====	\$202.0 =====

AIR PRODUCTS AND CHEMICALS, INC. AND SUBSIDIARIES CONSOLIDATED CASH FLOWS (Unaudited)

(Millions of dollars)

(Millions of dollars)	Six Months 31 Ma	
		1998
ODERATING ACTIVITIES		
OPERATING ACTIVITIES Net Income	\$233.3	\$281.0
Adjustments to reconcile income to cash provided by operating activities:		
Depreciation Deferred income taxes	261.3 31.9	238.2 37.6
Ref-Fuel divestiture deferred income taxes	31.9	(80.3)
Gain on formation of polymer venture	(31.1)	
Undistributed (earnings) of unconsolidated affiliates	(4.6)	15.9
Loss (gain) on sale of assets and investments Other	1.6	(83.7) 65.1
Working capital changes that provided (used) cash, net of effects of acquisitions:	68.0	05.1
Trade receivables	(18.7)	9.7
Other receivables	43.2	34.0
Inventories and contracts in progress Payables, trade and other	(40.2) 45.7	18.6
Accrued liabilities	(31.2)	(66.9) (48.8)
Accrued income taxes	(2.4)	89.0
Other	(5.1)	(10.9)
Cash (used for) discontinued operations	(2.0)	(3.4)
CASH PROVIDED BY OPERATING ACTIVITIES	549.7	495.1
INVESTING ACTIVITIES		
Additions to plant and equipment	(450.9)	(332.7)
Acquisitions, less cash acquired Investment in and advances to unconsolidated affiliates	(22.4) (66.0)	(125.0)
Proceeds from sale of assets and investments	31.3	(10.0) 285.9
Other	19.8	(13.8)
CASH (USED FOR) INVESTING ACTIVITIES	(488.2)	(195.6)
FINANCING ACTIVITIES		
Long-term debt proceeds	51.5	52.2
Payments on long-term debt	(31.7)	(54.0)
Net increase in commercial paper Net increase (decrease) in other short-term borrowings	11.4 9.2	10.2 (15.1)
Dividends paid to shareholders	9.2 (71.9)	(65.4)
Purchase of Treasury Stock	(24.6)	(200.0)
Other	19.6	7.1
CASH (USED FOR) FINANCING ACTIVITIES	(36.5)	(265.0)
Effect of Exchange Rate Changes on Cash	(1.0)	(2.0)
Increase in Cash and Cash Items	24.0	32.5
Cash and Cash Items - Beginning of Year	61.5	52.5
Cash and Cash Items - End of Period	\$85.5	\$85.0
	====	=====

AIR PRODUCTS AND CHEMICALS, INC. AND SUBSIDIARIES SUMMARY BY BUSINESS SEGMENTS (Unaudited)

(Millions of dollars)	Three Mon	ths Ended	Six Months	Ended
	31 March 31 March			
	1999	1998	1999	1998
Sales:				
Industrial Gases	\$727.0	\$715.3	\$1,467.8	\$1,442.3
Chemicals	416.9	378.4 114.9	818.7 241.4	759.3
Equipment/Services	109.4			241.8
Corporate/Other				
CONCOLTRATER		т	ФО БОТ О	ФО 440 4
CONSOLIDATED	\$1,253.3	\$1,208.6	\$2,527.9	\$2,443.4
Operating Income:				
Industrial Gases	\$142.6	\$144.7	\$264.8(b)	\$291.9
Chemicals	44.2(a)		96.8(a)(b)	126.0
Equipment/Services	8.2 ′	17.4	37.0(b)	30.0
Corporate/Other	(12.3)		(26.9)(b)	(28.5)(c)
CONSOLIDATED	\$182.7 	\$206.4	\$371.7 	\$419.4
Fauity Affiliated Income.				
Equity Affiliates' Income: Industrial Gases	\$7.2	\$2.8	\$13.3	\$3.2
Chemicals	3.4	.4	Ψ13.3 5.5	.4
Equipment/Services	3.6	3.9	4.7	8.3
Corporate/Other	(.1)	.8	.4	1.7
CONSOLIDATED	\$14.1	\$7.9	\$23.9	\$13.6
Operating Return on Net Assets:(d)				
Industrial Gases			11.1%	11.8%
Chemicals			15.2	17.9
Equipment/Services			30.8	13.9
Corporate/Other			N/A	N/A
CONSOLIDATED			11.6%	11.8%

- (a) The results for the three and six months ended 31 March 1999 include a charge of \$10.3 million primarily related to Chemicals facility closure costs.
- (b) The results for the six months ended 31 March 1999 include the cost reduction charge in Industrial Gases (\$16.3 million), Chemicals (\$1.6 million), Equipment/Services (\$1.9 million), and Corporate/Other (\$.5 million).
- (c) The results for the three and six months ended 31 March 1998 have been restated to reflect the current year presentation of minority interest in a separate line item between income taxes and net income.
- (d) Operating return on net assets (ORONA) is calculated as the rolling four quarter sum of operating income divided by the rolling five quarter average of total assets less investments in equity affiliates. The ORONA calculation excludes \$20.3 million in charges related to a global cost reduction plan and \$10.3 million in charges primarily related to Chemicals facility closure costs.

