		ITED STATES SECURITIES AND EXCHANGE COMMISSION
		EPORT PURSUANT TO SECTION 13 OR 15(d) OF THE -
		OR $\c \c$ 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
		(Exact Name of Registrant as Specified in Its
Charter)		
Delaware		
23-1274455		
		
-(State of		
Other		
Jurisdiction		
of -		
Incorporation		
Of		
Organization)		
(I.R.S.		
Employer		
Identification		
No.)		(111 - 271 1 1
		(Address of Principal
		1 Indicate by check X whether the registrant (1) has
		during the preceding 12 months (or for such shorter period that the registrant
		00 days. Yes X No Indicate the number of shares outstanding of
		1 May 2002
- Common Stock, \$1 par value 227,203,388 AIF		Subsidiaries INDEX
Page No Part I. Financial Information		
Consolidated Balance Sheets - 31 N	viaren	
2002 and 30 September 2001	"1 , 1	
Income - Three Months and Six Months Ender		
March 2002 and 2001		
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Three Months and Six Months Ended 31 March		
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2001 6 Sur		
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March 2002 and 2001		
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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 interim results for the periods indicated herein do not 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 or six month period are not necessarily indicative of the results of operations for a full year. 2 AIR PRODUCTS AND CHEMICALS, INC. and Subsidiaries CONSOLIDATED BALANCE SHEETS

(Millions of dollars, except per share)	2002 30
September 2001 ASSETS (Unaudited)	ENT
hillings 95.3 67.9 Other current assets 206.6 226.8	progress
TOTAL CURRENT ASSETS 1,631.3 1,684.8	
INVESTMENTS IN NET ASSETS OF AND ADVANCES TO 530.6 499.5 EQUITY AFFILIATES PLANT AND EQUIPMENT, at cost 10,157.1 10,226.5	less -
	ANT
AND EQUIPMENT, not 4,996.9 5,118.5	DWILL
343.1 384.7 OTHER NONCURRENT ASSETS 368.9 396.6	
TOTAL ASSETS \$7,870.8 \$8,084.1	
LIADII IZIEG AND GUADEUOI DEDGI EOLIIZIV	
LIABILITIES AND SHAREHOLDERS' EQUITY	255.7
	233.7 OTAL
	3-TERM
DEBT 1,968.9 2,027.5 DEFERRED INCOME & OTHER NONCURRENT LIABILITIES 718.9 702.0 DEFERRED INCOME TAXES 791.1 778.4	
TOTAL LIABILITIES 4,453.2 4,860.3	
	e, issued
2002 and 2001-249,455,584 249.4 249.4 shares) Capital in excess of par value 417.2 384.9 Retained earnings 4,118.9 3,965.9 Accumulated other comprehensive	
(loss) (498.1) (452.5) Treasury Stock, at cost (2002-22,252,196 shares; 2001-22,269,244 shares) (768.3) (768.8) Shares in trust (2002-9,489,217 shares; 2011-22,269,244 shares) (768.3) (768.8) Shares in trust (2002-9,489,217 shares; 2011-22,269,244 shares)	
11,723,720 shares) (222.4) (273.1) TOT/ SHAREHOLDERS' EQUITY 3,296.7 3,105.8	ve TOTAL
LIABILITIES AND SHAREHOLDERS' EQUITY \$7,870.8 \$8,084.1	IUIAL
======================================	
The accompanying notes are an integral part of these statements. 3 AIR PRODUCTS AND CHEMICALS, INC. and Subsidiaries CONSOLIDATED INCOME	
(Unaudited) (Millions of dollars, except per share)	
(Millions of dollars, except per share) Three Months Ended Six Months Ended 31 March 31 March 2002 2001 2002 2001	
Selling and administrative 189.1 189.5 358.4 363.0 Research and development 28.1 30.8 58.5 59.3 Other (income) expense, net (1.6) 9.0 (6.1) (4.3)	
Income from equity affiliates, net of 20.3 16.9 38.7 37.8 related expenses Gain on sale of packaged gas 55.7 55.7 business Interest expense 31.0 50.3	
66.1 98.7	
199.8 130.8 367.3 330.8 MINORITY INTEREST Income taxes 69.6 36.6 118.4 98.3 Minority interest (a) 4.1 (.4) 9.1 2.3	
NET INCOME \$126.1 \$94.6 \$239.8 \$230.2	
BASIC EARNINGS PER \$.58 \$.44 \$1.11 \$1.07 COMMON SHARE	
NUMBER OF COMMON AND COMMON EQUIVALENT SHARES (in millions) (b)	
(a) Minority interest primarily includes before-tax amounts. (b) The dilution of earnings per common share is due mainly to the impact of unexercised stock options. The accompanying notes are an integral part of these statements. 4 AIR PRODUCTS AND CHEMICALS, INC. and Subsidiaries CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME (Unaudited) (Millions of dollars)	
Three Months	
Ended Six Months	
Ended 31 March 31	
March 2002 2001	
2002 2001	
	
