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

FORM 10-Q

(Mark One)

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the quarterly period ended 31 March 2009

OR

☐ **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
(State or Other Jurisdiction of Incorporation or Organization)

23-1274455
(I.R.S. Employer Identification No.)

7201 Hamilton Boulevard, Allentown, Pennsylvania
(Address of Principal Executive Offices)

18195-1501
(Zip Code)

610-481-4911
(Registrant's Telephone Number, Including Area Code)

Not Applicable
(Former Name, Former Address and Former Fiscal Year, if Changed Since Last Report)

Indicate by check mark 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 such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ☒ Accelerated filer ☐ Non-accelerated filer ☐ Smaller reporting company ☐
(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Class	Outstanding at 24 April 2009
Common Stock, \$1 par value	209,828,783

AIR PRODUCTS AND CHEMICALS, INC. and Subsidiaries
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PART I. FINANCIAL INFORMATION
Item 1. Financial Statements

AIR PRODUCTS AND CHEMICALS, INC. and Subsidiaries
CONSOLIDATED BALANCE SHEETS
(Unaudited)

(Millions of dollars, except for share data)	31 March 2009	30 September 2008
ASSETS		
CURRENT ASSETS		
Cash and cash items	\$ 79.7	\$ 103.5
Trade receivables, less allowances for doubtful accounts	1,272.2	1,575.2
Inventories	506.6	503.7
Contracts in progress, less progress billings	123.7	152.0
Prepaid expenses	172.2	107.7
Other receivables and current assets	396.6	349.4
Current assets of discontinued operations	45.4	56.6
TOTAL CURRENT ASSETS	2,596.4	2,848.1
INVESTMENT IN NET ASSETS OF AND ADVANCES TO EQUITY AFFILIATES	756.5	822.6
PLANT AND EQUIPMENT, at cost	14,645.4	14,988.6
Less accumulated depreciation	8,235.3	8,373.8
PLANT AND EQUIPMENT, net	6,410.1	6,614.8
GOODWILL	811.2	928.1
INTANGIBLE ASSETS, net	215.0	289.6
NONCURRENT CAPITAL LEASE RECEIVABLES	527.1	505.3
OTHER NONCURRENT ASSETS	550.3	504.1
NONCURRENT ASSETS OF DISCONTINUED OPERATIONS	12.3	58.7
TOTAL ASSETS	\$11,878.9	\$ 12,571.3
LIABILITIES AND SHAREHOLDERS' EQUITY		
CURRENT LIABILITIES		
Payables and accrued liabilities	\$ 1,307.1	\$ 1,665.6
Accrued income taxes	34.2	87.0
Short-term borrowings	592.0	419.3
Current portion of long-term debt	53.8	32.1
Current liabilities of discontinued operations	9.2	8.0
TOTAL CURRENT LIABILITIES	1,996.3	2,212.0
LONG-TERM DEBT	3,456.6	3,515.4
DEFERRED INCOME & OTHER NONCURRENT LIABILITIES	952.8	1,049.2
DEFERRED INCOME TAXES	707.6	626.6
NONCURRENT LIABILITIES OF DISCONTINUED OPERATIONS	.8	1.2
TOTAL LIABILITIES	7,114.1	7,404.4
MINORITY INTEREST IN SUBSIDIARY COMPANIES	126.7	136.2
COMMITMENTS AND CONTINGENCIES — See Note 12		
SHAREHOLDERS' EQUITY		
Common stock (par value \$1 per share; 2009 and 2008 — 249,455,584 shares)	249.4	249.4
Capital in excess of par value	812.2	811.7
Retained earnings	7,068.7	6,990.2
Accumulated other comprehensive income (loss)	(1,051.0)	(549.3)
Treasury stock, at cost (2009 — 39,626,801 shares; 2008 — 40,120,957 shares)	(2,441.2)	(2,471.3)
TOTAL SHAREHOLDERS' EQUITY	4,638.1	5,030.7
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	\$11,878.9	\$ 12,571.3

The accompanying notes are an integral part of these statements.

AIR PRODUCTS AND CHEMICALS, INC. and Subsidiaries
CONSOLIDATED INCOME STATEMENTS
(Unaudited)

	Three Months Ended 31 March		Six Months Ended 31 March	
(Millions of dollars, except for share data)	2009	2008	2009	2008
SALES	\$ 1,955.4	\$ 2,542.7	\$ 4,150.7	\$ 4,950.1
Cost of sales	1,439.9	1,871.6	3,069.6	3,625.2
Selling and administrative	230.6	272.1	477.6	530.6
Research and development	29.6	34.3	62.8	64.6
Global cost reduction plan	—	—	174.2	—
Pension settlement	—	26.3	—	27.7
Other income, net	5.1	10.2	8.0	27.0
OPERATING INCOME	260.4	348.6	374.5	729.0
Equity affiliates' income	27.0	42.4	51.5	67.7
Interest expense	30.0	38.9	66.5	79.7
INCOME FROM CONTINUING OPERATIONS BEFORE TAXES AND MINORITY INTEREST	257.4	352.1	359.5	717.0
Income tax provision	66.5	87.8	73.6	184.3
Minority interest in earnings of subsidiary companies	1.6	4.5	6.6	10.6
INCOME FROM CONTINUING OPERATIONS	189.3	259.8	279.3	522.1
INCOME (LOSS) FROM DISCONTINUED OPERATIONS, net of tax	16.3	54.5	(5.1)	55.9
NET INCOME	\$ 205.6	\$ 314.3	\$ 274.2	\$ 578.0
BASIC EARNINGS PER COMMON SHARE				
Income from continuing operations	\$.90	\$ 1.22	\$ 1.33	\$ 2.45
Income (loss) from discontinued operations	.08	.26	(.02)	.26
Net Income	\$.98	\$ 1.48	\$ 1.31	\$ 2.71
DILUTED EARNINGS PER COMMON SHARE				
Income from continuing operations	\$.89	\$ 1.18	\$ 1.32	\$ 2.37
Income (loss) from discontinued operations	.08	.25	(.03)	.25
Net Income	\$.97	\$ 1.43	\$ 1.29	\$ 2.62
WEIGHTED AVERAGE OF COMMON SHARES OUTSTANDING (in millions)	209.6	212.3	209.5	213.6
WEIGHTED AVERAGE OF COMMON SHARES OUTSTANDING ASSUMING DILUTION (in millions)	212.3	219.2	212.2	220.8
DIVIDENDS DECLARED PER COMMON SHARE — Cash	\$.45	\$.44	\$.89	\$.82

The accompanying notes are an integral part of these statements.

AIR PRODUCTS AND CHEMICALS, INC. and Subsidiaries
CONSOLIDATED COMPREHENSIVE INCOME STATEMENTS
(Unaudited)

	Three Months Ended 31 March	
(Millions of dollars)	2009	2008
NET INCOME	\$ 205.6	\$ 314.3
OTHER COMPREHENSIVE INCOME (LOSS), net of tax:		
Net unrealized holding gain (loss) on investments, net of income tax (benefit) of \$.1 and \$(1.4)	.3	(2.5)
Net unrecognized (loss) on derivatives qualifying as hedges, net of income tax (benefit) of \$(2.2) and \$(4.5)	(3.2)	(6.4)
Foreign currency translation adjustments, net of income tax (benefit) of \$20.7 and \$(65.1)	(217.1)	91.8
Reclassification adjustment for foreign currency translation adjustment realized in net income (a)	—	(53.7)
Change in pension funded status, net of income tax of \$1.4 and \$4.9	4.3	6.6
TOTAL OTHER COMPREHENSIVE INCOME (LOSS)	(215.7)	35.8
COMPREHENSIVE INCOME (LOSS)	\$ (10.1)	\$ 350.1

	Six Months Ended 31 March	
(Millions of dollars)	2009	2008
NET INCOME	\$ 274.2	\$578.0
OTHER COMPREHENSIVE INCOME (LOSS), net of tax:		
Net unrealized holding (loss) on investments, net of income tax (benefit) of \$(.5) and \$(2.2)	(.8)	(4.2)
Net unrecognized (loss) on derivatives qualifying as hedges, net of income tax (benefit) of \$(2.8) and \$(6.4)	(5.7)	(11.2)
Foreign currency translation adjustments, net of income tax (benefit) of \$4.7 and \$(70.6)	(538.1)	147.4
Reclassification adjustment for foreign currency translation adjustment realized in net income (a)	—	(53.7)
Change in pension funded status, net of income tax of \$2.7 and \$8.4	7.1	17.5
TOTAL OTHER COMPREHENSIVE INCOME (LOSS)	(537.5)	95.8
COMPREHENSIVE INCOME (LOSS)	\$ (263.3)	\$673.8

(a) In the second quarter of 2008, the Company completed the sale of its Polymer Emulsions business as discussed in Note 4. Accordingly, the related foreign currency translation results of this business were reclassified from other comprehensive income into earnings.

Other amounts reclassified from other comprehensive income into earnings in 2009 and 2008 were not material.

The accompanying notes are an integral part of these statements.

AIR PRODUCTS AND CHEMICALS, INC. and Subsidiaries
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

(Millions of dollars)	2009	Six Months Ended 31 March 2008
OPERATING ACTIVITIES		
Net income	\$ 274.2	\$ 578.0
Adjustments to reconcile income to cash provided by operating activities:		
Depreciation and amortization	397.7	428.1
Impairment of assets of continuing operations	32.1	—
Impairment of assets of discontinued operations	48.7	—
Gain on sale of discontinued operations	—	(88.9)
Deferred income taxes	41.8	34.6
Undistributed earnings of unconsolidated affiliates	(35.0)	(42.6)
Loss on sale of assets and investments	6.6	.9
Share-based compensation	30.1	33.0
Noncurrent capital lease receivables	(52.9)	(118.5)
Pension and other postretirement costs	52.2	82.8
Other adjustments	(85.3)	(89.1)
Working capital changes that provided (used) cash, excluding effects of acquisitions and divestitures:		
Trade receivables	166.3	(153.3)
Inventories	(41.7)	(36.6)
Contracts in progress	11.0	75.9
Other receivables	(17.7)	10.2
Payables and accrued liabilities	(257.6)	(100.2)
Other working capital	(116.8)	16.8
CASH PROVIDED BY OPERATING ACTIVITIES (a)	453.7	631.1
INVESTING ACTIVITIES		
Additions to plant and equipment	(615.8)	(522.2)
Acquisitions, less cash acquired	(1.6)	(.6)
Investment in and advances to unconsolidated affiliates	(.1)	—
Proceeds from sale of assets and investments	25.0	14.2
Proceeds from sale of discontinued operations	.9	327.5
Change in restricted cash	40.7	(132.3)
Other investing activities	—	(18.6)
CASH USED FOR INVESTING ACTIVITIES	(550.9)	(332.0)
FINANCING ACTIVITIES		
Long-term debt proceeds	114.3	461.1
Payments on long-term debt	(44.2)	(93.9)
Net increase in commercial paper and short-term borrowings	183.2	84.9
Dividends paid to shareholders	(184.3)	(163.4)
Purchase of treasury stock	—	(560.2)
Proceeds from stock option exercises	6.8	41.8
Excess tax benefit from share-based compensation/other	2.2	25.5
CASH PROVIDED BY (USED FOR) FINANCING ACTIVITIES	78.0	(204.2)
Effect of Exchange Rate Changes on Cash	(4.6)	3.4
Increase (Decrease) in Cash and Cash Items	(23.8)	98.3
Cash and Cash Items — Beginning of Year	103.5	40.5
Cash and Cash Items — End of Period	\$ 79.7	\$ 138.8
(a) Pension plan contributions	\$ 153.5	\$ 118.3

The accompanying notes are an integral part of these statements.