AIR PRODUCTS AND CHEMICALS, INC. AND SUBSIDIARIES SUMMARY BY GEOGRAPHIC REGION (Unaudited)

(Millions of dollars)

31 March		31 March	า
1999	1998	1999	
\$801.8 388.6 45.2	\$836.7 315.7 52.4	\$1,609.7 787.9 103.2	615.1 103.7
\$1,253.3	\$1,208.6	\$2,527.9	\$2,443.4
51.4 5.3 (.7)	45.7 (c) 3.3 (c) (1.4)(c)	99.7(b) 10.7 (1.4)	86.9 (c) 6.8 (c)
\$182.7	\$206.4	\$371.7	
\$5.0 3.5 4.4 1.2	\$4.2 2.3 2.7 (1.3)	\$6.9 6.4 8.9	\$9.7 5.0 5.6
		\$23.9	\$13.6
	31 Marc 1999 \$801.8 388.6 45.2 17.7 \$1,253.3 \$1126.7(a) 51.4 5.3 (.7) \$182.7 \$182.7 \$14.1	31 March 1999 1998 \$801.8 \$836.7 388.6 315.7 45.2 52.4 17.7 3.8 \$1,253.3 \$1,208.6 \$126.7(a) \$158.8 (c) 51.4 45.7 (c) 5.3 3.3 (c) (.7) (1.4)(c) \$182.7 \$206.4 \$5.0 \$4.2 3.5 2.3 4.4 2.7 1.2 (1.3) \$1.4.1 \$7.9	\$801.8 \$836.7 \$1,609.7 388.6 315.7 787.9 45.2 52.4 103.2 17.7 3.8 27.1 51.4 45.7 (c) 99.7 (b) 5.3 3.3 (c) 10.7 (.7) (1.4)(c) (1.4) 51.4 \$2.7 \$2.6 \$2.7 \$2.6 \$4.2 \$6.9 3.5 \$2.3 \$6.4 4.4 \$2.7 8.9 1.2 (1.3) 1.7 51.4 \$7.9 \$23.9

- (a) The results for the three and six months ended 31 March 1999 include a charge of \$10.3 million primarily related to Chemicals facility closure costs.
- (b) The results for the six months ended 31 March 1999 include the cost reduction charge in the United States (\$10.5 million) and Europe (\$9.8 million).
- (c) The results for the three and six months ended 31 March 1998 have been restated to reflect the current year presentation of minority interest in a separate line item between income taxes and net income.

AIR PRODUCTS AND CHEMICALS, INC. AND SUBSIDIARIES NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The following table sets forth the computation of basic and diluted earnings per share:

(Millions, except per share)			Three Months Ended Six Months Er 31 March 31 March	
		1998		
Numerator for basic EPS				
and diluted EPS-net income	\$106.9	\$120.5	\$233.3	\$281.0
Denominator for basic EPS weighted average shares	211.6	215.9	211.5	217.1
Effect of diluted securities: Employee stock options Other award plans		3.9 1.1		-
	3.5	5.0	3.8	4.7
Denominator for diluted EPS weighted average shares and				
assumed conversions ====		220.9 =======		
Basic EPS	•	\$.56 ======	•	
Diluted EPS ====		\$.55 		

Options on 8.4 million and 2.5 million shares of common stock were not included in computing diluted EPS for the second quarter of fiscal 1999 and 1998, respectively because their effects were antidilutive. The potential dilutive effect of these options can not be estimated based on current information.

The results for the three and six months ended 31 March 1999 include a charge of \$10.3 million (\$6.4 million after-tax, or \$.03 per share) primarily related to Chemicals facility closure costs.

The results for the six months ended 31 March 1999 include a net gain of \$31.1 million (\$21.3 million after-tax, or \$.10 per share) related to the formation of Air Products Polymers (a 65% majority owned venture with Wacker-Chemie GmbH). The gain was partially offset by costs related to an emulsions facility shutdown not included in the joint venture and for costs related to indemnities provided by Air Products to the venture.