	
NITT	
INCOME \$126.1	
INCOME \$126.1 \$04.6 \$230.8	
\$94.6 \$239.8 \$230.2	

-----OTHER

COMPREHENSIVE INCOME (LOSS); net of tax Unrealized gains (losses) on investments: Unrealized holding gains (losses) (3.3) .5 (2.5) (.3) arising during the period Less: reclassification adjustment for (1.7) – (1.7) — gains included in net income
TOTAL OTHER COMPREHENSIVE (21.7) (59.3) (45.6) (76.3) INCOME (LOSS), net of tax
COMPREHENSIVE INCOME \$104.4 \$35.3 \$194.2 \$153.9

The accompanying notes are an integral part of these statements. 5 AIR PRODUCTS AND CHEMICALS, INC. and Subsidiaries CONSOLIDATED CASH FLOWS (Unaudited)

(Millions of dollars)	Six Months Ended 31 March 2002
2001 OPERAT	TNG ACTIVITIES Net Income \$239.8
\$230.2 Adjustments to reconcile income to cash provided by operating activities: Depreciation 275.7 291.7 Deferred income taxes	es 7.4 7.1 Undistributed earnings of
unconsolidated affiliates (30.9) (19.9) Gain on sale of assets and investments (58.6) (.6) Other 66.1 (8.2) Working capital changes that	t provided (used) cash, excluding effects
of acquisitions and divestitures: Trade receivables 10.1 (82.2) Inventories and contracts in progress (5.8) (37.9) Payables, trade and ot	
	NG ACTIVITIES Additions to plant an
equipment (a) (321.3) (302.3) Investment in and advances to unconsolidated affiliates (34.7) (26.5) Acquisitions, less cash acquired (12.6) (1	
investments 267.8 32.2 Other 10.5 23.0	CASH USED
FOR INVESTING ACTIVITIES (78.8) (273.6)	. 1 . 1 . 1
FINANCING ACTIVITIES Long-term debt proceeds 20.8 54.4 Payments on long-term debt (164.8) (21.4) Net decrease in co	
borrowings (205.2) (25.7) Purchase of treasury stock (50.0) Dividends paid to shareholders (86.2) (81.5) Issuance of stock for opti	
CASH USED FOR FINA	
	re Rate Changes on Cash (6.8) (2.6)
	nd Cash Items 31.6 6.5 Cash and Cash
Items - Beginning of Year 66.2 94.1	Cash and Cash
(a) Evaluate control logge additions of \$1.9 and \$5 in 2002 and 2001, respectively. The accompanying notes are an integral most of the	an atatamenta 6 AID DDODLICTS
(a) Excludes capital lease additions of \$1.8 and \$.5 in 2002 and 2001, respectively. The accompanying notes are an integral part of thes	se statements, o AIK PRODUCTS
AND CHEMICALS, INC. and Subsidiaries SUMMARY BY BUSINESS SEGMENTS (Unaudited)	
Business segment	
information is	
shown below:	
(Millions of	
dollars)	
	
Three Months	
Ended Six	
Months Ended	
31 March 31	
March 2002	
2001 2002 2001	
Revenues	
from external	
customers Gases	
\$ 886.8	
\$1,079.4	
\$1,790.9	
\$2,106.1	
Chemicals 358.1	
390.3 707.1	
783.6 Equipment	
67.8 64.8 131.2	
120.6	
	
	
	