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

(Millions of dollars, except for share data)

1. MAJOR ACCOUNTING POLICIES

Refer to the Company's 2008 annual report on Form 10-K for a description of major accounting policies. There have been no material changes to these accounting policies during the first six months of 2009 other than those detailed in Note 2.

Basis of Presentation

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 U.S. 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 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. Adjustments included herein are of a normal, recurring nature unless otherwise disclosed in the Notes. 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. The consolidated financial statements and related Notes included herein should be read in conjunction with the financial statements and Notes thereto included in the Company's latest annual report on Form 10-K in order to fully understand the basis of presentation. Results of operations for interim periods are not necessarily indicative of the results of operations for a full year.

2. NEW ACCOUNTING STANDARDS

Disclosures about Derivatives and Hedging

Effective 1 January 2009, the Company adopted Statement of Financial Accounting Standard (SFAS) No. 161, "Disclosures about Derivative Instruments and Hedging Activities — an amendment of FASB Statement No. 133." SFAS No. 161 requires enhanced disclosures about how and why an entity uses derivative instruments; how derivative instruments and related hedged items are accounted for; and how they affect an entity's financial position, financial performance, and cash flows. This Statement only requires additional disclosure and did not have an impact on the Company's consolidated financial statements upon adoption.

Refer to Note 5 for the disclosures required under SFAS No. 161.

Fair Value Option

In February 2007, the Financial Accounting Standard Board (FASB) issued SFAS No. 159, "The Fair Value Option for Financial Assets and Financial Liabilities — Including an amendment of FASB Statement No. 115." This Statement permits companies to elect to measure certain financial instruments at fair value on an instrument-by-instrument basis, with changes in fair value recognized in earnings each reporting period. In addition, SFAS No. 159 establishes financial statement presentation and disclosure requirements for assets and liabilities reported at fair value under the election. The Company adopted SFAS No. 159 as of 1 October 2008 and elected not to fair value any items under this Statement.

Postretirement Benefits

The Company adopted the measurement date change of SFAS No. 158, "Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans," for its U.K. and Belgium pension plans as of 1 October 2008. SFAS No. 158 required the Company to change the measurement date for these plans from 30 June to 30 September (end of fiscal year). As a result of this change, pension expense and actuarial gains/losses for the three-month period ended 30 September 2008 were recognized as adjustments to the beginning balances of retained earnings and Accumulated Other Comprehensive Income (AOCI), respectively. The after-tax charge to retained earnings was \$8.1. AOCI was credited \$35.8 for net actuarial gains on an after-tax basis. These adjustments only affected the balance sheet.

Fair Value Measurements

Effective 1 October 2008, the Company adopted SFAS No. 157, "Fair Value Measurements," for financial assets and liabilities and any other assets and liabilities that are recognized and disclosed at fair value on a recurring basis. This Statement defines fair value, establishes a method for measuring fair value, and requires additional disclosures about fair value measurements. FASB Staff Position No. 157-2 delayed the adoption of SFAS No. 157 for other nonfinancial assets and liabilities until 1 October 2009 for the Company. The adoption of SFAS No. 157 did not impact the Company's financial statements for assets and liabilities measured at fair value on a recurring basis.

Refer to Note 6 for the new disclosures required under SFAS No. 157.

3. GLOBAL COST REDUCTION PLAN

During the first quarter ended 31 December 2008, the Company announced a global cost reduction plan designed to lower its cost structure and better align its businesses to reflect rapidly declining economic conditions around the world. The results from continuing operations included a charge of \$174.2 (\$116.1 after-tax, or \$.55 per share) for this plan. This charge included \$120.0 for severance and pension-related costs. The Company will eliminate approximately 1,400 positions, or about seven percent of its global workforce. The reductions are targeted at reducing overhead and infrastructure costs, reducing and refocusing elements of the Company's technology and business development spending, and lowering its plant operating costs. The remainder of the charge, \$54.2, is for business exits and asset management actions. Assets held for sale were written down to net realizable value and an environmental liability of \$16.0 was recognized. This environmental liability results from a decision to sell a production facility. The planned actions are expected to be substantially completed by the end of the first quarter of fiscal year 2010.

The charge for the global cost reduction plan was excluded from segment operating profit. The table below displays how this charge related to the businesses at the segment level:

	Severance and Other Benefits	Asset Impairment/ Other Costs	Total
Merchant Gases	\$ 84.5	\$ 6.7	\$ 91.2
Tonnage Gases	11.1	—	11.1
Electronics and Performance Materials	21.7	47.2	68.9
Equipment and Energy	2.7	.3	3.0
Total 2009 Charge	\$ 120.0	\$ 54.2	\$174.2

The following table summarizes changes to the carrying amount of the accrual for the global cost reduction plan for the six months ended 31 March 2009:

	Severance and Other Benefits	Asset Impairments/ Other Costs	Total
2009 Charge	\$ 120.0	\$ 54.2	\$174.2
Environmental charge (see Note 12)	—	(16.0)	(16.0)
Noncash expenses	(14.6)	(32.1)	(46.7)
Cash expenditures	(22.1)	(.4)	(22.5)
Currency translation adjustment	(1.9)	—	(1.9)
Accrual Balance at 31 March 2009	\$ 81.4	\$ 5.7	\$ 87.1

4. DISCONTINUED OPERATIONS

The U.S. Healthcare business, Polymer Emulsions business, and the High Purity Process Chemicals (HPPC) business have been accounted for as discontinued operations. The results of operations of these businesses have been removed from the results of continuing operations for all periods presented.

For additional historical information on these discontinued operations, refer to the Company's 2008 annual report on Form 10-K.

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U.S. Healthcare

In July 2008, the Board of Directors authorized management to pursue the sale of the U.S. Healthcare business. In 2008, the Company recorded a total charge of \$329.2 (\$246.2 after-tax, or \$1.12 per share) related to the impairment/write-down of the net carrying value of the U.S. Healthcare business. In April 2009, the Company signed a contract to divest approximately half of its remaining U.S. Healthcare business and expects to conclude the sale of the remaining portions of this business in 2009.

In the first quarter of 2009, based on additional facts, the Company recorded an impairment charge of \$48.7 (\$30.9 after-tax, or \$.15 per share) reflecting a revision in the estimated net realizable value of the U.S. Healthcare business. Also, a tax benefit of \$8.8, or \$.04 per share, was recorded to revise the estimated tax benefit related to previously recognized impairment charges.

As a result of events occurring during the second quarter of 2009, which increased the Company's ability to realize tax benefits associated with the impairment charges recorded in 2008, the Company recognized a one-time tax benefit of \$16.7, or \$.08 per share.

Additional charges may be recorded in future periods dependent upon the timing and method of ultimate disposition.

The operating results of the U.S. Healthcare business have been classified as discontinued operations and are summarized below:

	Three Months Ended 31 March		Six Months Ended 31 March	
	2009	2008	2009	2008
Sales	\$ 43.9	\$ 62.6	\$ 92.1	\$ 128.8
Income (loss) before taxes	\$ (1.0)	\$ (10.6)	\$.1	\$ (19.1)
Income tax provision (benefit)	(.4)	(4.0)	—	(7.2)
Income (loss) from operations of discontinued operations	\$ (.6)	\$ (6.6)	\$.1	\$ (11.9)
Impairment/write-down to estimated net realizable value, net of tax	16.9	—	(5.2)	—
Income (loss) from discontinued operations, net of tax	\$ 16.3	\$ (6.6)	\$ (5.1)	\$ (11.9)

Details of balance sheet items for the U.S. Healthcare business are summarized below:

	31 March 2009	30 September 2008
Trade receivables, less allowances	\$ 38.3	\$ 47.7
Inventories	5.7	7.2
Prepaid expenses	1.4	1.4
Other receivables	—	.2
Total Current Assets	\$ 45.4	\$ 56.5
Plant and equipment, net	\$ 12.1	\$ 58.7
Other noncurrent assets	.2	—
Total Noncurrent Assets	\$ 12.3	\$ 58.7
Payables and accrued liabilities	\$ 8.4	\$ 6.8
Current portion long-term debt	.8	1.0
Total Current Liabilities	\$ 9.2	\$ 7.8
Long-term debt	\$.8	\$ 1.2
Total Noncurrent Liabilities	\$.8	\$ 1.2

Polymer Emulsions Business

On 31 January 2008, the Company sold its Polymers Emulsions business to Wacker Chemie AG, its long-time joint venture partner. As part of the agreement, the Company received Wacker Chemie AG's interest in the Elkton, Md. and Piedmont, S.C. production facilities and their related businesses plus cash proceeds of \$258.2. The Company recognized a gain on the sale of \$89.5 (\$57.7 after-tax).

In the second quarter of 2008, the Polymer Emulsions business generated sales of \$78.8 and income from operations, net of tax, of \$3.3. For the six months ended 31 March 2008, sales were \$230.0 and income from operations, net of tax, was \$10.1.

HPPC Business

In the first quarter of 2008, the HPPC business generated sales of \$22.9 and income from operations, net of tax, of \$2. The Company closed on the sale of its HPPC business on 31 December 2007.

5. FINANCIAL INSTRUMENTS

Currency Price Risk Management

The Company's earnings, cash flows, and financial position are exposed to foreign currency risk from foreign currency denominated transactions and net investments in foreign operations. It is the policy of the Company to minimize its cash flow exposure to adverse changes in currency and exchange rates. This is accomplished by identifying and evaluating the risk that the Company's cash flows will decline in value due to changes in exchange rates, and by determining the appropriate strategies necessary to manage such exposures. The Company's objective is to maintain economically balanced currency risk management strategies that provide adequate downside protection.

Forward Exchange Contracts

The Company enters into forward exchange contracts to reduce the cash flow exposure to foreign currency fluctuations associated with highly anticipated cash flows and certain firm commitments such as the purchase of plant and equipment. Forward exchange contracts are also used to hedge the value of investments in certain foreign subsidiaries and affiliates by creating a liability in a currency in which the Company has a net equity position.

The Company recognizes these derivatives on the balance sheet at fair value. On the date the derivative instrument is entered into, the Company generally designates the derivative as either (1) a hedge of a forecasted transaction or of the variability of cash flows to be received or paid related to a recognized asset or liability (cash flow hedge), (2) a hedge of a net investment in a foreign operation (net investment hedge), or (3) a hedge of the fair value of a recognized asset or liability or of an unrecognized firm commitment (fair value hedge).

In addition to the foreign exchange contracts that are designated as hedges under SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities" (SFAS No. 133), the Company also utilizes forward exchange contracts that are not designated as hedges. These contracts are used to hedge foreign currency-denominated monetary assets and liabilities, primarily intercompany loans and working capital. The primary objective of these forward contracts is to protect the value of foreign currency-denominated monetary assets and liabilities from the effects of volatility in foreign exchange rates that might occur prior to their receipt or settlement.

Option Contracts

The Company enters into option contracts to reduce the cash flow exposure to foreign currency fluctuations associated with highly anticipated export sales transactions. The Company recognizes these derivatives on the balance sheet at fair value. On the date the derivative instrument is entered into, the Company designates these derivatives as cash flow hedges.