On 21 December 1998, the Company committed to a global cost reduction plan. The plan results in a staffing reduction of 206 employees in the areas of manufacturing, distribution, and overhead. The plan will be completed by 31 December 1999. \$20.3 million (\$12.9 million after-tax, or \$.06 per share) related to employee termination benefits was charged to expense in the first fiscal quarter. As of this filing, \$10.3 million has been incurred and the balance is included in accrued liabilities. The charges to cost of sales, selling and administrative and research and development were \$9.9 million, \$9.3 million and \$1.1 million, respectively.

In December 1997, the Company sold its 50% interest in American Ref-Fuel Company, its former waste-to-energy joint venture with Browning-Ferris Industries, Inc.(BFI), to a limited liability company (LCC) formed by Duke Energy Power Services and United American Energy Corporation. This transaction provides for the sale of Air Products' interest in American Ref-Fuel's five waste-to-energy facilities for \$237 million, and the assumption of various parental support agreements by Duke Energy Capital Corporation, the parent company of Duke Energy Power Services. The income statement for the three months ended 31 December 1997 includes a gain of \$62.6 million from this sale, (\$35.1 million after-tax, or \$.16 per share).

The results for the six months ended 31 March 1998 also include a gain of \$12.6 million from a cogeneration project contract settlement (\$7.6 million after-tax, or \$.03 per share).

AIR PRODUCTS AND CHEMICALS, INC. AND SUBSIDIARIES MANAGEMENT'S DISCUSSION AND ANALYSIS

SECOND QUARTER FISCAL 1999 VS. SECOND QUARTER FISCAL 1998

RESULTS OF OPERATIONS

Consolidated

Sales in the second quarter of fiscal 1999 were \$1,253.3 million, 4% higher than in the same quarter of the prior year while operating income, was down \$23.7 million, or 11%, to \$182.7 million. Profits of equity affiliates increased \$6.2 million to \$14.1 million for the three months ended 31 March 1999. Net income was \$106.9 million, or \$.50 diluted earnings per share, compared to net income of \$120.5 million, or \$.55 diluted earnings per share, in the year-ago quarter. The current year included an after-tax charge of \$6.4 million, or \$.03 per share primarily related to Chemicals facility closure costs. Excluding the impact of this special item, net income for the second quarter of fiscal 1999 of \$113.3 million declined \$7.2 million from the prior year, and diluted earnings per share of \$.53 is down 4%. The remaining discussion and analysis of the consolidated results of operations excludes the impact of the special item.

Consolidated sales were up 4% driven by growth in Chemicals and Industrial Gases, primarily outside North America. Higher sales were achieved in Europe and Asia while North American sales across several end markets in the Industrial Gases segment were flat. Volume gains in the chemicals businesses were largely due to the new emulsions venture and prior year acquisitions.

Operating income declined primarily due to slowing activity in the Equipment/ Services segment, where profits were approximately half of those of the prior year. Also, unfavorably impacting results were higher fixed costs for new capacity and softer end-market conditions in some key Industrial Gases and Chemicals businesses. Favorable cost performance, particularly in distribution and overheads, was achieved.

Equity affiliates' income increased principally due to better performance at several affiliates, favorable foreign currency impacts in the current quarter, and the addition of the redispersible powders venture formed with Wacker-Chemie GmbH.

Industrial Gases - Sales increased 2% to \$727.0 million in the second quarter of fiscal 1999 while operating income declined slightly to \$142.6 million. Merchant gases volumes grew 2% in the United States, with LOX/LIN down 1% including non-cryo. Soft business conditions in the metals and electronics areas offset growth in several other end use markets. LOX/LIN pricing was flat compared to the prior year. Tonnage gases volumes in the United States declined 1% due to production cutbacks at several large steel accounts. HYCO volumes were essentially the same as the prior year. European merchant volumes were up 2% with LOX/LIN including non-cryo up 8%. Carburos Metalicos continues to provide strong growth. Consistent with North America, European LOX/LIN prices were unchanged from the prior year. Tonnage volumes increased 6% due to loading in Rotterdam more than offsetting weaker steel

demand. Total gases margin of 19.6% was down slightly from the prior year. A portion of the decline is due to geographic mix and the balance is due to lower volumes to steel customers and continued pressure in several electronics product areas. The results of asset management initiatives and cost reduction efforts had a favorable impact in the current quarter.

Equity affiliates' income for the second quarter of fiscal 1999 increased to \$7.2 million compared to \$2.8 million in the prior year. This increase was due primarily to improved performance at several affiliates as well as favorable foreign currency effects in the current quarter.

Chemicals- Sales in the second quarter of fiscal 1999 of \$416.9 million increased 10%, or \$38.5 million. Operating income decreased \$13.4 million to \$44.2 million. Excluding the charge primarily related to facility closure costs included in the current year results, operating income was \$54.5 million, a decline of 5%. Overall volumes increased 12%. Excluding the impact of the emulsions venture and prior year acquisitions, the current quarter volumes increased 2%. The current year operating margin of 13.1% declined approximately 2% from the prior year as a result of several factors including costs related to the emulsions venture, new facilities brought on-stream, and secondary Asian market impacts.