	
Segment Totals	
1,312.7 1,534.5	
1,512.7 1,334.3 2,629.2 3,010.3	

Consolidated
Totals \$1,312.7
\$1,534.5
\$2,629.2
\$3,010.3
Operating
income Gases
\$122.5 \$156.8
\$274.5 \$348.2
Chemicals 42.0
18.5 82.5 55.5
Equipment 5.1
3.5 6.0 4.6
Segment Totals
169.6-178.8
363.0 408.3
303.0 408.3
- Corporate
research and
development and
(1.1.0) (1.1.0)
(14.8) (14.6)
(24.0) (16.6)
(24.0) (16.6) other
(24.0) (16.6)
(24.0) (16.6) other
(24.0) (16.6) other income/(expense)
(24.0) (16.6) other income/(expense)
(24.0) (16.6) other income/(expense)
(24.0) (16.6) other income/(expense) Consolidated Totals \$154.8 \$164.2 \$339.0
(24.0) (16.6) other income/(expense)
(24.0) (16.6) other income/(expense) Consolidated Totals \$154.8 \$164.2 \$339.0
(24.0) (16.6) other income/(expense) Consolidated Totals \$154.8 \$164.2 \$339.0
(24.0) (16.6) other income/(expense) Consolidated Totals \$154.8 \$164.2 \$339.0
(24.0) (16.6) other income/(expense) Consolidated Totals \$154.8 \$164.2 \$339.0
(24.0) (16.6) other income/(expense) Consolidated Totals \$154.8 \$164.2 \$339.0
(24.0) (16.6) other income/(expense)
(24.0) (16.6) other income/(expense)
Consolidated Totals \$154.8 \$164.2 \$339.0 \$391.7 Operating income
Consolidated Totals \$154.8 \$164.2 \$339.0 \$391.7 Operating income (excluding special
Consolidated Totals \$154.8 \$164.2 \$339.0 \$391.7 Operating income (excluding special items) Gases
Consolidated Totals \$154.8 \$164.2 \$339.0 \$391.7 Operating income (excluding special items) Gases \$148.7(a)
Consolidated Totals \$154.8 \$164.2 \$339.0 \$391.7 Operating income (excluding special items) Gases \$148.7(a) \$183.1(e)
Consolidated Totals \$154.8 \$164.2 \$339.0 \$391.7 Operating income (excluding special items) Gases \$148.7(a) \$183.1(e) \$300.7(a)
Consolidated Totals \$154.8 \$164.2 \$339.0 \$391.7 Operating income (excluding special items) Gases \$148.7(a) \$183.1(e) \$300.7(a) \$374.5(e)
Consolidated Totals \$154.8 \$164.2 \$339.0 \$391.7 Operating income (excluding special items) Gases \$148.7(a) \$183.1(e) \$300.7(a) \$374.5(e) Chemicals
Consolidated Totals \$154.8 \$164.2 \$339.0 \$391.7 Operating income (excluding special items) Gases \$148.7(a) \$183.1(e) \$300.7(a) \$374.5(e) Chemicals 46.6(b) 23.1(d)
Consolidated Totals \$154.8 \$164.2 \$339.0 \$391.7 Operating income (excluding special items) Gases \$148.7(a) \$183.1(e) \$300.7(a) \$374.5(e) Chemicals

3.5 6.0 4.6
Segment Totals
200.4 209.7
393.8 439.2
- Corporate research and
development and
(14.8) (8.6)(e) (24.0) (10.6)(e)
other
income/(expense)
Consolidated
Totals \$185.6
\$201.1 \$369.8 \$428.6
Equity affiliates'
income Gases \$16.3 \$16.6
income Gases \$16.3 \$16.6 \$32.1 \$35.3
\$16.3 \$16.6 \$32.1 \$35.3 Chemicals 2.8—
income Gases \$16.3 \$16.6 \$32.1 \$35.3 Chemicals 2.8 5.1 1.5
\$16.3 \$16.6 \$32.1 \$35.3 Chemicals 2.8—
income Gases \$16.3 \$16.6 \$32.1 \$35.3 Chemicals 2.8 5.1 1.5 Equipment 1.2.2
income Gases \$16.3 \$16.6 \$32.1 \$35.3 Chemicals 2.8 5.1 1.5 Equipment 1.2.2
income Gases \$16.3 \$16.6 \$32.1 \$35.3 Chemicals 2.8 5.1 1.5 Equipment 1.2.2
income Gases \$16.3 \$16.6 \$32.1 \$35.3 Chemicals 2.8 5.1 1.5 Equipment 1.2.2
income Gases \$16.3 \$16.6 \$32.1 \$35.3 Chemicals 2.8— 5.1 1.5 Equipment 1.2 .2 1.5 .9———————————————————————————————————
income Gases \$16.3 \$16.6 \$32.1 \$35.3 Chemicals 2.8— 5.1 1.5 Equipment 1.2 .2 1.5 .9———————————————————————————————————
income Gases \$16.3 \$16.6 \$32.1 \$35.3 Chemicals 2.8— 5.1 1.5 Equipment 1.2 .2 1.5 .9———————————————————————————————————
income Gases \$16.3 \$16.6 \$32.1 \$35.3 Chemicals 2.8— 5.1 1.5 Equipment 1.2 .2 1.5 .9———————————————————————————————————
income Gases \$16.3 \$16.6 \$32.1 \$35.3 Chemicals 2.8— 5.1 1.5 Equipment 1.2 .2 1.5 .9———————————————————————————————————
income Gases \$16.3 \$16.6 \$32.1 \$35.3 Chemicals 2.8— 5.1 1.5 Equipment 1.2 .2 1.5 .9———————————————————————————————————
income Gases \$16.3 \$16.6 \$32.1 \$35.3 Chemicals 2.8— 5.1 1.5 Equipment 1.2 .2 1.5 .9———————————————————————————————————
income Gases \$16.3 \$16.6 \$32.1 \$35.3 Chemicals 2.8— 5.1 1.5 Equipment 1.2 .2 1.5 .9———————————————————————————————————
Segment Totals 20.3 16.8 38.7 37.7 ————————————————————————————————
Segment Totals 20.3 16.8 38.7 37.7 ————————————————————————————————
Segment Totals 20.3 16.8 38.7 37.7 ————————————————————————————————
Segment Totals 20.3 16.8 38.7 37.7 ————————————————————————————————