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The table below summarizes the Company's outstanding currency price risk management instruments as of 31 March 2009 and 30 September 2008:

	31 March 2009		30 September 2008	
	US\$ Notional	Years Average Maturity	US\$ Notional	Years Average Maturity
Forward exchange contracts:				
Cash flow hedges	\$ 654.4	.5	\$ 824.5	.6
Net investment hedges	745.8	3.5	749.5	4.0
Fair value hedges	5.0	.1	10.3	.3
Hedges not designated under SFAS No. 133	1,369.4	.4	1,282.8	.3
Total forward exchange contracts	\$2,774.6	1.3	\$2,867.1	1.4
Options:				
Cash flow hedges	\$ 16.8	.4	\$ 26.0	.3
Total options	\$ 16.8	.4	\$ 26.0	.3

In addition to the above, the Company uses foreign currency denominated debt and net liability positions primarily in European U.S. dollar functional entities to hedge the foreign currency exposures of the Company's net investment in certain foreign affiliates. The foreign currency denominated debt includes the €1,450.0 Eurobonds due in 2010 through 2017, and the net liability positions include €250.6 and £152.9 at 31 March 2009 and €218.4 and £110.8 at 30 September 2008. These non-U.S. dollar borrowings and net liability positions are designated as hedges of net investments.

Debt Portfolio Management

It is the policy of the Company to identify on a continuing basis the need for debt capital and evaluate the financial risks inherent in funding the Company with debt capital. Reflecting the result of this ongoing review, the debt portfolio and hedging program of the Company are managed with the objectives and intent to (1) reduce funding risk with respect to borrowings made by the Company to preserve the Company's access to debt capital and provide debt capital as required for funding and liquidity purposes, and (2) manage the aggregate interest rate risk and the debt portfolio in accordance with certain debt management parameters.

Interest Rate Swap Contracts

The Company enters into interest rate swap contracts to change the fixed/variable interest rate mix of its debt portfolio in order to maintain the percentage of fixed- and variable-rate debt within the parameters set by management. In accordance with these parameters, the agreements are used to optimize interest rate risks and costs inherent in the Company's debt portfolio. In addition, the Company may use interest rate swap agreements to hedge the interest rate on anticipated fixed-rate debt issuance. The notional amount of the interest rate swap agreements is equal to or less than the designated debt instrument being hedged. When variable-rate debt is hedged, the variable-rate indices of the swap instruments and the debt to which they are designated are the same. It is the Company's policy not to enter into any interest rate swap contracts which lever a move in interest rates on a greater than one-to-one basis.

Cross Currency Interest Rate Swap Contracts

The Company also enters into cross currency interest rate swap contracts. These contracts may entail both the exchange of fixed- and floating-rate interest payments periodically over the life of the agreement and the exchange of one currency for another currency at inception and at a specified future date. 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 contracts are used to hedge intercompany and third-party borrowing transactions and certain net investments in foreign operations.

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The following table summarizes the interest rate swaps and cross currency interest rate swaps outstanding as of 31 March 2009 and 30 September 2008:

	31 March 2009			30 September 2008		
	US\$ Notional	Pay %	Average Receive %	US\$ Notional	Pay %	Average Receive %
Interest rate swaps (fair value hedges)	\$ 313.7	6 month LIBOR	4.49%	\$ 321.9	6 month LIBOR	4.49%
Cross currency interest rate swaps (net investment hedge)	\$ 32.2	5.54%	5.48%	\$ 40.3	5.55%	3.89%

Commodity Price Risk Management

The Company has entered into a limited number of commodity swap contracts in order to reduce the cash flow exposure to changes in the price of natural gas relative to certain oil-based feedstocks. The Company has also entered into contracts hedging the cash flow exposure of changes in the market price of certain metals which are raw materials used in the fabrication of certain industrial gas equipment with the overall intent of locking in, or minimizing its exposure to these base metals. As of 31 March 2009, there are no outstanding contracts hedging the changes in the market price of metals.

The table below summarizes the Company's outstanding commodity contracts as of 31 March 2009 and 30 September 2008:

	31 March 2009		30 September 2008	
	US\$ Notional	Years Average Maturity	US\$ Notional	Years Average Maturity
Energy	\$ 49.1	.8	\$ 72.6	.8
Metals	—	—	4.2	.2
Total commodity contracts	\$ 49.1	.8	\$ 76.8	.8

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The table below summarizes the fair value and balance sheet location of the Company's outstanding derivatives at 31 March 2009 and 30 September 2008:

		31 March 2009	30 September 2008		31 March 2009	30 September 2008
	Balance Sheet Location	Fair Value	Fair Value	Balance Sheet Location	Fair Value	Fair Value
Derivatives designated as hedging instruments under SFAS No. 133:						
Foreign exchange contracts	Other Receivables	\$ 34.5	\$ 23.4	Accrued Liabilities	\$ 37.7	\$ 24.4
Interest rate swap contracts	Other Receivables	6.5	—	Accrued Liabilities	—	—
Commodity swap contracts	Other Receivables	15.4	5.9	Accrued Liabilities	12.6	2.5
Currency option contracts	Other Receivables	2.1	1.7	Accrued Liabilities	—	—
Cross currency interest rate swap contracts	Other Receivables	—	1.2	Accrued Liabilities	—	—
Foreign exchange contracts	Other Noncurrent Assets	54.0	19.6	Other Noncurrent Liabilities	30.6	29.8
Interest rate swap contracts	Other Noncurrent Assets	8.4	4.4	Other Noncurrent Liabilities	—	3.5
Commodity swap contracts	Other Noncurrent Assets	—	1.8	Other Noncurrent Liabilities	—	.4
Cross currency interest rate swap contracts	Other Noncurrent Assets	.7	—	Other Noncurrent Liabilities	—	—
Total derivatives designated as hedging instruments under SFAS No. 133		\$ 121.6	\$ 58.0		\$ 80.9	\$ 60.6
Derivatives not designated as hedging instruments under SFAS No. 133:						
Foreign exchange contracts	Other Receivables	\$ 19.6	\$ 10.2	Accrued Liabilities	\$ 46.6	\$ 55.0
Total derivatives not designated as hedging instruments under SFAS No. 133		\$ 19.6	\$ 10.2		\$ 46.6	\$ 55.0
Total Derivatives		\$ 141.2	\$ 68.2		\$ 127.5	\$ 115.6

Refer to Note 6 for SFAS No. 157, "Fair Value Measurements," which defines fair value, establishes a method for measuring fair value, provides additional disclosures regarding fair value measurements, and discusses the Company's counterparty risk.

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The following details summarize the accounting treatment of the Company's cash flow, fair value, net investment, and non-designated hedges:

- Changes in the fair value of a derivative that is designated as and meets all the required criteria for a cash flow hedge are recorded in accumulated OCI and then recognized in earnings when the hedged items affect earnings.
- Changes in the fair value of a derivative that is designated as and meets all the required criteria for a fair value hedge, along with the gain or loss on the hedged asset or liability that is attributable to the hedged risk, are recorded in current period earnings.
- Changes in the fair value of a derivative, foreign currency debt, or other foreign currency liabilities that are designated as and meet all the required criteria for a hedge of a net investment are recorded as translation adjustments in accumulated OCI.
- Changes in the fair value of a derivative that is not designated as a hedge are recorded immediately in earnings.

The tables below summarize the information related to our cash flow, net investment, and non-designated hedges during the three and six month periods ended 31 March 2009 and 31 March 2008. The outstanding fair value hedges for these time periods are not material.

	Three Months Ended 31 March 2009						
	Forward Exchange Contracts	Commodity Swap Contracts	Currency Option Contracts	Cross Currency Interest Rate Swaps	Foreign Currency Debt	Net Liability Positions	Total
Cash Flow Hedges:							
Net (gain) loss recognized in OCI (effective portion)	\$ 4.4	\$ (2.6)	\$ (.6)	\$ —	\$ —	\$ —	\$ 1.2
Net gain (loss) reclassified from OCI to sales (effective portion)	—	1.2	.8	—	—	—	2.0
Net gain (loss) reclassified from OCI to cost of sales (effective portion)	.2	(.1)	—	—	—	—	.1
Net gain (loss) from OCI to other (income) expense (ineffective portion)	(.1)	—	—	—	—	—	(.1)
Net Investment Hedges:							
Net (gain) loss recognized in OCI	\$ (7.6)	\$ —	\$ —	\$ (.2)	\$ (57.8)	\$ (28.0)	\$(93.6)
Net gain (loss) reclassified from OCI to other (income) expense	—	—	—	—	—	—	—
Non-designated Hedges:							
Net (gain) loss recognized in other (income) expense (a)	\$ 32.1	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 32.1

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Three Months Ended 31 March 2008							
	Forward Exchange Contracts	Commodity Swap Contracts	Currency Option Contracts	Cross Currency Interest Rate Swaps	Foreign Currency Debt	Net Liability Positions	Total
Cash Flow Hedges:							
Net (gain) loss recognized in OCI (effective portion)	\$ 1.9	\$ 1.9	\$ —	\$ —	\$ —	\$ —	\$ 3.8
Net gain (loss) reclassified from OCI to sales (effective portion)	(.7)	(.2)	—	—	—	—	(.9)
Net gain (loss) reclassified from OCI to cost of sales (effective portion)	3.9	(.4)	—	—	—	—	3.5
Net gain (loss) from OCI to other (income) expense (ineffective portion)	—	—	—	—	—	—	—
Net Investment Hedges:							
Net (gain) loss recognized in OCI	\$ 24.3	\$ —	\$ —	\$ (.6)	\$ 58.5	\$ 108.4	\$190.6
Net gain (loss) reclassified from OCI to other (income) expense	—	—	—	—	—	—	—
Non-designated Hedges:							
Net (gain) loss recognized in other (income) expense (a)	\$ (15.5)	\$ —	\$ —	\$ —	\$ —	\$ —	\$ (15.5)
Six Months Ended 31 March 2009							
	Forward Exchange Contracts	Commodity Swap Contracts	Currency Option Contracts	Cross Currency Interest Rate Swaps	Foreign Currency Debt	Net Liability Positions	Total
Cash Flow Hedges:							
Net (gain) loss recognized in OCI (effective portion)	\$ 7.1	\$ 1.1	\$ (1.3)	\$ —	\$ —	\$ —	\$ 6.9
Net gain (loss) reclassified from OCI to sales (effective portion)	(3.6)	1.5	1.0	—	—	—	(1.1)
Net gain (loss) reclassified from OCI to cost of sales (effective portion)	.1	(.1)	—	—	—	—	—
Net gain (loss) from OCI to other (income) expense (ineffective portion)	(.1)	—	—	—	—	—	(.1)
Net Investment Hedges:							
Net (gain) loss recognized in OCI	\$ (21.1)	\$ —	\$ —	\$ (4.8)	\$ (72.7)	\$ (70.7)	\$ (169.3)
Net gain (loss) reclassified from OCI to other (income) expense	—	—	—	—	—	—	—
Non-designated Hedges:							
Net (gain) loss recognized in other (income) expense (a)	\$ 9.4	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 9.4

Six Months Ended 31 March 2008

	Forward Exchange Contracts	Commodity Swap Contracts	Currency Option Contracts	Cross Currency Interest Rate Swaps	Foreign Currency Debt	Net Liability Positions	Total
Cash Flow Hedges:							
Net (gain) loss recognized in OCI (effective portion)	\$ 6.8	\$ 2.8	\$ —	\$ —	\$ —	\$ —	\$ 9.6
Net gain (loss) reclassified from OCI to sales (effective portion)	(1.8)	(0.1)	—	—	—	—	(1.9)
Net gain (loss) reclassified from OCI to cost of sales (effective portion)	4.5	(1.0)	—	—	—	—	3.5
Net gain (loss) from OCI to other (income) expense (ineffective portion)	—	—	—	—	—	—	—
Net Investment Hedges:							
Net (gain) loss recognized in OCI	\$ 23.9	\$ —	\$ —	\$ (1.3)	\$ 146.5	\$ 66.6	\$235.7
Net gain (loss) reclassified from OCI to other (income) expense	—	—	—	—	—	—	—
Non-designated Hedges:							
Net (gain) loss recognized in other (income) expense (a)	\$ (8.2)	\$ —	\$ —	\$ —	\$ —	\$ —	\$ (8.2)

(a) The impact of the non-designated hedges noted above was largely offset by gains and losses, respectively, resulting from the impact of changes in exchange rates on recognized assets and liabilities denominated in non-functional currencies.