Equity affiliates' income for the second quarter of fiscal 1999 was \$3.4 million. This amount mainly reflects the Company's 20% interest in the redispersible powders venture formed with Wacker-Chemie GmbH.

Equipment and Services - Sales decreased 5% from \$114.9 million in the prior year to \$109.4 million. Operating income decreased from \$17.4 million to \$8.2 million. The significant decline in operating income was a result of less project activity in all areas. Sales backlog for the equipment product line declined to \$134 million at 31 March 1999. This backlog compares to \$302 million at 30 September 1998 and \$355 million at 31 March 1998.

Equity affiliates' income for the second quarter of fiscal 1999 decreased slightly from \$3.9 million in the prior year to \$3.6 million.

Corporate and Other - Operating loss declined \$1.0 million to \$12.3 million. The operating loss decline is mainly due to a litigation settlement in the current fiscal quarter.

Equity affiliates' income for the second quarter of fiscal 1999 decreased \$.9 million mainly due to a favorable power contract settlement in the prior year.

INTEREST

Interest expense of \$40.4 million is slightly higher than the level of the prior fiscal year second quarter. Increased interest incurred on a higher average debt balance was offset by lower rates and higher capitalized interest.

INCOME TAXES

The consolidated effective tax rate on income was 29.7%. Excluding the tax rate impact related to Chemicals facility closure costs, the effective tax rate is 30.2%.

This rate is 1% lower than the prior year rate mainly due to tax strategies and initiatives. The effective tax rate calculation includes before-tax minority interest.

ACCOUNTING CHANGES

As of April 1999, the Company will apply highly inflationary accounting to operations in Indonesia. The financial statements of the Company's operations in Indonesia will be remeasured as if the functional currency were the US dollar. No material effects on the financial statements are expected to result from this change.

As of 1 January 1999, the Company ceased applying highly inflationary accounting to operations in Mexico. For operations that used the US dollar for translation, due to hyperinflationary conditions, the functional currency will now be the Mexican Peso. No material effects on the financial statements are expected to result from this change.

Beginning with the fiscal quarter ended 31 December 1998, the Company changed the income statement presentation of distribution expense. Distribution expense is now included as part of "Cost of sales" and was previously reported as part of "Selling, distribution and administrative." This change reflects a more common industry classification of expenses. Results of the three and six months ended 31 March 1998 were restated for comparability.

COST REDUCTION PLAN

On 21 December 1998, the Company committed to a global cost reduction plan. The plan results in a staffing reduction of 206 employees in the areas of manufacturing, distribution and overhead. The plan has been communicated to all employees and as of the filing, approximately two thirds of the plan has been implemented. The plan will be completed by 31 December 1999. \$20.3 million (\$12.9 million after-tax, or \$.06 per share) related to employee termination benefits was charged to expense in the fiscal quarter ended 31 December 1998. Expenses of \$10.3 million have been incurred and charged to the accrual with the balance remaining in accrued liabilities. The charges to cost of sales, selling and administrative, and to research and development were \$9.9 million, \$9.3 million and \$1.1 million, respectively. The charges to segments were to Industrial Gases (\$16.3 million), Chemicals (\$1.6 million), Equipment/Services (\$1.9 million) and Corporate/Other (\$.5 million). Benefits of the cost reduction plan began to occur in the second quarter of the current fiscal year and will reach an annualized savings of approximately \$15 million in early fiscal year 2000.

YEAR 2000 READINESS DISCLOSURE

Year 2000 Preparation

During the fiscal quarter ended 31 March 1999, the Company continued to achieve the critical milestones in the Year 2000 readiness program. Progress and exposure are essentially as planned and disclosed in the fiscal year 1998 Annual Report issued in December 1998. The Company continues to believe that the previously disclosed \$40 million cost estimate remains sufficient to cover the cost of the Company's Year 2000 program. Year 2000 contingency planning is in progress and is expected to be ready to address Year 2000 issues as they arise.

Information Technology

Over 99% of the mission-critical infrastructure and applications portfolio have been tested and certified as Year 2000 ready. This activity is expected to be complete by May 1999. The Company continues to believe that the combination of readiness certification and contingency plans will result in no material adverse impact on the Company's operations or financial condition due to Information Technology Systems. An organization has been created and is in place to support Information Technology contingency planning. Normal operating plans have been reviewed against potential Year 2000 risks. Year 2000 contingency plans are currently being developed to address these risks. The Company has implemented controls to limit changes to Information Technology Systems over Year 2000 critical date changeovers.

