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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 2013

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 31 March 2013
Common Stock, \$1 par value	208,330,698

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PART I. FINANCIAL INFORMATION
Item 1. Financial 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)	2013	2012	2013	2012
Sales	\$2,484.2	\$2,344.3	\$5,046.6	\$4,665.8
Cost of sales	1,813.6	1,715.8	3,713.7	3,438.1
Selling and administrative	266.6	237.3	534.8	468.4
Research and development	32.3	29.8	65.6	57.8
Business restructuring and cost reduction plans	—	86.8	—	86.8
Other income, net	18.0	13.3	29.6	27.0
Operating Income	389.7	287.9	762.1	641.7
Equity affiliates' income	39.8	35.5	81.2	72.6
Interest expense	35.2	29.4	71.0	58.8
Income from Continuing Operations before Taxes	394.3	294.0	772.3	655.5
Income tax provision	95.8	8.8	188.0	136.2
Income from Continuing Operations	298.5	285.2	584.3	519.3
Income from Discontinued Operations, net of tax	1.1	17.0	2.5	39.2
Net Income	299.6	302.2	586.8	558.5
Less: Net Income Attributable to Noncontrolling Interests	9.2	6.2	18.1	14.4
Net Income Attributable to Air Products	\$ 290.4	\$ 296.0	\$ 568.7	\$ 544.1
Net Income Attributable to Air Products				
Income from continuing operations	\$ 289.3	\$ 279.0	\$ 566.2	\$ 504.9
Income from discontinued operations	1.1	17.0	2.5	39.2
Net Income Attributable to Air Products	\$ 290.4	\$ 296.0	\$ 568.7	\$ 544.1
Basic Earnings Per Common Share Attributable to Air Products				
Income from continuing operations	\$ 1.38	\$ 1.32	\$ 2.71	\$ 2.39
Income from discontinued operations	.01	.08	.01	.19
Net Income Attributable to Air Products	\$ 1.39	\$ 1.40	\$ 2.72	\$ 2.58
Diluted Earnings Per Common Share Attributable to Air Products				
Income from continuing operations	\$ 1.37	\$ 1.30	\$ 2.67	\$ 2.36
Income from discontinued operations	.01	.08	.01	.18
Net Income Attributable to Air Products	\$ 1.38	\$ 1.38	\$ 2.68	\$ 2.54
Weighted Average Common Shares – Basic (in millions)	208.4	211.1	209.2	210.7
Weighted Average Common Shares – Diluted (in millions)	211.0	215.0	211.8	214.5
Dividends Declared Per Common Share – Cash	\$.71	\$.64	\$ 1.35	\$ 1.22

The accompanying notes are an integral part of these statements.

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

	Three Months Ended 31 March	
(Millions of dollars)	2013	2012
Net Income	\$ 299.6	\$ 302.2
Other Comprehensive Income, net of tax:		
Translation adjustments, net of tax of \$13.3 and (\$18.0)	(162.8)	133.9
Net gain (loss) on derivatives, net of tax of (\$0.4) and \$1.1	(2.5)	(1.1)
Reclassification adjustments:		
Derivatives, net of tax of \$2.3 and \$0.3	6.6	2.1
Pension and postretirement benefits, net of tax of \$12.9 and \$8.9	24.2	16.0
Total Other Comprehensive Income (Loss)	(134.5)	150.9
Comprehensive Income	165.1	453.1
Net Income Attributable to Noncontrolling Interests	9.2	6.2
Other Comprehensive Income (Loss) Attributable to Noncontrolling Interests	(2.8)	3.4
Comprehensive Income Attributable to Air Products	\$ 158.7	\$ 443.5

	Six Months Ended 31 March	
(Millions of dollars)	2013	2012
Net Income	\$ 586.8	\$ 558.5
Other Comprehensive Income, net of tax:		
Translation adjustments, net of tax of (\$0.3) and (\$4.0)	(84.4)	95.7
Net gain (loss) on derivatives, net of tax of \$5.4 and (\$2.3)	13.5	(10.4)
Reclassification adjustments:		
Derivatives, net of tax of (\$2.2) and \$4.4	(7.7)	12.0
Pension and postretirement benefits, net of tax of \$25.8 and \$17.8	48.6	32.1
Total Other Comprehensive Income (Loss)	(30.0)	129.4
Comprehensive Income	556.8	687.9
Net Income Attributable to Noncontrolling Interests	18.1	14.4
Other Comprehensive Income (Loss) Attributable to Noncontrolling Interests	(1.7)	4.1
Comprehensive Income Attributable to Air Products	\$ 540.4	\$ 669.4

The accompanying notes are an integral part of these statements.