Totals \$20.3	
\$16.9 \$38.7	
\$37.8	
7 (Millions of dollars)	
Identifiable assets (f) Gases \$5,503.2 \$5,930.7 Chemicals 1,384.4 1,457.9 Equipment 214.1 229.9	
Twelve Months Ended 31 March 2002 2001	
ORONA (f) Gases 11.2% 12.9% Chemicals 12.0% 9.6% Equipment 6.5% 6.3%	
Segment Totals 11.2% 12.0% Consolidated Totals 10.6% 11.3%	
(a) The results for the three and six months ended 31 March 2002 excluded a cost reduction characteristics.	ge
of \$26.2. (b) The results for the three and six months ended 31 March 2002 excluded a cost reduction charge of \$4.6. (c) The results for the three and six months ended 31 March 2001 excluded a cost reduction charge of \$26.3. (d) The results for the three and six months ended 31 March 2001 excluded a cost reduction charge of \$4.6. (e) The results for the three and six months ended 31 March 2001 excluded a litigation settlement charge of \$6.0. (f) 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 (identifiable assets). The ORONA calculation excluded all special items impacting operating income. 8 AIR PRODUCTS AND CHEMICALS, INC. and Subsidiaries SUMMARY BY GEOGRAPHIC REGIONS (Unaudited)	9
(Millions	
of dollars)	
	
	
	
	
Three	
Months	
Ended	
Six	
Months Ended 21	
Ended 31 March 31	
March	
2002	
2001	
2002	
2001	
	
	
Revenues	
from	
external external	
customers	
United	
States	
\$819.9	
\$1,030.9	
\$1,657.8	
\$2,012.1	
Canada	
27.1 29.8	

52.1-59.3

Total North America 847.0 1,060.7 1,709.9 2,071.4 -**United** Kingdom 108.0 125.7 218.9 238.1 Spain 80.5 82.8 161.7 157.1 Other Europe 180.5 159.9 332.4 307.5 ----- Total Europe 369.0 368.4 713.0 702.7 ----- Asia 69.1-77.1 152.0

169.7

Latin
America
27.6 28.3
54.2 66.4
All Other

Total
\$1,312.7
\$1,534.5
\$2,629.2
\$3,010.3

Note: Geographic information is based on country of origin. The other Europe segment operates principally in France, Germany, Netherlands, and Belgium 9 AIR PRODUCTS AND CHEMICALS, INC. and Subsidiaries NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Millions of dollars, except per share) The company adopted SFAS No. 142, "Goodwill and Other Intangible Assets" on 1 October 2001. As required by SFAS 142, the company performed an impairment test on goodwill as of 1 October 2001, which indicated no impairment of goodwill. As of 1 October 2001, the company is no longer amortizing goodwill, including goodwill associated with investments in equity affiliates. Goodwill amortization in 2001 was \$14.8 on an after-tax basis, or \$.07 per share. Goodwill amortization for the three and six months ended 31 March 2001 was \$3.6 and \$7.4, on an after-tax basis, or \$.02 and \$.04 per share, respectively. Changes to the carrying amount of consolidated goodwill by segment for the six months ended 31 March 2002, are as follows: Gases Chemicals Equipment Total
Three
Months
Ended Six
Months
Ended 31
March 31
March 2002
2001 2002
2001

Numerator for basic EPS and diluted EPSnet income \$126.1 \$94.6 \$239.8 \$230.2 **Denominator** for basic EPSweighted average shares 216.6 214.5 216.2 214.4 Effect of diluted securities: **Employee** stock options 5.5 3.4 4.9 3.1 Other award plans .8-1.0 .6.9---- 6.3 4.4 5.5 4.0 -----**Denominator** for diluted EPSweighted average shares and assumed conversions 222.9 218.9 221.7 218.4 ---- Basie EPS \$.58 \$.44 \$1.11 \$1.07 -----