Process Control and Embedded Chip Systems

Over 99% of the Company-owned or operated Non-Information Technology Systems have been inventoried and risk assessment is complete. Year 2000 certification efforts continue as planned with over 88% of the mission critical systems certified as Year 2000 ready. The Company expects that approximately 98% of the mission critical systems will be certified as Year 2000 ready by the end of June 1999. Individual plant site contingency plans are currently being reviewed against potential Year 2000 risks. These reviews and any required Year 2000 changes to these contingency plans are expected to be complete by September 1999.

Third Parties

Assessment of the Company's key suppliers for Year 2000 readiness with respect to the Company's needs is continuing as planned. Over 95% of the Company's key suppliers have been contacted and assessed. Approximately 60% have met the Company's Year 2000 readiness expectations and no further follow-up activities are planned. The Company is conducting more thorough evaluations of the remaining key suppliers based on the assessment results. By September 1999, contingency plans will be developed as appropriate to address perceived Year 2000 readiness shortfalls with respect to individual key suppliers.

Business Contingency Planning

A cross-functional management team has been created and is in place to coordinate the Company's various Year 2000 contingency planning efforts, to guide the Company's Year 2000 business contingency planning, and to specifically address customers' Year 2000 issues and concerns. The Company expects to develop its business contingency plans by September 1999.

EURO IMPACT

The Euro became legal currency as of 1 January 1999. The Company has administrative operations in 9 of the 11 countries which have adopted the Euro and is well positioned to comply with the legislation applicable to its introduction.

SIX MONTHS FISCAL 1999 VS. SIX MONTHS FISCAL 1998

RESULTS OF OPERATIONS

Consolidated

Sales in the first six months of fiscal 1999 of \$2,527.9 million were 3% higher than the \$2,443.4 million reported in the prior fiscal year. Operating income declined \$47.7 million, or 11%, to \$371.7 million. Profits of equity affiliates increased \$10.3 million to \$23.9 million for the six months ended 31 March 1999. Net income was \$233.3 million, or \$1.08 diluted earnings per share, compared to net income of \$281.0 million, or \$1.27 diluted earnings per share in the prior year. In the first six months of 1999 there were three special items; an after-tax gain of \$21.3 million, or \$.10 per share related to the formation of Air Products Polymers, and an after-tax charge of \$12.9 million, or \$.06 per share related to a global cost reduction plan, and an after-tax charge of \$6.4 million, or \$.03 per share primarily related to Chemicals facility closure costs. Excluding these special items, net income for this year is \$231.3 million, or \$1.07 diluted earnings per share. Additionally, in the first fiscal quarter of 1998 there were two special items; an after-tax gain of \$35.1 million, or \$.16 per share from the sale of the Company's 50% interest in American Ref-Fuel Company, and a gain of \$7.6 million, or \$.03 per share from a cogeneration project contract settlement. Excluding these special items, net income for the six months ended 31 March 1998 was \$238.3 million, or \$1.08 diluted earnings per share. Excluding the impact of all special items, net income for the first six months of fiscal 1999 of \$231.3 million declined \$7.0 million from the prior year, and diluted earnings per share of \$1.07 is down \$.01. The remaining discussion and analysis of the consolidated results of operations excludes the impact of special items.

Consolidated sales grew 3% primarily as a result of growth in Chemicals and Industrial Gases outside North America. Sales growth in Europe and Asia was offset by decreased North American sales across several end markets in the Industrial Gases segment. Chemicals businesses experienced volume gains as a result of the new emulsions venture with Wacker-Chemie GmbH and prior year acquisitions. The Equipment/Services segment sales were essentially flat compared to the prior year.

Operating income excluding special items decreased \$17.1 million, or 4% from the prior year. This decline is primarily due to slower Industrial Gases sales in the electronics and metals markets. Also, the margin impacts on some Chemicals product lines resulting from the secondary effects of the Asian market contributed to the decline in operating income.

Equity affiliates' income increased due to unfavorable foreign exchange impacts in the prior year, favorable foreign currency effects in the current year, improved performance at several affiliates, and the addition of the redispersible powders venture formed with Wacker-Chemie GmbH.

Industrial Gases - Sales of \$1,467.8 million in the first six months of fiscal 1999 increased 2%, or \$25.5 million over the \$1,442.3 million reported in fiscal 1998. Merchant gases volumes are up approximately 3% in both North America and

Europe. Soft conditions in the metals and electronics markets offset growth in several other end use markets. Pricing in the LOX/LIN component of merchant gases is down approximately 2% in North America and 1% in Europe, with average pricing impacted primarily by continuing competitive pressure. Tonnage gases volumes declined 2% in North America while Europe remained flat driven by weaker steel demand and a planned customer outage in Rotterdam.