Credit Risk-Related Contingent Features

Certain derivative instruments are executed under agreements that require the Company to maintain a credit rating of at least A- from Standard & Poor's and A3 from Moody's. If the Company's credit rating falls below these levels, the counterparty to the derivative instruments has the right to request full collateralization on the derivatives' net liability position. The net liability position of derivatives with credit risk-related contingent features is \$2.6 and \$21.5 as of 31 March 2009 and 30 September 2008, respectively. Because of the Company's current credit rating of A from Standard & Poor's and A2 from Moody's, no collateral has been posted on these liability positions.

Counterparty Credit Risk Management

The Company executes all derivative transactions with counterparties that are highly rated financial institutions, and all of which are investment grade at this time. Some of the Company's underlying derivative agreements give the Company the right to require the institution to post collateral if its credit rating falls below A- from Standard & Poor's or A3 from Moody's. These are the same agreements referenced in Credit Risk-Related Contingent Features above. The collateral that the counterparties would be required to post is \$66.1 as of 31 March 2009 and \$14.1 as of 30 September 2008. No financial institution is required to post collateral at this time, as all have credit ratings at or above the threshold.

6. FAIR VALUE MEASUREMENTS

As discussed in Note 2 on New Accounting Standards, the Company adopted SFAS No. 157 as of 1 October 2008, with the exception of the application of the Statement to nonrecurring nonfinancial assets and nonfinancial liabilities, for which adoption has been delayed until 1 October 2009.

SFAS No. 157 defines fair value as an exit price (i.e., the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date). SFAS No. 157 establishes a three-level fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value.

- Level 1 — Quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2 — Inputs that are observable for the asset or liability, either directly or indirectly through market corroboration, for substantially the full term of the asset or liability.
- Level 3 — Inputs that are unobservable for the asset or liability based on the Company's own assumptions (about the assumptions market participants would use in pricing the asset or liability).

The following table summarizes assets and liabilities measured at fair value on a recurring basis in the consolidated balance sheet:

31 March 2009	Total	Level 1	Level 2	Level 3
Assets at Fair Value				
Derivatives (a)				
Interest rate swap agreements	\$ 14.9	\$ —	\$ 14.9	\$ —
Cross currency interest rate swap contracts	.7	—	.7	—
Currency option contracts	2.1	—	2.1	—
Forward exchange contracts	108.1	—	108.1	—
Commodity swap contracts	15.4	—	15.4	—
Other investments (b)	14.3	14.3	—	—
Total Assets at Fair Value	\$155.5	\$ 14.3	\$141.2	\$ —
Liabilities at Fair Value				
Derivatives (a)				
Forward exchange contracts	\$114.9	\$ —	\$114.9	\$ —
Commodity swap contracts	12.6	—	12.6	—
Total Liabilities at Fair Value	\$127.5	\$ —	\$127.5	\$ —

(a) The fair value of the Company's interest rate swap agreements and foreign exchange contracts are based on estimates using standard pricing models that take into account the present value of future cash flows as of the balance sheet date. The computation of the fair values of these instruments is generally performed by the Company. These standard pricing models utilize inputs which are derived from or corroborated by observable market data such as interest rate yield curves and currency spot and forward rates. In addition, on an ongoing basis, the Company randomly tests a subset of its valuations against valuations received from the counterparty to the transaction to validate the accuracy of its standard pricing models. The fair value of commodity swaps is based on current market price as provided by the financial institutions with which the commodity swaps have been executed. Counterparties to these derivative contracts are highly rated financial institutions none of which experienced significant downgrades since 30 September 2008 that could reduce the receivable amount collectible.

(b) The fair value of other investments in publicly traded companies is based on quoted market prices from the New York and Tokyo stock exchanges.

Refer to Note 1 in the Company's 2008 annual report on Form 10-K and Note 5 in this quarterly filing for additional information on the Company's accounting and reporting of the fair value of financial instruments.

7. INVENTORIES

The components of inventories are as follows:

	31 March 2009	30 September 2008
Inventories at FIFO Cost		
Finished goods	\$ 389.1	\$ 365.1
Work in process	22.7	22.4
Raw materials and supplies	173.5	183.5
	585.3	571.0
Less: excess of FIFO cost over LIFO cost	(78.7)	(67.3)
	\$ 506.6	\$ 503.7

FIFO cost approximates replacement cost. The Company's inventories have a high turnover, and as a result, there is little difference between the original cost of an item and its current replacement cost.

8. GOODWILL

Changes to the carrying amount of consolidated goodwill by segment for the six months ended 31 March 2009 are as follows:

	30 September 2008	Acquisition and Adjustments	Currency Translation and Other	31 March 2009
Merchant Gases	\$ 626.5	\$ 1.4	\$ (96.7)	\$ 531.2
Tonnage Gases	18.0	—	(4.5)	13.5
Electronics and Performance Materials	283.6	(.9)	(16.2)	266.5
	\$ 928.1	\$.5	\$ (117.4)	\$ 811.2

Goodwill is subject to impairment testing at least annually. In addition, goodwill is tested more frequently if a change in circumstances or the occurrence of events indicates that potential impairment exists.

9. SHARE-BASED COMPENSATION

The Company has various share-based compensation programs, which include stock options, deferred stock units, and restricted shares. During the six months ended 31 March 2009, the Company granted 2.0 million stock options at a weighted-average exercise price of \$66.90 and an estimated fair value of \$20.86 per option. The fair value of these options was estimated using a lattice-based option valuation model that used the following assumptions: expected volatility of 31.2%; expected dividend yield of 2.1%; expected life in years of 6.7-8.0; and a risk-free interest rate of 3.5%-3.9%. In addition, the Company granted 379,961 deferred stock units at a weighted-average grant-date fair value of \$52.12 and 40,092 restricted shares at a weighted-average grant-date fair value of \$64.01. Refer to Note 15 in the Company's 2008 annual report on Form 10-K for information on the valuation and accounting for these programs.

Share-based compensation cost charged against income in the three and six months ended 31 March 2009 was \$12.7 (\$7.8 after-tax) and \$30.1 (\$18.5 after-tax), respectively. Of the share-based compensation cost recognized, 77% was a component of selling and administrative expense, 14% a component of cost of sales, and 9% a component of research and development. Share-based compensation cost charged against income in the three and six months ended 31 March 2008 was \$16.0 (\$9.9 after-tax) and \$33.0 (\$20.3 after-tax), respectively. The amount of share-based compensation cost capitalized in 2009 and 2008 was not material.

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10. EARNINGS PER SHARE

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

	Three Months Ended 31 March		Six Months Ended 31 March	
	2009	2008	2009	2008
NUMERATOR				
Used in basic and diluted EPS				
Income from continuing operations	\$ 189.3	\$ 259.8	\$ 279.3	\$ 522.1
Income (loss) from discontinued operations	16.3	54.5	(5.1)	55.9
Net Income	\$ 205.6	\$ 314.3	\$ 274.2	\$ 578.0
DENOMINATOR (in millions)				
Weighted average number of common shares used in basic EPS	209.6	212.3	209.5	213.6
Effect of dilutive securities				
Employee stock options	1.7	5.8	1.7	6.1
Other award plans	1.0	1.1	1.0	1.1
	2.7	6.9	2.7	7.2
Weighted average number of common shares and dilutive potential common shares used in diluted EPS	212.3	219.2	212.2	220.8
BASIC EPS				
Income from continuing operations	\$.90	\$ 1.22	\$ 1.33	\$ 2.45
Income (loss) from discontinued operations	.08	.26	(.02)	.26
Net Income	\$.98	\$ 1.48	\$ 1.31	\$ 2.71
DILUTED EPS				
Income from continuing operations	\$.89	\$ 1.18	\$ 1.32	\$ 2.37
Income (loss) from discontinued operations	.08	.25	(.03)	.25
Net Income	\$.97	\$ 1.43	\$ 1.29	\$ 2.62

Options on 8.6 and 8.7 million shares were antidilutive and therefore excluded from the computation of diluted earnings per share for the three and six months ended 31 March 2009, respectively. Options on 1.2 million shares were antidilutive and therefore excluded from the computation for the three and six months ended 31 March 2008.

11. RETIREMENT BENEFITS

The components of net pension cost for the defined benefit pension plans and other postretirement benefit cost were as follows:

	2009	Three Months Ended 31 March		2008
		Pension Benefits	Other Benefits	
Service cost	\$ 14.7	\$ 19.6	\$.8	\$ 1.5
Interest cost	45.2	45.5	1.7	1.4
Expected return on plan assets	(49.6)	(52.0)	—	—
Prior service cost (credit) amortization	1.0	.8	(.3)	(.3)
Actuarial loss amortization	3.6	9.8	(.1)	.4
Settlement and curtailment charges	—	26.3	—	—
Special termination benefits	.2	.5	—	—
Other	.7	.1	—	—
Net periodic benefit cost	\$ 15.8	\$ 50.6	\$ 2.1	\$ 3.0

	2009	Six Months Ended 31 March		2008
		Pension Benefits	Other Benefits	
Service cost	\$ 29.8	\$ 39.2	\$ 2.3	\$ 3.0
Interest cost	91.0	91.2	3.1	2.9
Expected return on plan assets	(98.6)	(104.1)	—	—
Prior service cost (credit) amortization	2.0	1.6	(.7)	(.7)
Actuarial loss amortization	7.4	19.7	.3	.8
Settlement and curtailment charges	—	27.7	—	—
Special termination benefits	14.8	.5	—	—
Other	.8	1.0	—	—
Net periodic benefit cost	\$ 47.2	\$ 76.8	\$ 5.0	\$ 6.0

Special termination benefits for the six months ended 31 March 2009 included \$14.4 for the global cost reduction plan.

For the six months ended 31 March 2009, pension contributions of \$153.5 were made. Total contributions for 2009 are expected to be approximately \$175. For the six months ended 31 March 2008, pension contributions of \$118.3 were made. During 2008, total contributions were \$234.0.

A number of corporate officers and others who were eligible for supplemental pension plan benefits retired in fiscal years 2007 and 2008. The Company's supplemental pension plan provides for a lump sum benefit payment option at the time of retirement, or for corporate officers six months after the participant's retirement date. The Company recognizes pension settlements when payments exceed the sum of service and interest cost components of net periodic pension cost of the plan for the fiscal year. A settlement loss is recognized when the pension obligation is settled. Based on the timing of when cash payments were made, the Company recognized \$26.3 and \$27.7 in the three and six months ended 31 March 2008, respectively. The Company expects to recognize settlement charges in the second half of 2009.

12. COMMITMENTS AND CONTINGENCIES

Litigation

The Company is involved in various legal proceedings, including competition, environmental, health, safety, product liability, and insurance matters. In the third quarter of 2008, a unit of the Brazilian Ministry of Justice issued a report (previously issued in January 2007, and then withdrawn) on its investigation of the Company's Brazilian subsidiary, Air Products Brazil Ltda., and several other Brazilian industrial gas companies. The report recommended that the Brazilian Administrative Council for Economic Defense impose sanctions on Air Products Brazil Ltda. and the other industrial gas companies for alleged anticompetitive activities. The Company intends to defend this action and cannot, at this time, reasonably predict the ultimate outcome of the proceedings or sanctions, if any, that will be imposed. While the Company does not expect that any sums it may have to pay in connection with this or any other legal proceeding would have a materially adverse effect on its consolidated financial position or net cash flows, a future charge for regulatory fines or damage awards could have a significant impact on the Company's net income in the period in which it is recorded.