Diluted EPS
\$.57 \$.43
\$1.08 \$1.05
μ1.00 ψ1.05

Options of 5.6 million shares of common stock were not included in computing diluted EPS for the second quarter of 2001 because their effects were antidilutive. Income from equity affiliates contributed \$.09 and \$.07 to diluted earnings per share for the three months ended 31 March 2002 and 2001, respectively. Income from equity affiliates contributed \$.16 to diluted earnings per share for both the six months ended 31 March 2002 and 2001. The results for the three and six months ended 31 March 2002 included a charge of \$30.8 (\$18.9 after-tax, or \$.09 per share) for a global cost reduction plan (2002 Plan) including packaged gas divestiture related reductions. This charge included \$27.1 for severance and pension related benefits and \$3.7 for asset impairments related to the planned sale or closure of two small chemical facilities. The company will eliminate 333 positions in areas of manufacturing, engineering, distribution, and overheads. The restructuring charges included in cost of sales, selling and administrative, research and development, and other expense were \$13.4, \$14.1, \$.4, and \$2.9, respectively. The results for the three and six months ended 31 March 2001 included a charge of \$30.9 (\$20.0 after-tax, or \$.09 per share) for a global cost reduction plan. The plan included 311 position eliminations, resulting in a charge of \$22.4 for severance and termination benefits. A charge of \$8.5 was recognized for asset impairments and other related restructuring costs. The restructuring charges included in cost of sales, selling and administrative, and other expense were \$14.4, \$9.4, and \$7.1, respectively. The results for the three and six months ended 31 March 2001 also included a charge of \$6.0 (\$3.7 after-tax, or \$.02 per share) related to a litigation settlement. 11 ACCRUAL FOR COST REDUCTION PLANS Severance Pension Other (1) Total ------the other category. 12 AIR PRODUCTS AND CHEMICALS, INC. and Subsidiaries MANAGEMENT'S DISCUSSION AND ANALYSIS SECOND QUARTER 2002 VS. SECOND QUARTER 2001 ----- (Millions of dollars, except per share) RESULTS OF OPERATIONS Consolidated - Sales in the second quarter of 2002 of \$1,312.7 declined 14%, or \$221.8, compared with the same quarter in the prior year. Operating income was \$154.8, down \$9.4, or 6%. Income from equity affiliates was up \$3.4 to \$20.3. Net income was \$126.1, or \$.57 diluted earnings per share, compared to net income of \$94.6, or \$.43 diluted earnings per share. The results for the quarter ended 31 March 2002 were impacted by two special items: an after-tax gain of \$25.7, or \$.12 per share, on the sale of the U.S. packaged gas business; and an after-tax charge of \$18.9, or \$.09 per share, for a global cost reduction plan. The results for the quarter ended 31 March 2001 were impacted by an after-tax charge of \$20.0, or \$.09 per share, for a global cost reduction plan as well as an after-tax charge of \$3.7, or \$.02 per share, for costs related to a litigation settlement. Excluding special items, net income for the quarters ended 31 March 2002 and 2001 were \$119.3 and \$118.3, respectively. Excluding special items, diluted earnings per share for both quarters ended 31 March 2002 and 2001 was \$.54. Operating income benefited from global cost reduction plans initiated in 2002 and prior years. See Note 3 to the consolidated financial statements in the 2001 annual report on Form 10-K for details of the 2001, 2000, and 1999 plans. Benefits generated from the plans of \$58 for fiscal year 2001 resulted primarily from reduced personnel costs. Benefits of \$87 are expected for fiscal year 2002 and \$110 for fiscal year 2003. The remaining discussion and analysis of the results of operations excludes the impact of special items. See Summary of Business Segments for details of special items by segment. All comparisons in the discussion are to the corresponding period in the prior year unless otherwise stated. Gases - Sales declined \$192.6, or 18%, to \$886.8 in the second quarter of 2002. Excluding natural gas cost pass-through, acquisitions and divestitures, and currency effects, sales declined 4%. This decline of 4% was principally due to lower shipments, especially to the electronics industry. Volume growth in chemicals and processing industries (CPI) and higher merchant prices partially offset this decline in sales. Operating income of \$148.7 declined \$34.4, or 19%. This decline was principally due to the depressed conditions in the global electronics market