Operating income decreased \$27.1 million to \$264.8 million from the prior year. The current year results include a cost reduction charge of \$16.3 million. Excluding this charge, operating income declined 4%. Operating margin for the six months excluding special items was 19.2% down 1% from 20.2% in the prior year. The operating margin decline is mainly due to geographic mix, lower volumes to steel customers and a weak electronics market.

Equity affiliates' income increased \$10.1 million to \$13.3 million. This increase is due to unfavorable foreign exchange effects in the prior year, favorable foreign currency effects in the current year, and improved performance at several affiliates in the current year.

Chemicals - Sales in the first six months of fiscal 1999 of \$818.7 million increased \$59.4 million, or 8%. Operating income declined \$29.2 million to \$96.8 million. The current year results include a charge of \$10.3 million primarily due to facility closure costs, and a cost reduction charge of \$1.6 million. Excluding these special items, fiscal 1999 operating income declined 14%. The overall volume for the segment grew about 10% for the first half of the fiscal year primarily due to the emulsions venture and prior year acquisitions. Methylamine, higher amine and PVOH volumes were down from the strong levels in the prior year. The operating income decline was due to increased fixed costs of new capacity additions, integration costs of the emulsions venture, customer outages, and the impacts of the Asian economy.

Equipment and Services - Sales decreased slightly to \$241.4 million from \$241.8 million in the prior year. Operating income increased \$7.0 million to \$37.0 million over the prior year. Excluding the cost reduction charge included in the current year results, operating income was \$38.9 million, an increase of 30%. The significant increase in operating income was the result of improved cost performance and a favorable project mix in the first quarter of fiscal year 1999. The second quarter results reflect a slowing of project activity as reflected in the backlog. Sales backlog for the equipment product line declined to \$134 million at 31 March 1999. This backlog compares to \$302 million at 30 September 1998 and \$355 million at 31 March 1998.

Equity affiliates' income for the first half of fiscal 1999 decreased \$3.6 million to \$4.7 million from the prior year. The decrease is mainly due to lower energy pricing in the power generation business.

Corporate and Other - Operating expense declined to \$26.9 million from \$28.5 million in the prior year. The current year results include a cost reduction charge of \$.5 million. Excluding this charge, operating expense declined \$2.1 million due primarily to unfavorable foreign exchange impacts in the prior year and a litigation settlement received in the current year.

Equity affiliates' income declined \$1.3 million to \$.4 million in the current year. This decline is mainly due a favorable power contract settlement in the prior year.

INTEREST

Interest expense of \$80.8 million increased \$1.6 million or 2% over the prior year. Higher average debt was partially offset by lower interest rates and higher capitalized interest.

INCOME TAXES

The consolidated effective tax rate on income was 31.0%. Excluding the tax rate impact on the Chemicals facility closure costs, the gain on formation of the emulsions venture, and the cost reduction plan charge, the effective tax rate is 31.5%. This rate is down from 32.5% excluding special items in the prior year primarily due to tax strategies and initiatives. The effective tax rate calculation includes before-tax minority interest.

LIOUIDITY AND CAPITAL RESOURCES

Capital expenditures during the first six months of fiscal 1999 totaled \$541.3 million compared to \$479.8 million in the corresponding period of the prior year. Additions to plant and equipment increased from \$332.7 million during the first six months of fiscal 1998 to \$450.9 million during the current period. The current year additions include a new 500 million pound-per-year dinitrotoluene (DNT) production facility in Geismar, Louisiana. Investments in unconsolidated affiliates were \$66.0 million during the first six months of fiscal 1999 versus \$10.0 million last year. The current year results include a cash contribution of \$33.5 million related to the formation of the redispersible powders venture with Wacker-Chemie GmbH. Capital expenditures are expected to be approximately \$1.1 billion in fiscal 1999. This is up from the first quarter estimate due to a number of acquisition opportunities the Company has completed or plans to complete in this fiscal year. It is anticipated that these expenditures will be funded with cash from operations supplemented with proceeds from financing activities.

Cash provided by operating activities during the first six months of fiscal 1999 (\$549.7 million) combined with proceeds from the sale of assets and investments (\$31.3 million) and cash provided by debt financing (\$62.9 million) were used largely for capital expenditures (\$541.3 million), purchase of common stock for treasury (\$24.6 million), debt repayments (\$22.5 million) and cash dividends (\$71.9 million). Cash and cash items increased \$24.0 million from \$61.5 million at the beginning of the fiscal year to \$85.5 million at 31 March 1999. The net increase in commercial paper was \$11.4 million.