Customer Bankruptcy

On 6 January 2009, a customer of the Company began operating under Chapter 11 bankruptcy protection. This company receives product principally from the Tonnage Gases segment. At 31 March 2009, the Company had outstanding net receivables with the customer of \$37.3. Sales and operating income associated with this customer are not material to the Tonnage Gases segment's results. At the present time, the Company does not expect any material charges related to long-term assets associated with this customer bankruptcy.

Environmental

Accruals for environmental loss contingencies are recorded when it is probable that a liability has been incurred and the amount of loss can be reasonably estimated. The consolidated balance sheet at 31 March 2009 and 30 September 2008 included an accrual of \$96.1 and \$82.9, respectively, primarily as part of other noncurrent liabilities. The environmental liabilities will be paid over a period of up to 30 years. The Company estimates the exposure for environmental loss contingencies to range from \$96 to a reasonably possible upper exposure of \$110 as of 31 March 2009.

During the first quarter of 2009, the Company recognized a \$16.0 environmental liability associated with a production facility. The Company is required by state law to investigate and remediate a site upon its sale. In the first quarter of 2009, management committed to a plan to sell this facility. The Company estimates that it will take at least several years to complete the remediation efforts at this site.

Refer to Note 19 to the Consolidated Financial Statements in the Company's 2008 annual report on Form 10-K for information on the Company's environmental accruals related to the Pace, Florida and Piedmont, S.C. facilities. At 31 March 2009, the accrual balances associated with the Pace, Florida and Piedmont, S.C. facilities totaled \$38.7 and \$22.7, respectively.

13. BUSINESS SEGMENT AND GEOGRAPHIC INFORMATION

The Company's segments are organized based on differences in product and/or type of customer. The Company has four business segments consisting of Merchant Gases, Tonnage Gases, Electronics and Performance Materials, and Equipment and Energy.

Business Segment Information

	Three Months Ended 31 March		Six Months Ended 31 March	
	2009	2008	2009	2008
Revenues from External Customers				
Merchant Gases	\$ 870.4	\$1,008.7	\$1,795.6	\$2,010.4
Tonnage Gases	624.6	867.2	1,368.6	1,658.3
Electronics and Performance Materials	332.2	562.1	738.8	1,076.4
Equipment and Energy	128.2	104.7	247.7	205.0
Segment and Consolidated Totals	\$1,955.4	\$2,542.7	\$4,150.7	\$4,950.1
Operating Income				
Merchant Gases	\$ 156.2	\$ 189.2	\$ 326.7	\$ 389.0
Tonnage Gases	98.0	111.1	206.8	222.2
Electronics and Performance Materials	(11.1)	67.6	13.5	133.6
Equipment and Energy	16.3	10.0	23.3	19.3
Segment Totals	259.4	377.9	570.3	764.1
Global cost reduction plan (a)	—	—	(174.2)	—
Pension settlement	—	(26.3)	—	(27.7)
Other	1.0	(3.0)	(21.6)	(7.4)
Consolidated Totals	\$ 260.4	\$ 348.6	\$ 374.5	\$ 729.0

	31 March 2009	30 September 2008
Identifiable Assets (b)		
Merchant Gases	\$ 4,518.4	\$ 4,881.6
Tonnage Gases	3,266.0	3,335.4
Electronics and Performance Materials	2,109.8	2,341.0
Equipment and Energy	301.7	300.2
Segment Totals	10,195.9	10,858.2
Other	868.8	775.2
Discontinued operations	57.7	115.3
Consolidated Totals	\$11,122.4	\$ 11,748.7

(a) Information about this charge at the segment level is discussed in Note 3.

(b) Identifiable assets are equal to total assets less investments in and advances to equity affiliates.

Geographic Information

	Three Months Ended 31 March		Six Months Ended 31 March	
	2009	2008	2009	2008
Revenues from External Customers				
North America	\$ 978.8	\$ 1,231.6	\$2,089.3	\$2,378.2
Europe	662.2	856.6	1,379.6	1,664.1
Asia	270.1	403.5	595.7	807.4
Latin America	44.3	51.0	86.1	100.4
Total	\$1,955.4	\$2,542.7	\$4,150.7	\$4,950.1

Geographic information is based on country of origin. The Europe segment operates principally in Belgium, France, Germany, the Netherlands, Poland, the U.K. and Spain. The Asia segment operates principally in China, Japan, Korea, and Taiwan.

14. SUPPLEMENTAL INFORMATION

Share Repurchase Program

On 20 September 2007, the Board of Directors authorized the repurchase of up to \$1,000 of the Company's outstanding common stock. During the six months ended 31 March 2009, the Company did not purchase any shares under this authorization. At 31 March 2009, \$649.2 in share repurchase authorization remains.

Industrial Revenue Bonds

During the first quarter of 2009, the Company issued two Industrial Revenue Bonds totaling \$80.0, the proceeds of which must be held in escrow until related project spending occurs. As of 31 March 2009 and 30 September 2008, \$139.1 and \$181.2 were held in escrow from Industrial Revenue Bond issuances and classified as other noncurrent assets, respectively.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

(Millions of dollars, except for share data)

The disclosures in this quarterly report are complementary to those made in the Company's 2008 annual report on Form 10-K. An analysis of results for the second quarter and first six months of 2009, including an update to the Company's 2009 Outlook, is provided in the Management's Discussion and Analysis to follow.

All comparisons in the discussion are to the corresponding prior year unless otherwise stated. All amounts presented are in accordance with U.S. generally accepted accounting principles, except as noted. All amounts are presented in millions of dollars, except for share data, unless otherwise indicated.

SECOND QUARTER 2009 VS. SECOND QUARTER 2008

SECOND QUARTER 2009 IN SUMMARY

- Declining business conditions around the world have created a challenging business environment across the Company's end markets. As a result, volumes declined significantly this quarter as many customers ran at reduced operating rates.
- Sales of \$1,955.4 declined 23% from weaker volumes, unfavorable currency impacts, and lower natural gas and raw material contractual cost pass-through. Underlying business declined due to lower volumes primarily in the Electronics and Performance Materials segment and also in the Tonnage Gases segment. Volumes were lower in the Merchant Gases segment, but this decline was mostly offset by higher pricing.
- Operating income of \$260.4 decreased \$88.2. Operating income declined principally from lower volumes and unfavorable currency impacts. Prior year results included a pension settlement charge of \$26.3 for the retirement of certain corporate officers and others who were eligible for supplemental pension plan benefits.
- Income from continuing operations of \$189.3 declined \$70.5 and diluted earnings per share from continuing operations of \$.89 declined \$.29. A summary table of changes in diluted earnings per share is presented below.
- Income from discontinued operations was \$16.3 or \$.08 per share. The Company recognized a one-time tax benefit of \$16.7 (\$.08 per share) to increase the tax benefit related to previously recognized impairment charges associated with the U.S. Healthcare business.
- The Company increased the quarterly dividend from \$.44 to \$.45 per share. This represents the 27th consecutive year that the Company has increased its dividend payment.
- For a discussion of the challenges, risks, and opportunities on which management is focused, refer to the update to the Company's 2009 Outlook provided on page 36.

Changes in Diluted Earnings per Share

	Three Months Ended 31 March		Increase (Decrease)
	2009	2008	
Diluted Earnings per Share			
Net Income	\$.97	\$ 1.43	\$ (.46)
Discontinued Operations	.08	.25	(.17)
Continuing Operations	\$.89	\$ 1.18	\$ (.29)
Operating Income (after-tax)			
Underlying business			
Volume			(.52)
Price/raw materials			.13
Costs			.12
Currency			(.11)
2008 Pension settlement			.08
Operating Income			(.30)
Other (after-tax)			
Equity affiliates' income			(.05)
Interest expense			.03
Average shares outstanding			.03
Other			.01
Total Change in Diluted Earnings per Share from Continuing Operations			\$ (.29)

RESULTS OF OPERATIONS

Discussion of Consolidated Results

	Three Months Ended 31 March		% Change
	2009	2008	
Sales	\$1,955.4	\$2,542.7	(23)%
Operating income	260.4	348.6	(25)%
Equity affiliates' income	27.0	42.4	(36)%

Sales

	% Change from Prior Year
Underlying business	
Volume	(13)%
Price	2%
Currency	(7)%
Natural gas/raw material cost pass-through	(5)%
Total Consolidated Change	(23)%

Sales of \$1,955.4 decreased 23%, or \$587.3. Underlying business declined 11% from lower volumes due to weak demand across most end markets, primarily in the Electronics and Performance Materials segment and also in the Tonnage Gases segment. Volumes were lower in Merchant Gases but this decline was mostly offset by higher pricing. Currency unfavorably impacted sales by 7%, due primarily to the strengthening of the U.S. dollar against key European and Asian currencies. Natural gas and raw material contractual cost pass-through to customers reduced sales by 5%.

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Operating Income

Operating income of \$260.4 decreased 25%, or \$88.2.

- Underlying business declined \$81, primarily from lower volumes in the Electronics and Performance Materials, Tonnage Gases, and Merchant Gases segments. Weakening consumer confidence, as a result of the deterioration in the global economy, significantly impacted customers' operating rates across many of the Company's end markets. The volume declines were partially offset by higher prices in Merchant Gases and favorable cost performance.
- Unfavorable currency impacts reduced operating income by \$33, reflecting the strengthening of the U.S. dollar against key European and Asian currencies.
- Prior year results included a pension settlement charge of \$26.3 for the retirements of certain corporate officers and others who were eligible for supplemental pension plan benefits.

Equity Affiliates' Income

Income from equity affiliates of \$27.0 decreased 36%, or \$15.4, primarily due to unfavorable currency impacts and a prior year fine reversal. Results in 2008 included a gain of \$6.5 related to the reimbursement of an antitrust fine levied against an Italian affiliate in 2006. A higher court overruled the Italian antitrust authority who levied the fine.

Selling and Administrative Expense (S&A)

S&A expense of \$230.6 decreased 15%, or \$41.5. S&A, as a percent of sales, increased to 11.8% from 10.7%. Favorable currency impacts, primarily the strengthening of the U.S. dollar against the Euro and Pound Sterling, decreased S&A by 9%. S&A further declined 6% from lower underlying costs, partially offset by inflation.

Research and Development (R&D)

R&D expense of \$29.6 decreased 14%, or \$4.7. R&D increased as a percent of sales to 1.5% from 1.3%.

Pension Settlement

A number of corporate officers and others who were eligible for supplemental pension plan benefits retired in fiscal years 2007 and 2008. The Company's supplemental pension plan provides for a lump sum benefit payment option at the time of retirement, or for corporate officers six months after the participant's retirement date. The Company recognizes pension settlements when payments exceed the sum of service and interest cost components of net periodic pension cost of the plan for the fiscal year. A settlement loss is recognized when the pension obligation is settled. Based on the timing of when cash payments were made, the Company recognized \$26.3 for settlement losses in the three months ended 31 March 2008. The Company expects to recognize settlement charges in the second half of 2009.

Other Income, Net

Items recorded to other income arise from transactions and events not directly related to the principal income earning activities of the Company.

Other income of \$5.1 decreased \$5.1. No individual items were significant in comparison to the prior year.

Interest Expense

	Three Months Ended 31 March	
	2009	2008
Interest incurred	\$ 34.9	\$ 45.5
Less: interest capitalized	4.9	6.6
Interest expense	\$ 30.0	\$ 38.9

Interest incurred decreased \$10.6, primarily due to lower average interest rates on variable-rate debt. The change in capitalized interest is driven by a decrease in project spending which qualified for capitalization.

[Table of Contents](#)**Effective Tax Rate**

The effective tax rate equals the income tax provision divided by income from continuing operations before taxes less minority interest. The effective tax rate was 26.0% and 25.3% in the second quarter of 2009 and 2008, respectively.