as current low levels are being compared to record high levels of prior year. North American operating results included a write-off of \$7.3 million in receivables associated with three bankrupt steel customers. Higher merchant gases pricing and lower operating costs partially offset the operating income decline. Currency and exchange related effects had a minimal impact on the operating income comparison. Operating margin of 16.8% was down .2% compared to 17.0%. While experiencing modest sequential improvement, results for electronics continued to be affected by a sharp reduction in customers' global silicon wafer processing due to soft demand. Total worldwide CPI tonnage volume increased overall 7% with hydrogen and carbon monoxide (HYCO) experiencing double-digit growth. While remaining stable sequentially, liquid bulk volume declined 8% in North America, reflecting continued softening demand across a number of end markets. Improved pricing, lower operating costs, and lower overheads in liquid bulk were able to more than offset the continued general slowdown in volumes. Average liquid oxygen and nitrogen (LOX/LIN) prices increased 5% as a direct result of pricing and surcharge initiatives. 13 A 4% increase in the European LOX/LIN price index and lower operating costs were more than offset by a 5% decline in European liquid bulk volumes. The Asian liquid bulk volume decreased 5% primarily due to lower demand by northern Chinese steel makers. Gases equity affiliates' income was \$16.3 down \$3.3 from \$16.6. The absence of income from two cogeneration facilities that were divested in the fourth quarter of 2001 and lower results from electronics affiliates more than offset a \$5.0 gain recognized from a one-time tax benefit related to an asset revaluation of an Italian affiliate. Chemicals - Sales in the second quarter of 2002 of \$358.1 declined \$32.2, or 8%. Excluding the effects of natural gas cost pass-through and currency impacts, sales were down 4%. This decline was principally due to unfavorable price/mix variance. The overall volume index for chemicals was up 1%. In the performance chemicals division, overall volumes were up 4%. Worldwide emulsion volumes increased nearly 7%, while epoxy additives and surfactants volumes were down. Chemical intermediates volumes declined 4% as higher shipments of methylamines and polyurethane intermediates were more than offset by weaker demand for specialty and higher amines. Operating income of \$46.6 increased \$23.5, or 102%, due to margin improvement in most product lines resulting from lower natural gas and feedstock costs, lower costs due to continuous improvement efforts, and the increase in volume performance. The operating margin of 13.0% was significantly improved. Equity affiliates' income was up \$2.8 due to the improved profitability of the global Polymers joint venture. A long-term supplier of sulfuric acid, which is used in the production of dinitrotoluene (DNT), has been operating under Chapter 11 bankruptcy protection since 8 May 2001. The company's DNT operation and supply to its customers have not been materially impacted. The company expects this supplier to be successful in their reorganization. In the unlikely event of unsuccessful reorganization, the profitability of the chemicals segment could be materially impacted on an annual basis. The company extended an \$8.0 line of credit to this supplier, of which \$4.5 was drawn at 31 March 2002. The company also entered into a product pre-payment agreement with this supplier. At 31 March 2002 the unamortized balance was \$5.8. The company expects to fully recover these advances. Equipment - Sales of \$67.8 were up \$3.0, or 5%, due to increased activity across several product lines. Operating income increased \$1.6, to \$5.1, primarily due to higher shipments of helium containers and membrane units. The sales backlog for the equipment segment at 31 March 2002 was \$193.8 compared to \$103.9 at 31 March 2001 and \$227.2 at 30 September 2001. INTEREST Interest expense of \$31.0 decreased \$19.3, or 38%. This decline resulted from a lower average debt outstanding coupled with lower interest rates. INCOME TAXES The effective tax rate for the second quarter of 2002 was 35.6%, after minority interest of \$4.1. The effective rate excluding the impact of special items was 30.0%. The comparable rate in the prior year was 29.6%. The .4% increase was due principally to lower tax credits in the current year. 14 AIR PRODUCTS AND CHEMICALS, INC. and Subsidiaries MANAGEMENT'S DISCUSSION AND ANALYSIS