Total debt expressed as a percentage of the sum of total debt and shareholders' equity, was 50% at 31 March 1999 and 30 September 1998. Total debt increased from \$2,697.5 million at 30 September 1998 to \$2,721.7 million at 31 March 1999.

There was \$332.1 million of commercial paper outstanding at 31 March 1999. The Company's revolving credit commitments amounted to \$600.0 million at 31 March 1999 with funding available in 13 currencies. No borrowings were outstanding under these commitments. Additional commitments totaling \$91.5 million are maintained by the Company's foreign subsidiaries, of which \$9.9 million was utilized at 31 March 1999.

At 31 March 1999, the Company had unutilized shelf registrations for \$325.0 million of debt securities.

The Company enters into interest rate swap agreements to change the fixed/ variable interest rate mix of the debt portfolio in order to maintain the percentage of fixed and variable rate debt within certain parameters set by management. In accordance with these parameters, the agreements are used to reduce interest rate risks and costs inherent in the Company's debt portfolio. Accordingly, the Company enters into agreements to both effectively convert variable-rate debt to fixed-rate debt and to effectively convert fixed-rate debt to variable-rate debt, which is principally indexed to LIBOR rates. The Company has also entered into interest rate swap contracts to effectively convert the stated variable rates to interest rates based on LIBOR. The fair value gain (loss) on the variable to variable swaps is equally offset by a fair value loss (gain) on the related debt agreements.

The notional principal and fair value of interest rate swap agreements at 31 March 1999 and 30 September 1998 were as follows:

(Millions of dollars)

	31 March 1999		30 September 1998	
	Notional	Fair Value	Notional	Fair Value
	Amount	Gain (Loss)	Amount	Gain (Loss)
Fixed to Variable	\$311.0	\$16.5	\$461.0	\$37.6
Variable to Variable	60.0	118.1	60.0	86.4
Total	\$371.0 =========	\$134.6 =======	\$521.0 =======	\$124.0

During the first six months of fiscal 1999 three fixed to variable interest rate swap agreements with a total notional amount of \$150.0 million were terminated, resulting in a deferred gain of \$10.5 million.

A \$60.8 million asset has been recognized in the financial statements related to the above variable to variable interest rate swap agreements. Additionally, a \$60.8 million liability has been recognized in the financial statements related to the corresponding debt agreements.

The Company is also party to interest rate and currency swap contracts. These contracts effectively convert the currency denomination of a debt instrument into another currency in which the Company has a net equity position while changing the interest rate characteristics of the instrument. The notional principal of interest rate and currency swap agreements outstanding at 31 March 1999 was \$270.8 million. The fair value of the agreements was a gain of \$1.1 million, of which a \$24.5 million gain related to the currency component was recognized in the financial statements. The remaining \$23.4 million loss was related to the interest component and has not been recognized in the financial statements. This loss reflects that current interest rates are generally lower than the interest rates paid under the interest rate and currency swap agreements. As of 30 September 1998 interest rate and currency swap agreements were outstanding with a notional principal amount and fair value of \$419.3 million and a gain of \$1.8 million, respectively. In the quarter ended 31 March 1999, three interest rate and currency

swap agreements with a total notional amount of \$118.5 million were terminated, resulting in a deferred loss of \$2.2 million.

The estimated fair value of the Company's long-term debt, including current portion, as of 31 March 1999 is \$2,731.5 million compared to a book value of \$2,433.4 million.

During the first six months of fiscal 1999, .6 million shares of the Company's outstanding common stock were repurchased at a cost of \$24.6 million.

FINANCIAL INSTRUMENTS

There has been no material change in the net financial instrument position or sensitivity to market risk since the disclosure in the annual report.

FORWARD-LOOKING STATEMENTS

The forward-looking statements contained in this document are based on current expectations regarding important risk factors. Actual results may differ materially from those expressed. In addition to important risk factors and uncertainties referred to in the Management's Discussion and Analysis such as those relating to the Year 2000, other important risk factors and uncertainties include the impact of worldwide economic growth, pricing of both the Company's products and raw materials such as electricity, customer demand and other factors resulting from fluctuations in interest rates and foreign currencies, the impact of competitive products and pricing, success of work process programs to control costs, and the impact of tax and other legislation and other regulations in the jurisdictions in which the Company and its affiliates operate.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

During April of 1999, the Kentucky Department of Environmental Protection ("KDEP") forwarded a Notice of Violation alleging the Company's Calvert City, Kentucky chemical manufacturing facility had exceeded the significant net emission rate for ozone (measured as volatile organic compounds ("VOCs")) of Kentucky's Prevention of Significant Air Quality regulation with respect to calendar years 1993, 1995, 1997 and related construction permits. KDEP has also cited the facility for delayed installation of a device to control VOCs.