Discontinued Operations

The U.S. Healthcare business, Polymer Emulsions business, and the High Purity Process Chemicals (HPPC) business have been accounted for as discontinued operations. The results of operations of these businesses have been removed from the results of continuing operations for all periods presented. Refer to Note 4 to the Consolidated Financial Statements for additional information.

U.S. Healthcare

The U.S. Healthcare business generated sales of \$43.9 and loss from operations, net of tax, of \$.6 in the second quarter of 2009. As a result of events occurring during the quarter, which increased the Company's ability to realize tax benefits associated with the impairment charges recorded in 2008, the Company recognized a one-time tax benefit of \$16.7, or \$.08 per share. Sales in the second quarter of 2008 were \$62.6 and loss from operations, net of tax, was \$6.6.

Polymer Emulsions

On 31 January 2008, the Company sold its Polymer Emulsions business to Wacker Chemie AG, its long-time joint venture partner. As part of the agreement, the Company received Wacker Chemie AG's interest in the Elkton, Md. and Piedmont, S.C. production facilities and their related businesses plus cash proceeds of \$258.2. The Company recognized a gain on the sale of \$89.5 (\$57.7 after-tax). In the second quarter of 2008, the Polymer Emulsions business generated sales of \$78.8 and income from operations, net of tax, of \$3.3.

Net Income

Net income was \$205.6 compared to \$314.3. Diluted earnings per share was \$.97 compared to \$1.43. A summary table of changes in earnings per share is presented on page 25.

Segment Analysis**Merchant Gases**

	Three Months Ended 31 March		
	2009	2008	% Change
Sales	\$870.4	\$1,008.7	(14)%
Operating income	156.2	189.2	(17)%
Equity affiliates' income	25.1	36.7	(32)%

Merchant Gases Sales

	% Change from Prior Year
Underlying business	
Volume	(8)%
Price	6%
Currency	(12)%
Total Merchant Gases Change	(14)%

Sales of \$870.4 decreased 14%, or \$138.3. Sales decreased 12% from unfavorable currency impacts, driven primarily by the strengthening of the U.S. dollar against key European and Asian currencies. Underlying business declined by 2%, with volumes down 8% and pricing up 6%. Volumes declined as a result of the downturn in global manufacturing. Price increases have been effective in all regions, partially offsetting the weakness in volume.

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In North America, sales decreased 10% driven by a slow manufacturing climate. Volumes declined 15% and were especially impacted by lower argon and liquid hydrogen. Higher prices of 5% partially offset the decline in volumes. In Europe, sales decreased 18%, mainly due to unfavorable currency impacts of 17%. Volumes were lower by 7%, due to weak manufacturing demand across most end markets and regions. Improved pricing added 6%. In Asia, sales declined by 17%. Volumes declined 12% as a result of significantly lower demand from Electronics customers and from the overall manufacturing slowdown in Asia. Unfavorable currency reduced sales by 10%, while improved pricing added 5%.

Merchant Gases Operating Income

Operating income of \$156.2 decreased 17%, or \$33.0. Volume declines of \$58 and unfavorable currency impacts of \$24 reduced operating income. These declines were partially offset by higher pricing net of variable costs of \$27 and improved fixed cost performance of \$22.

Merchant Gases Equity Affiliates' Income

Merchant Gases equity affiliates' income of \$25.1 decreased 32%, or \$11.6, driven by unfavorable currency impacts and a prior year fine reversal. Overall volumes were flat as higher volumes in Mexico offset lower volumes in other countries.

Tonnage Gases

	Three Months Ended 31 March		% Change
	2009	2008	
Sales	\$ 624.6	\$ 867.2	(28)%
Operating income	98.0	111.1	(12)%

Tonnage Gases Sales

	% Change from Prior Year
Underlying business	
Volume	(7)%
Currency	(6)%
Natural gas/raw material cost pass-through	(15)%
Total Tonnage Gases Change	(28)%

Sales of \$624.6 decreased 28%, or \$242.6. Natural gas and raw material contractual cost pass-through to customers reduced sales by 15%. Underlying business declined by 7%. Volume declines were due to reduced demand from steel and chemical customers. Unfavorable currency effects reduced sales by 6%.

Tonnage Gases Operating Income

Operating income of \$98.0 decreased 12%, or \$13.1. Unfavorable currency reduced operating income by \$9. Underlying business declined by \$4, primarily from reduced operating rates from steel and chemical customers.

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Electronics and Performance Materials

	Three Months Ended 31 March		
	2009	2008	% Change
Sales	\$ 332.2	\$ 562.1	(41)%
Operating income (loss)	(11.1)	67.6	(116)%

Electronics and Performance Materials Sales

	% Change from Prior Year
Underlying business	
Volume	(38)%
Price	—
Currency	(3)%
Total Electronics and Performance Materials Change	(41)%

Sales of \$332.2 decreased 41%, or \$229.9. Volumes reduced sales by 38% and unfavorable currency reduced sales by 3%. Electronics volumes decreased 41%, reflecting the dramatic global downturn in semiconductor and flat panel capacity utilization that continued to worsen this quarter. Performance Materials volumes declined by 31% reflecting weakened demand across end markets. Asia continued to be the weakest region, followed by Europe and North America.

Electronics and Performance Materials Operating Loss

Operating loss was \$11.1, primarily due to lower volumes. While costs in this business were significantly reduced, the rapid contraction in Electronics specialty materials demand was responsible for the overall segment losses in the quarter.

Equipment and Energy

	Three Months Ended 31 March		
	2009	2008	% Change
Sales	\$ 128.2	\$ 104.7	22%
Operating income	16.3	10.0	63%

Equipment and Energy Sales and Operating Income

Sales of \$128.2 increased 22%, or \$23.5, due to increased large air separation unit (ASU) activity. Operating income of \$16.3 increased \$6.3, primarily due to favorable cost performance.

The sales backlog for the Equipment business at 31 March 2009 was \$281, compared to \$399 at 30 September 2008.

Other

Other operating income (loss) includes expense and income that cannot be directly associated with the business segments, including foreign exchange gains and losses and interest income. Also included are LIFO inventory adjustments, as the business segments use FIFO and the LIFO pool is kept at corporate.

Other operating income was \$1.0 compared to a loss of \$3.0. No individual items were significant in comparison to the prior year.

FIRST SIX MONTHS 2009 VS. FIRST SIX MONTHS 2008

FIRST SIX MONTHS 2009 IN SUMMARY

- Declining business conditions around the world have unfavorably impacted the Company's businesses. In response to these market conditions, the Company implemented a global cost reduction plan to lower its cost structure and better align its businesses. The results from continuing operations included a charge of \$174.2 (\$116.1 after-tax, or \$.55 per share) for this plan.
- Sales of \$4,150.7 declined 16% from lower volumes, unfavorable currency impacts, and lower natural gas and raw material contractual cost pass-through. Volumes declined primarily in the Electronics and Performance Materials segment and also in the Tonnage Gases segment, reflecting the weak market conditions. Volumes were also lower in Merchant Gases; however, the decrease was offset by higher pricing.
- Operating income of \$374.5 declined \$354.5 principally from lower volumes, unfavorable currency impacts, and the global cost reduction charge. Improved pricing in the Merchant Gases segment partially offset this decline. Prior year results included a pension settlement charge of \$27.7 for the retirement of certain corporate officers and others who were eligible for supplemental pension plan benefits.
- Income from continuing operations was \$279.3 as compared to \$522.1. Diluted earnings per share from continuing operations of \$1.32 declined \$1.05. A summary table of changes in diluted earnings per share is presented below.
- Loss from discontinued operations was \$5.1. The Company recorded an impairment charge of \$48.7 (\$30.9 after-tax, or \$.15 per share), reflecting a revision in the estimated net realizable value of the U.S. Healthcare business. The Company recognized tax benefits of \$25.5 (\$.12 per share) related to previously recognized impairment charges associated with the U.S. Healthcare business.
- The Company increased the quarterly dividend from \$.44 to \$.45 per share. This represents the 27th consecutive year that the Company has increased its dividend payment.
- For a discussion of the challenges, risks, and opportunities on which management is focused, refer to the update to the Company's 2009 Outlook provided on page 36.

Changes in Diluted Earnings per Share

	Six Months Ended 31 March		Increase (Decrease)
	2009	2008	
Diluted Earnings per Share			
Net Income	\$ 1.29	\$ 2.62	\$ (1.33)
Discontinued Operations	(.03)	.25	(.28)
Continuing Operations	\$ 1.32	\$ 2.37	\$ (1.05)
Operating Income (after-tax)			
Underlying business			
Volume			(.77)
Price/raw materials			.18
Costs			.15
Currency			(.24)
Global cost reduction plan			(.55)
2008 Pension settlement			.08
Operating Income			(1.15)
Other (after-tax)			
Equity affiliates' income			(.05)
Interest expense			.04
Income tax rate			.03
Minority interest			.01
Average shares outstanding			.07
Other			.10
Total Change in Diluted Earnings per Share from Continuing Operations			\$ (1.05)

RESULTS OF OPERATIONS

Discussion of Consolidated Results

	Six Months Ended 31 March		% Change
	2009	2008	
Sales	\$4,150.7	\$4,950.1	(16)%
Operating income	374.5	729.0	(49)%
Equity affiliates' income	51.5	67.7	(24)%

Sales

	% Change from Prior Year
Underlying business	
Volume	(10)%
Price	3%
Currency	(6)%
Natural gas/raw material cost pass-through	(3)%
Total Consolidated Change	(16)%

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Sales of \$4,150.7 decreased 16%, or \$799.4. Underlying business declined 7%, due to lower volumes primarily in the Electronics and Performance Materials segment and also in the Tonnage Gases segment. Volumes were lower in the Merchant Gases segment, but this decline was mostly offset by improved pricing. Currency unfavorably impacted sales by 6%, due primarily to the strengthening of the U.S. dollar against key European and Asian currencies. Natural gas and raw material contractual cost pass-through to customers reduced sales by 3%.

Operating Income

Operating income of \$374.5 decreased 49%, or \$354.5.

- Underlying business declined \$134, primarily from lower volumes in the Electronics and Performance Materials, Tonnage Gases, and Merchant Gases segments. Weakening consumer confidence, as a result of the deterioration in the global economy, significantly impacted customers' operating rates across many of the Company's end markets. The volume declines were partially offset by higher prices in the Merchant Gases segment and favorable cost performance.
- Unfavorable currency impacts lowered operating income by \$72, reflecting the strengthening of the U.S. dollar against key European and Asian currencies.
- The global cost reduction plan charge in the first quarter of 2009 reduced operating income by \$174.2.
- Prior year results included a pension settlement charge of \$27.7 for the retirements of certain corporate officers and others who were eligible for supplemental pension plan benefits.

Equity Affiliates' Income

Income from equity affiliates of \$51.5 decreased \$16.2, or 24%, primarily due to unfavorable currency impacts and a prior year fine reversal.

Selling and Administrative Expense (S&A)

S&A expense of \$477.6 decreased 10%, or \$53.0. S&A as a percent of sales, increased to 11.5% from 10.7%. Favorable currency effects, primarily the strengthening of the U.S. dollar against the Euro and Pound Sterling, decreased S&A by 7%. S&A further declined 3% primarily from lower underlying costs, partially offset by inflation.

Research and Development (R&D)

R&D expense of \$62.8 decreased 3%, or \$1.8. R&D increased as a percent of sales to 1.5% from 1.3%.