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SIX MONTHS FISCAL 2002 VS, SIX MONTHS FISCAL 2001 ------ RESULTS OF
OPERATIONS Consolidated - Sales for the six months ended 31 March 2002 of $2,629.2 were 13% lower than the $3,010.3 reported in the prior year. Operating income
of $339.0 declined $52.7, or 14%. Income from equity affiliates was $38.7 compared with $37.8. Net income was $239.8, or $1.08 diluted earnings per share, compared to
net income of $230.2, or $1.05 diluted earnings per share. The results for the six months ended 31 March 2002 were impacted by two special items: an after-tax gain of $25.7,
or $.12 per share, on the sale of the U.S. packaged gas business; and an after-tax charge of $18.9, or $.09 per share, for a global cost reduction plan. The results for the six
months ended 31 March 2001 included an after-tax charge of $20.0 million, or $.09 per share, for a cost reduction program and an after-tax charge of $3.7 million, or $.02
per share, related to a litigation settlement. Excluding these special items, net income for the six months ended 31 March 2002 of $233.0 declined $20.9, or 8% from the prior
year. Excluding special items, diluted earnings per share of $1.05 declined 9% from prior year. The remaining discussion and analysis of the results of operations excludes the
impact of special items. See Summary of Business Segments for details of special items by segment. All comparisons in the discussion are to the corresponding period in the
prior year unless otherwise stated. Gases - Sales in the first six months of 2002 were $1,790.9 compared to $2,106.1, down $315.2 or 15%. Excluding natural gas cost pass-
through, acquisitions and divestitures, and currency effects, sales declined 5%. The balance of the sales decline was due principally to lower shipments to the electronics
industry. The decline in sales was partially offset by higher prices for merchant gases and volume growth in CPI. Operating income of $300.7 declined $73.8, or 20%, due
principally to the depressed conditions in the global electronics market. North American operating results included a write-off of $7.3 million in receivables associated with three
bankrupt steel customers. Higher merchant gases pricing and lower operating costs partially offset the operating income decline. Unfavorable currency and exchange related
effects reduced operating income by 1%. Operating margin of 16.8% was down 1.0% compared to 17.8%. Electronics volume decline resulted from continued depressed
conditions in the global electronics market as current low levels are being compared to record high levels of prior year. While experiencing modest sequential improvement,
electronics continued to be affected by a sharp reduction in customers' global silicon wafer processing due to soft demand. Overall CPI tonnage volume grew 4% as increased
HYCO demand was largely offset by weakness in gaseous oxygen and nitrogen (GOX/GAN). While remaining stable sequentially, liquid bulk volume declined 8% in North
America, reflecting continued softening demand across a number of end markets. Improved pricing, lower operating costs, and lower overheads in liquid bulk were able to
more than offset the continued general slowdown in volumes. Average LOX/LIN prices increased 5% as a direct result of pricing and surcharge initiatives. A 4% increase in the
European LOX/LIN price was tempered by a 5% decline in European liquid bulk volumes. The Asian liquid bulk volume decreased 2% due to lower demand by northern
Chinese steel makers partially offset by growth in Southern China and Thailand. 15 Gases equity affiliates' income was down $3.2 or 9\%, mainly due to the absence of income
from two cogeneration facilities that were divested in the fourth quarter of 2001 which more than offset a $5.0 gain recognized from a one-time tax benefit related to an asset
revaluation in an Italian affiliate. Chemicals - Sales in the first six months of 2002 were $707.1 compared to $783.6, down 10%. Excluding the effects of natural gas cost pass-
through and some prior year polyvinyl alcohol (PVOH) post-sale export revenues, sales declined 5%. Unfavorable currency impacts had minimal effect on revenues. The
overall volume index decline was 6%, excluding the impact of PVOH. The volume decline resulted from soft demand related to the weak economy. Performance chemicals
experienced generally flat volumes year on year. Chemical intermediates volume declined 7%, resulting from market softness for polyurethane intermediates as well as weaker
demand in specialty and higher amines. Operating income of $87.1 increased 45%, or $27.0. Improved margins resulting from lower natural gas and feedstock costs, and
reduced overhead costs drove the significant increase in operating income. Unfavorable currency and exchange related effects reduced operating income about 1%. The
operating margin of 12.3% was significantly improved. Equity affiliates' income increased $3.6 primarily due to the improved profitability of the global Polymers joint venture.
Equipment - Sales of $131.2 grew $10.6 while operating income of $6.0 was up $1.4. The improved results reflected increased activity across several product lines.
INTEREST Interest expense of $66.1 decreased $32.6, or 33%. The decrease primarily resulted from a combination of lower average debt outstanding and lower interest
rates. INCOME TAXES The effective tax rate for the first six months of 2002 was 33.1%, after minority interest of $9.1. The effective rate excluding the impact of special
items was 30.0%. The comparable rate in the prior year was 30.5%. The .5% decrease was due principally to higher tax credits in the current year. LIQUIDITY, CAPITAL
RESOURCES, AND OTHER FINANCIAL DATA Capital expenditures during the first six months of 2002 totaled $358.9 compared to $329.3. Additions to plant and
equipment were $321.3 during the first six months of 2002 compared to $302.3. Investments in and advances to unconsolidated affiliates were $34.7 during the current period
versus $26.5. Capital expenditures for new plant and equipment are expected to be approximately $700 in 2002. In addition, the company intends to continue to pursue
acquisition opportunities and investments in affiliated entities. It is anticipated these expenditures will be funded with cash from operations and proceeds from asset sales. Total
debt at 31 March 2002 and 30 September 2001, expressed as a percentage of the sum of total debt, shareholders' equity, and minority interest, was 38% and 43%,
respectively. Total debt decreased from $2,477.7 at 30 September 2001 to $2,082.4 at 31 March 2002. There was no commercial paper outstanding at 31 March 2002. The
company's total revolving credit commitments amounted to $600.0 at 31 March 2002. No borrowings were outstanding under these commitments. 16 Additional commitments
totaling $71.7 are maintained by the company's foreign subsidiaries, of which $22.2 was utilized at 31 March 2002. The estimated fair value of the company's long-term debt,