The Company does not expect that any sums it may have to pay in connection with these matters would have a materially adverse effect on its consolidated financial position nor is there any material additional exposure expected in any one year in excess of the amounts the Company currently has accrued.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY-HOLDERS

- a. The Annual Meeting of Shareholders of the Registrant was held on 28 January 1999.
- c. The following matters were voted on at the Annual Meeting:
 - 1. Election of Directors

		NUMBER OF	VOTES CAST	
NAME OF DIRECTOR	FOR	AGAINST OR WITHHELD	ABSTENTIONS	BROKER NON- VOTES
R. CIZIK	203,758,595	2,878,765	0	0
U.F. FAIRBAIRN	203,810,516	2,826,844	0	0
J.P. JONES III	203,759,232	2,878,128	0	0
J.J. KAMINSKI	202,311,915	4,325,445	0	0
R.F.M. LUBBERS	203,852,286	2,785,074	0	0

 Ratification of the appointment of Arthur Andersen LLP of Philadelphia, Pennsylvania, as independent certified public accountants for the Registrant for the fiscal year ending 30 September 1999.

		NUMBER OF VOTES	CAST
FOR	AGAINST OR WITHHELD	ABSTENTIONS	BROKER NON-VOTES
205,079,080	702,981	855,299	0
	102,901		

ITEM 6. EXHIBITS AND REPORTS ON FORM 8-K

- (a)(12) Computation of Ratios of Earnings to Fixed Charges.
- (a)(27) Financial Data Schedule, which is submitted electronically to the Securities and Exchange Commission for information only, and not filed.
- (b) Current Reports on Form 8-K dated 22 January 1999 and 26 January 1999 were filed by the Registrant during the quarter ended 31 March 1999 in which Item 5 of such forms was reported.

21

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused $\,$ this report to be signed on its behalf by the undersigned thereunto duly authorized.

Air Products and Chemicals, Inc. (Registrant)

Date: May 12, 1999 By: /s/ L. J. Daley

L. J. Daley Vice President - Finance (Chief Financial Officer)

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

EXHIBITS

То

FORM 10-Q

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF

THE SECURITIES EXCHANGE ACT OF 1934

For the quarter ended 31 March 1999

Commission File No. 1-4534

 $\begin{array}{c} \text{AIR PRODUCTS AND CHEMICALS, INC.} \\ \text{(Exact name of registrant as specified in its charter)} \end{array}$

INDEX TO EXHIBITS

- (a)(12) Computation of Ratios of Earnings to Fixed Charges.
- (a)(27) Financial Data Schedule, which is submitted electronically to the Securities and Exchange Commission for information only, and not filed.

Exhibit (a)(12) Exhibit (a)(12)

AIR PRODUCTS AND CHEMICALS, INC., AND SUBSIDIARIES

COMPUTATION OF RATIOS OF EARNINGS TO FIXED CHARGES (Unaudited)

		Six Months Ended 31 Mar						
	1994	1995	1996	1997	1998	1999		
	(Millions of dollars)							
Earnings:								
<pre>Income before extraordinary item and the cumulative effect of accounting changes:</pre>	\$233.5	\$368.2	\$416.4	\$429.3	\$546.8	\$233.3		
Add (deduct): Provision for income taxes	95.2	186.2	195.5	203.4	280.9	107.7		
Fixed charges, excluding capitalized interest	127.1	148.8	184.0	233.0	202.8	98.0		
Capitalized interest amortized during the period	8.0	9.1	9.4	8.3	7.4	3.0		
Undistributed earnings of less-than-fifty-percent-owned affiliates	(2.8)	(25.4)	(40.6)	(31.1)	(25.3)	(17.3)		
Earnings, as adjusted	\$461.0 =====	\$686.9 =====	\$764.7 =====	\$842.9 =====	1,012.6 ======	\$424.7 =====		
Fixed Charges:								
Interest on indebtedness, including capital leaseobligations	\$118.2	\$139.4	\$171.7	\$217.8	\$186.7	\$89.6		
Capitalized interest	9.7	18.5	20.0	20.9	18.4	11.4		
Amortization of debt discount premium and expense	.8	.2	1.5	1.8	1.9	.9		
Portion of rents under operating leases representative of the interest factor	8.1	9.2	10.8	13.4	14.2	7.5		
Fixed charges	\$136.8	\$167.3	\$204.0	\$253.9	\$221.2	\$109.4		
Ratio of Earnings to Fixed Charges:	===== 3.4 =====	===== 4.1 =====	3.7	3.3	4.6	===== 3.9 =====		

This Schedule contains summary financial information extracted from the consolidated balance sheet and the consolidated statement of income filed as part of Form 10-Q and is qualified in its entirety by reference to such Form 10-Q.

1,000,000 U S Dollar

1.08