Global Cost Reduction Plan

During the first quarter ended 31 December 2008, the Company announced a global cost reduction plan designed to lower its cost structure and better align its businesses to reflect rapidly declining economic conditions around the world. The results from continuing operations included a charge of \$174.2 (\$116.1 after-tax, or \$.55 per share) for this plan. This charge included \$120.0 for severance and pension-related costs. The Company will eliminate approximately 1,400 positions, or about seven percent of its global workforce. The reductions are targeted at reducing overhead and infrastructure costs, reducing and refocusing elements of the Company's technology and business development spending, and lowering its plant operating costs. The remainder of the charge, \$54.2, is for business exits and asset management actions. Assets held for sale were written down to net realizable value and an environmental liability of \$16.0 was recognized. This environmental liability results from a decision to sell a production facility. The planned actions are expected to be substantially completed by the end of the first quarter of fiscal year 2010. Refer to Note 3 to the Consolidated Financial Statements for additional information.

The charge for the global cost reduction plan has been excluded from segment operating profit. The charge was related to the businesses at the segment level as follows: \$91.2 in Merchant Gases, \$11.1 in Tonnage Gases, \$68.9 in Electronics and Performance Materials, and \$3.0 in Equipment and Energy.

Cost savings of \$50 are expected in 2009 and \$125 in 2010. Beyond 2010, the Company expects the restructuring plan to provide annualized savings of approximately \$130, of which the majority is related to personnel costs. The Company does not expect a material change to these original estimated cost savings.

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Pension Settlement

The Company recorded settlement losses of \$27.7 related to the cash settlement of pension plan liabilities in the first six months of 2008. See Note 11 to the Consolidated Financial Statements for additional information.

Other Income, Net

Items recorded to other income arise from transactions and events not directly related to the principal income earning activities of the Company.

Other income of \$8.0 decreased \$19.0. The decrease is primarily due to unfavorable foreign exchange. No other individual items were significant in comparison to the prior year.

Interest Expense

	Six Months Ended 31 March	
	2009	2008
Interest incurred	\$ 76.6	\$ 92.5
Less: interest capitalized	10.1	12.8
Interest expense	\$ 66.5	\$ 79.7

Interest incurred decreased \$15.9, primarily due to lower average interest rates on variable-rate debt. The change in capitalized interest is driven by a decrease in project spending which qualified for capitalization.

Effective Tax Rate

The effective tax rate equals the income tax provision divided by income from continuing operations before taxes less minority interest.

The effective tax rate was 20.9% and 26.1% in 2009 and 2008, respectively. The global cost reduction plan charge recorded in the first quarter reduced the effective tax rate by 4.1%. Also, the effective tax rate is lower in 2009 from higher relative tax credits based on lower income before taxes.

Discontinued Operations

The U.S. Healthcare business, Polymer Emulsions business, and the High Purity Process Chemicals (HPPC) business have been accounted for as discontinued operations. The results of operations of these businesses have been removed from the results of continuing operations for all periods presented. Refer to Note 4 to the Consolidated Financial Statements for additional information.

U.S. Healthcare

The U.S. Healthcare business generated sales of \$92.1 and income from operations, net of tax, of \$.1 in 2009. In 2008, sales were \$128.8 and loss from operations, net of tax, was \$11.9.

In the first quarter of 2009, based on additional facts, the Company recorded an impairment charge of \$48.7 (\$30.9 after-tax, or \$.15 per share) reflecting a revision in the estimated net realizable value of the U.S. Healthcare business. Also, a tax benefit of \$8.8, or \$.04 per share, was recorded to revise the estimated tax benefit related to previously recognized impairment charges. As a result of events occurring during the second quarter of 2009, which increased the Company's ability to realize tax benefits associated with the impairment charges recorded in 2008, the Company recognized a one-time tax benefit of \$16.7, or \$.08 per share.

Polymer Emulsions

On 31 January 2008, the Company completed the sale of its interest in its vinyl acetate ethylene polymers joint ventures to Wacker Chemie AG (Wacker), its long-time joint venture partner. As part of the agreement, the Company received Wacker's interest in the Elkton, Md. and Piedmont, S.C. production facilities and their related businesses plus cash proceeds of \$258.2. The Company recognized a gain on the sale of the Polymer Emulsions business of \$89.5 (\$57.7 after-tax). The Polymer Emulsions business generated sales of \$230.0 and income from operations, net of tax, of \$10.1 in 2008.

[Table of Contents](#)**Net Income**

Net income was \$274.2 compared to \$578.0. Diluted earnings per share was \$1.29 compared to \$2.62. A summary table of changes in earnings per share is presented on page 31.

Segment Analysis**Merchant Gases**

	Six Months Ended 31 March		
	2009	2008	% Change
Sales	\$1,795.6	\$2,010.4	(11)%
Operating income	326.7	389.0	(16)%
Equity affiliates' income	47.1	61.9	(24)%

Merchant Gases Sales

	% Change from Prior Year
Underlying business	
Volume	(7)%
Price	6%
Currency	(10)%
Total Merchant Gases Change	(11)%

Sales of \$1,795.6 decreased 11%, or \$214.8. Sales decreased 10% from unfavorable currency effects, driven primarily by the strengthening of the U.S. dollar against key European and Asian currencies. Volumes were lower across most product lines and regions, consistent with weak manufacturing worldwide. Price increases have been effective in all regions, substantially offsetting the decline in volume.

In North America, sales decreased 4% due to lower volumes of 10% as a result of the global manufacturing downturn. Pricing gains of 6% partially offset the decline. In Europe, sales decreased 16%. Currency unfavorably impacted sales by 15% and volumes were lower by 7% due to weak demand across most end markets and regions in Europe. Improved pricing of 6% partially offset the decline. In Asia, sales decreased 12%. Volumes declined by 9% from the overall manufacturing slowdown in Asia, particularly from sales to electronics and steel customers. Improved pricing of 5% partially offset the decline in volume. Currency unfavorably impacted sales by 8%.

Merchant Gases Operating Income

Operating income of \$326.7 decreased 16%, or \$62.3. The decline is due to reduced volumes of \$84 and unfavorable currency impacts of \$42. These declines were partially offset by improved pricing, net of variable costs, of \$52 and reduced fixed costs due to productivity improvements of \$12.

Merchant Gases Equity Affiliates' Income

Merchant Gases equity affiliates' income of \$47.1 decreased \$14.8, driven by lower volumes, unfavorable currency impacts, and a prior year fine reversal.

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Tonnage Gases

	Six Months Ended 31 March		
	2009	2008	% Change
Sales	\$1,368.6	\$1,658.3	(17)%
Operating income	206.8	222.2	(7)%

Tonnage Gases Sales

	% Change from Prior Year
Underlying business	
Volume	(5)%
Currency	(5)%
Natural gas/raw material cost pass-through	(7)%
Total Tonnage Gases Change	(17)%

Sales of \$1,368.6 decreased 17%, or \$289.7. Natural gas and raw material contractual cost pass-through to customers reduced sales by 7%. Unfavorable currency reduced sales by 5%, and volumes were down 5%. Volume declines were due to reduced demand from steel and chemical customers.

Tonnage Gases Operating Income

Operating income of \$206.8 decreased 7%, or \$15.4, primarily from the unfavorable impact of currency of \$15.

Electronics and Performance Materials

	Six Months Ended 31 March		
	2009	2008	% Change
Sales	\$738.8	\$1,076.4	(31)%
Operating income	13.5	133.6	(90)%

Electronics and Performance Materials Sales

	% Change from Prior Year
Underlying business	
Volume	(29)%
Price	—
Currency	(2)%
Total Electronics and Performance Materials Change	(31)%

Sales of \$738.8 decreased 31%, or \$337.6, primarily from lower volumes. In Electronics, underlying sales were down 35%, reflecting a significant global downturn in semiconductor and flat panel capacity utilization, and lower specialty materials pricing. In Performance Materials, underlying sales were down 19% due to weaker demand across all end markets, particularly in Asia, partially offset by improved pricing. Volumes were impacted by weakness in coatings, autos, and housing end markets. Unfavorable currency added to the decline.

Electronics and Performance Materials Operating Income

Operating income of \$13.5 decreased 90%, or \$120.1, as result of lower volumes across the segment of \$122 and lower pricing of \$19, partially offset by reduced costs of \$23.

[Table of Contents](#)**Equipment and Energy**

	Six Months Ended 31 March		% Change
	2009	2008	
Sales	\$ 247.7	\$ 205.0	21%
Operating income	23.3	19.3	21%

Equipment and Energy Sales and Operating Income

Sales of \$247.7 increased 21%, or \$42.7 due to higher large ASU activity. Operating income of \$23.3 increased \$4.0, due primarily to favorable cost performance, partially offset by lower liquefied natural gas (LNG) heat exchanger activity.

The sales backlog for the Equipment business at 31 March 2009 was \$281, compared to \$399 at 30 September 2008.

Other

Other operating income (loss) includes expense and income that cannot be directly associated with the business segments, including foreign exchange gains and losses and interest income. Also included are LIFO inventory adjustments, as the business segments use FIFO and the LIFO pool is kept at corporate.

The operating loss of \$21.6 increased \$14.2, primarily due to unfavorable foreign exchange. No other individual items were significant in comparison to the prior year.

2009 OUTLOOK

The global economy deteriorated significantly during the first half of 2009. The outlook for the second half of the year is for a slower recovery than previously anticipated. The Company remains committed to improving margin and returns. Given the challenging outlook and the expectation of a slower recovery, the Company is considering additional cost reductions. The discussion below outlines the areas of challenge, risk, and opportunity on which management is focused.

Global manufacturing contraction is expected to persist through to the end of the fiscal year. Overall, manufacturing is expected to decline globally by 9% to 10%, greater than the 4% to 5% levels previously anticipated. Regionally, the U.S. is expected to decline 10%, Europe 11%, and Asia, excluding Japan, 3%.

Specifically by business, the Company expects slightly higher sequential volumes in the Electronics and Performance Materials and Merchant Gases segments. The steel and chemicals portions of the Tonnage Gases segment are expected to remain weak. The Company expects additional benefits from its cost reduction actions in the second half of the year.

Specifically by market, the Company expects refinery hydrogen demand to remain stable. In Electronics, we expect the market recovery will be slower than previously anticipated. Chemical markets will continue to decline in 2009 until key end markets such as autos, housing, and consumer goods start to improve. Also, improvement is not expected in global steel operating rates until late in calendar year 2009.

With the cost reduction actions the Company is taking, some seasonal improvement in demand, and new project start-ups, earnings in the second half of the year should improve.

Capital Expenditures

Capital expenditures for new plant and equipment are expected to be approximately equal to fiscal year 2008 spending.

SHARE-BASED COMPENSATION

Refer to Note 9 to the Consolidated Financial Statements for information on the Company's share-based compensation programs. For additional information on the valuation and accounting for the various programs, refer to Note 15 to the Consolidated Financial Statements in the Company's 2008 annual report on Form 10-K.

PENSION BENEFITS

Refer to Note 11 to the Consolidated Financial Statements for details on pension cost and cash contributions. For additional information on the Company's pension benefits and associated accounting policies, refer to the Pension Benefits section of Management's Discussion and Analysis and Note 18 to the Consolidated Financial Statements in the Company's 2008 annual report on Form 10-K.

LIQUIDITY AND CAPITAL RESOURCES

Cash Flow

The narrative below refers to the Consolidated Statements of Cash Flows included on page 6.

Operating Activities

For the first six months, net cash provided by operating activities decreased \$177.4, or 28%. This decrease was due to lower earnings of \$303.8 and an increase in the use of cash for working capital of \$69.3. Adjustments to income, primarily non-cash asset impairment charges in 2009 for the global cost reduction plan and the discontinued U.S. Healthcare business, and gains on the sale of discontinued operations in 2008, increased cash from operating activities by \$195.7.