including current portion, as of 31 March 2002 is $2,061.2 compared to a book value of $2,035.8. There have been no material changes to the company's commitments for
future payments of long-term debt, leases, and unconditional purchase obligations. The company's off-balance sheet arrangements include the sale and leaseback of cryogenic
vessel equipment with a third party and the debt of its equity affiliates. In September 2001, the company sold and leased back certain cryogenic vessel equipment for $301.9.
This operating lease has a five-year term with purchase and renewal options. This lease includes a residual value guarantee by the company not to exceed $256. The probability
of incurring a material loss under this guarantee is remote. Summarized financial information of equity affiliates was provided in Note 7 to the consolidated financial statements in
the company's 2001 annual report on Form 10-K. The company has not entered into any off-balance sheet arrangements with a limited or special purpose entity. Liquidity and
availability of capital resources are not dependent on the use of off-balance sheet arrangements. The company has no material obligations to provide funding for lines of credit,
take-or-pay contracts, throughout agreements, or similar types of arrangements. As discussed in Note 16 to the consolidated financial statements in the company's 2001 annual
report on Form 10-K, the company has guaranteed repayment of borrowings of certain foreign affiliates and has equity support agreements related to the financing by equity
affiliates for cogeneration projects. The company does not expect that any sum it may have to pay in connection with these matters will have a materially adverse effect on its
consolidated financial position or results of operations. The company's principal related parties are equity affiliates operating in industrial gas and chemicals businesses. During
2001 and the six months ended 31 March 2002, the company did not engage in any material transactions involving related parties that included terms or other aspects that differ
from those which would be negotiated with clearly independent parties. FINANCIAL INSTRUMENTS The net financial instrument position of the company was reduced
from $2,300.5 at 30 September 2001 to $2,021.6 at 31 March 2002 primarily due to scheduled repayments of outstanding long-term debt. All financial instruments are
entered into for other than trading purposes and there was no material change to market risk sensitivity since 30 September 2001. CRITICAL ACCOUNTING POLICIES
The consolidated financial statements are prepared in conformity with accounting principles generally accepted in the United States. The preparation of these financial
statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at
the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. The
significant accounting policies of the company are described in the notes to the consolidated financial statements included in the annual report on Form 10-K. Judgments and
estimates of uncertainties are required in applying the company's accounting policies in many areas. Following are some of the areas requiring significant judgments and
estimates: useful lives of plant and equipment; cash flow and valuation assumptions in performing asset impairment tests of long-lived assets and goodwill; assessment of the fair
value of investments 17 in equity affiliates; and estimated costs to be incurred for environmental matters, contract disputes and settlement of litigation, 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. Factors that might cause forward-looking statements to differ materially from actual results include those specifically referenced as future events
or outcomes that the company "expects" (or a similar forward-looking qualifier), as well as, among other things, overall economic and business conditions, in particular the
success of the world economy, including the electronics industry, strengthening in the second half of the fiscal year and resulting in meaningful increases in the demand for Air
Products' goods and services during that time; competitive factors in the industries in which it competes; the ability to recover increased energy and raw material costs from
customers; spikes in the pricing of natural gas; changes in government regulations; consequences of acts of terrorism impacting the United States' and other markets; the success
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of implementing cost reduction programs; the timing, impact and other uncertainties of future acqueurrencies; the impact of tax and other legislation and regulations in jurisdictions in which Air Productions in the Institute of the utilized. 18 PART II. OTHER INFORMATION Item 4. Submission of Matters to a Vote of was held on 24 January 2002. b. The following directors were elected at the meeting: Michael J. office continued after the meeting include: Mario L. Baeza, L. Paul Bremer III, Edward E. Hagenl Rosput and Lawrason D. Thomas. c. The following matters were voted on at the Annual Meeting	sucts and its affiliates operate; and the timing and rate at which tax credits can Security-Holders a. The Annual Meeting of Shareholders of the Registrant Donahue, Ursula F. Fairbairn and John P. Jones III. Directors whose term of ocker, Terry R. Lautenbach, James F. Hardymon, Charles H. Noski, Paul G.: 1. Election of Directors
NUMBER OF VOTES CAST NAME OF DIRECTOR	
WITHHELD ABSTENTIONS VOTES	
Ursula F. Fairbairn 204,462	
John P. Jones III 203,841,169 3,214,542 0 0	
appointment of Arthur Andersen LLP of Philadelphia, Pennsylvania, as independent certified publ 2002 NUMBER OF	
AGAINST OR BROKER FOR WITHHELD ABSTENTIONS NON-VOTES	
AGAINST OR BROKER FOR WITHHELD ABSTENTIONS NON-VOTES	10.2) Amended and Restated Annual Incentive Plan of the Company, Program for Directors of the Company, effective 1 January 2002 (a)(10.4) September 2001 (a)(12) Computation of Ratios of Earnings to Fixed Item 5 of such Forms was reported, and 22 January 2002 and 23 April 2002, quarter ended 31 March 2002. 20 SIGNATURES Pursuant to the be signed on its behalf by the undersigned thereunto duly authorized. Air :/s/L. J. Daley EXHIBITS To FORM 10-Q QUARTERLY CT OF 1934 For the quarter ended 31 March 2002 Commission File No. 1-nt as specified in its charter)
Restated Long Term Incentive Plan of the Company, effective 1 October 2001 (a)(10.2) Amende 2001 (a)(10.3) Resolutions approving an Amendment to the Compensation Program for Director Deferred Compensation Plan for Directors of the Company, effective 20 September 2001 (a)(12 Form 8-K dated 23 January 2002 and 23 April 2002, in which Item 5 of such Forms was report such Forms were reported, were filed by the Registrant during the quarter ended 31 March 2002	ed and Restated Annual Incentive Plan of the Company, effective 1 October is of the Company, effective 1 January 2002 (a)(10.4) Amended and Restated 1) Computation of Ratios of Earnings to Fixed Charges. (b) Current Reports on ed, and 22 January 2002 and 23 April 2002, in which Item 5 and Item 9 of