The net increase in cash used for working capital (negative cash flow variance) of \$69.3 primarily included:

- A \$319.6 positive cash flow variance due to lower trade receivables as a result of reduced sales.
- A \$157.4 negative cash flow variance due to a higher use of cash for payables and accrued liabilities. The negative variance was due principally to higher pension contributions and a decrease in accounts payables, customer advances, and other operating liabilities as a result of lower operating activity. The negative variances were partially offset by an increase in accrued liabilities resulting from the global cost reduction plan.
- A \$166.6 negative cash flow variance from other working capital accounts due principally to a reduction in accrued income taxes and a reduction in noncurrent liabilities in 2009.
- A \$64.9 negative cash flow variance from contracts in progress as spending continued to decline from lower equipment activity, however, the decline has slowed resulting in a year-on-year negative variance.

Investing Activities

Cash used for investing activities increased \$218.9, due principally to lower proceeds from the sale of discontinued businesses and increased spending on plant and equipment, partially offset by changes to restricted cash. The proceeds from the issuance of certain Industrial Revenue Bonds must be held in escrow until related project spending occurs and are classified as noncurrent assets in the balance sheet. During the first six months of 2009, the Company issued \$80.0 of Industrial Revenue Bonds versus \$145.0 in the prior year. The combined impact of lower bond proceeds and higher project spending resulted in a net increase to cash of \$173.0 compared to the prior year. The prior year included proceeds from the sale of the HPPC and Polymer Emulsions businesses for \$327.5.

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Capital expenditures are detailed in the table below.

	Six Months Ended 31 March	
	2009	2008
Additions to plant and equipment	\$ 615.8	\$ 522.2
Acquisitions, less cash acquired	1.6	.6
Investment in and advances to unconsolidated affiliates	.1	—
Total Capital Expenditures on a GAAP basis	\$ 617.5	\$ 522.8
Capital lease expenditures under EITF No. 01-08 (a)	68.2	116.5
Capital Expenditures on a Non-GAAP basis	\$ 685.7	\$ 639.3

- (a) The Company utilizes a non-GAAP measure in the computation of capital expenditures and includes spending associated with facilities accounted for as capital leases. Certain facilities that are built to service a specific customer are accounted for as capital leases in accordance with EITF No. 01-08, "Determining Whether an Arrangement Contains a Lease," and such spending is reflected as a use of cash within cash provided by operating activities. The presentation of this non-GAAP measure is intended to enhance the usefulness of information by providing a measure which the Company's management uses internally to evaluate and manage the Company's capital expenditures.

Financing Activities

Cash provided by financing activities increased \$282.2. During the first six months of 2009, the Company did not purchase any of its outstanding shares, as compared to the prior year which included share repurchases of \$560.2. This was partially offset primarily by lower net debt proceeds (short and long-term debt issuance net of repayments) of \$198.8 and lower proceeds from stock option exercises of \$35.0. Long-term debt proceeds of \$114.3 in fiscal 2009 included \$80.0 from Industrial Revenue Bonds issued in the first quarter.

Total debt at 31 March 2009 and 30 September 2008, expressed as a percentage of the sum of total debt, shareholders' equity, and minority interest, was 46.3% and 43.4%, respectively. Total debt increased from \$3,966.8 at 30 September 2008 to \$4,102.4 at 31 March 2009.

The Company's total multicurrency revolving facility, maturing in May 2011, amounted to \$1,450.0 at 31 March 2009. No borrowings were outstanding under these commitments. Additional commitments totaling \$353.0 are maintained by the Company's foreign subsidiaries, of which \$284.1 was utilized at 31 March 2009.

The estimated fair value of the Company's long-term debt, including current portion, as of 31 March 2009 was \$3,687.5 compared to a book value of \$3,510.4.

On 20 September 2007, the Board of Directors authorized the repurchase of up to \$1,000 of the Company's outstanding common stock. During the six months ended 31 March 2009, the Company did not purchase any shares under this authorization. At 31 March 2009, \$649.2 in share repurchase authorization remains.

CONTRACTUAL OBLIGATIONS

The Company is obligated to make future payments under various contracts such as debt agreements, lease agreements, unconditional purchase obligations, and other long-term obligations.

There have been no material changes to contractual obligations as reflected in the Management's Discussion and Analysis in the Company's 2008 annual report on Form 10-K.

COMMITMENTS AND CONTINGENCIES

Refer to Note 19 to the Consolidated Financial Statements in the Company's 2008 annual report on Form 10-K and Note 12 in this quarterly filing.

OFF-BALANCE SHEET ARRANGEMENTS

There have been no material changes to off-balance sheet arrangements as reflected in the Management's Discussion and Analysis in the Company's 2008 annual report on Form 10-K. The Company's off-balance sheet arrangements are not reasonably likely to have a material impact on financial condition, changes in financial condition, results of operations, or liquidity.

RELATED PARTY TRANSACTIONS

The Company's principal related parties are equity affiliates operating primarily in the industrial gas business. 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 at arm's length with clearly independent parties.

MARKET RISKS AND SENSITIVITY ANALYSIS

Information on the Company's utilization of financial instruments and an analysis of the sensitivity of these instruments to selected changes in market rates and prices is included in the Company's 2008 annual report on Form 10-K.

There were no material changes to market risk sensitivities for interest rate risk on fixed debt, foreign currency exchange rate risk, or commodity price risk since 30 September 2008.

The net financial instrument position increased from a liability of \$3,629 at 30 September 2008 to a liability of \$3,675 at 31 March 2009.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Management's Discussion and Analysis of the Company's financial condition and results of operations is based on the consolidated financial statements and accompanying notes that have been prepared in accordance with U.S. generally accepted accounting principles. 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 Note 1 to the Consolidated Financial Statements and the critical accounting policies and estimates are described in the Management's Discussion and Analysis included in the 2008 annual report on Form 10-K. Information concerning the Company's implementation and impact of new accounting standards issued by the Financial Accounting Standards Board (FASB) is included in Note 2 to the Consolidated Financial Statements. There have been no changes in accounting policy in the current period that had a material impact on the Company's financial condition, change in financial condition, liquidity or results of operations.

NEW ACCOUNTING STANDARDS

See Note 2 to the Consolidated Financial Statements for information concerning the Company's implementation and impact of new accounting standards.

FORWARD-LOOKING STATEMENTS

This document contains "forward-looking statements" within the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are based on management's reasonable

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expectations and assumptions as of the date of this document regarding important risk factors. Actual performance and financial results may differ materially from projections and estimates expressed in the forward-looking statements because of many factors not anticipated by management, including, without limitation, continuing deterioration in economic and business conditions; weakening demand for the Company's products; future financial and operating performance of major customers and industries served by the Company; inability to collect receivables from or recovery of payments made by customers in bankruptcy proceedings; unanticipated contract terminations or customer cancellations or postponement of projects and sales; asset impairments due to economic conditions or specific product or customer events; costs associated with future restructuring actions which are not currently planned or anticipated; the impact of competitive products and pricing; interruption in ordinary sources of supply of raw materials; the ability to recover unanticipated increased energy and raw material costs from customers; costs and outcomes of litigation or regulatory activities; consequences of acts of war or terrorism impacting the United States' and other markets; the effects of a pandemic or epidemic or a natural disaster; charges related to current portfolio management and cost reduction actions; the success of implementing cost reduction programs and achieving anticipated acquisition synergies; the timing, impact, and other uncertainties of future acquisitions or divestitures; the ability to attract, hire, and retain qualified personnel in all regions of the world where the Company operates; significant fluctuations in interest rates and foreign currencies from that currently anticipated; the continued availability of capital funding sources in all of the Company's foreign operations; the impact of new or changed environmental, healthcare, tax or other legislation and regulations in jurisdictions in which the Company and its affiliates operate; the impact of new or changed financial accounting standards; the timing and rate at which tax credits can be utilized; and other risk factors described in Part II below and in the Company's Form 10-K for its year ended 30 September 2008. The Company disclaims any obligation or undertaking to disseminate any updates or revisions to any forward-looking statements contained in this document to reflect any change in the Company's assumptions, beliefs or expectations or any change in events, conditions, or circumstances upon which any such forward-looking statements are based.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Refer to the Market Risks and Sensitivity Analysis on page 39 of Item 2 in Management's Discussion and Analysis of Financial Condition and Results of Operations.

Item 4. Controls and Procedures

We maintain a comprehensive set of disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) designed to ensure that information required to be disclosed in our filings under the Exchange Act is recorded, processed, summarized and reported accurately and within the time periods specified in the SEC's rules and forms. As of 31 March 2009 (the Evaluation Date), an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures was carried out under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer. Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that, as of the Evaluation Date, the design and operation of these disclosure controls and procedures were effective to provide reasonable assurance of the achievement of the objectives described above.

During the quarter that ended on the Evaluation Date, there was no change in internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 4. Submission of Matters to a Vote of Security Holders

- a. The Annual Meeting of Shareholders of the Registrant was held on 22 January 2009.
- b. The following directors were elected at the meeting: Mario L. Baeza, Edward E. Hagenlocker, John E. McGlade and Charles H. Noski. Directors whose term of office continued after the meeting include: William L. Davis III, W. Douglas Ford, Evert Henkes, Margaret G. McGlynn, Michael J. Donahue, Ursula O. Fairbairn and Lawrence S. Smith.
- c. The following matters were voted on at the Annual Meeting:
 1. Election of Directors

NAME OF DIRECTOR	NUMBER OF VOTES CAST	
	FOR	AGAINST OR WITHHELD
Mario L. Baeza	177,689,074	3,519,568
Edward E. Hagenlocker	176,702,725	4,505,917
John E. McGlade	177,006,232	4,202,410
Charles H. Noski	177,688,483	3,520,159

2. Ratification of the appointment of KPMG LLP of Philadelphia, Pennsylvania, as independent auditor for the registrant for the fiscal year ending 30 September 2009

NUMBER OF VOTES CAST		
	AGAINST OR WITHHELD	ABSTENTIONS
FOR		
178,722,643	2,158,823	327,176

Item 6. Exhibits.

Exhibits required by Item 601 of Regulation S-K

- 10.1 Share Purchase Agreement by and among Air Products and Chemicals, Inc., Tomah Holdings, Inc., and the Stockholders of Tomah Holdings, Inc., dated 21 March 2006.1
- 10.2 Supplementary Pension Plan of Air Products and Chemicals, Inc. as Amended and Restated Effective January 1, 2008.
- 10.3 Amendment No. 1 to the Supplementary Pension Plan of Air Products and Chemicals, Inc., as Amended and Restated Effective January 1, 2008.
- 10.4 Amendment No. 2 to the Supplementary Pension Plan of Air Products and Chemicals, Inc., as Amended and Restated Effective January 1, 2008.
- 10.5 Amendment No. 3 to the Supplementary Pension Plan of Air Products and Chemicals, Inc., as Amended and Restated Effective January 1, 2008.
- 10.6 Amendment No. 1 to the Air Products and Chemicals, Inc. Retirement Savings Plan, as Amended and Restated Effective 1 October 2006.
- 10.7 Annual Incentive Plan as Amended and Restated Effective 1 October 2008.

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- 12. Computation of Ratios of Earnings to Fixed Charges.
 - 31.1. Certification by the Principal Executive Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
 - 31.2. Certification by the Principal Financial Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
 - 32. Certification by the Principal Executive Officer and Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
-
- 1/ Exhibit 10.1 was previously filed as Exhibit 10.2 to the Company's Form 10-Q Report for the quarter ended 31 March 2006 with certain information redacted. At the time of the original filing, a request for confidential treatment of the redacted information was filed with the Securities and Exchange Commission. The Company has withdrawn its request for confidential treatment and is refiling the exhibit without redaction.

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: 24 April 2009

By: /s/ Paul E. Huck
Paul E. Huck
Senior Vice President and
Chief Financial Officer

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