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

(Millions of dollars, except for share data)	31 March 2013	30 September 2012
Assets		
Current Assets		
Cash and cash items	\$ 401.6	\$ 454.4
Trade receivables, net	1,519.4	1,544.7
Inventories	728.1	786.6
Contracts in progress, less progress billings	229.3	190.8
Prepaid expenses	100.1	81.7
Other receivables and current assets	387.6	342.0
Current assets of discontinued operations	13.1	15.6
Total Current Assets	3,379.2	3,415.8
Investment in net assets of and advances to equity affiliates	1,198.2	1,175.7
Plant and equipment, at cost	18,549.6	18,046.2
Less: accumulated depreciation	10,060.8	9,805.6
Plant and equipment, net	8,488.8	8,240.6
Goodwill	1,595.7	1,598.4
Intangible assets, net	734.3	761.6
Noncurrent capital lease receivables	1,429.4	1,328.9
Other noncurrent assets	373.3	393.6
Noncurrent assets of discontinued operations	22.3	27.2
Total Noncurrent Assets	13,842.0	13,526.0
Total Assets	\$17,221.2	\$16,941.8
Liabilities and Equity		
Current Liabilities		
Payables and accrued liabilities	\$ 1,823.0	\$ 1,927.7
Accrued income taxes	56.9	48.5
Short-term borrowings	1,239.8	633.4
Current portion of long-term debt	96.7	74.3
Current liabilities of discontinued operations	5.2	6.0
Total Current Liabilities	3,221.6	2,689.9
Long-term debt	4,644.7	4,584.2
Other noncurrent liabilities	1,723.5	1,980.9
Deferred income taxes	715.3	670.8
Noncurrent liabilities of discontinued operations	—	.2
Total Noncurrent Liabilities	7,083.5	7,236.1
Total Liabilities	10,305.1	9,926.0
Commitments and Contingencies – See Note 11		
Redeemable Noncontrolling Interest	398.7	392.5
Air Products Shareholders' Equity		
Common stock (par value \$1 per share; issued 2013 and 2012 – 249,455,584 shares)	249.4	249.4
Capital in excess of par value	799.0	810.5
Retained earnings	9,521.4	9,234.5
Accumulated other comprehensive loss	(1,377.1)	(1,348.8)
Treasury stock, at cost (2013 – 41,124,886 shares; 2012 – 36,979,704 shares)	(2,827.2)	(2,468.4)
Total Air Products Shareholders' Equity	6,365.5	6,477.2
Noncontrolling Interests	151.9	146.1
Total Equity	6,517.4	6,623.3
Total Liabilities and Equity	\$17,221.2	\$16,941.8

The accompanying notes are an integral part of these statements.

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

	Six Months Ended 31 March	
(Millions of dollars)	2013	2012
Operating Activities		
Net Income	\$ 586.8	\$ 558.5
Less: Net income attributable to noncontrolling interests	18.1	14.4
Net income attributable to Air Products	568.7	544.1
Income from discontinued operations	(2.5)	(39.2)
Income from continuing operations attributable to Air Products	566.2	504.9
Adjustments to reconcile income to cash provided by operating activities:		
Depreciation and amortization	444.7	408.3
Deferred income taxes	32.8	53.1
Benefit from Spanish tax ruling	—	(58.3)
Undistributed earnings of unconsolidated affiliates	(26.3)	(25.0)
Share-based compensation	22.4	27.4
Noncurrent capital lease receivables	(123.2)	(109.9)
Other adjustments	92.9	66.4
Working capital changes that provided (used) cash, excluding effects of acquisitions and divestitures:		
Trade receivables	17.8	(13.9)
Inventories	53.1	(19.9)
Contracts in progress, less progress billings	(41.4)	(1.9)
Other receivables	(55.7)	14.2
Payables and accrued liabilities	(150.3)	5.9
Other working capital	4.1	(96.7)
Pension plan contributions	(238.9)	(23.4)
Cash Provided by Operating Activities	598.2	731.2
Investing Activities		
Additions to plant and equipment	(707.3)	(734.9)
Acquisitions, less cash acquired	—	(26.4)
Investment in and advances to unconsolidated affiliates	.2	(21.2)
Proceeds from sale of assets and investments	6.4	12.5
Change in restricted cash	—	6.4
Other investing activities	(1.5)	—
Cash Used for Investing Activities	(702.2)	(763.6)
Financing Activities		
Long-term debt proceeds	504.0	400.1
Payments on long-term debt	(392.0)	(8.6)
Net increase (decrease) in commercial paper and short-term borrowings	604.4	(190.2)
Dividends paid to shareholders	(268.9)	(244.1)
Purchase of treasury shares	(461.6)	(53.1)
Proceeds from stock option exercises	62.7	75.9
Excess tax benefit from share-based compensation	14.3	18.5
Payment for subsidiary shares from noncontrolling interests	(.3)	(58.4)
Other financing activities	(19.9)	(13.2)
Cash Provided by (Used for) Financing Activities	42.7	(73.1)
Discontinued Operations		
Cash provided by operating activities	9.8	20.0
Cash used for investing activities	(.9)	(7.7)
Cash provided by financing activities	—	—
Cash Provided by Discontinued Operations	8.9	12.3
Effect of Exchange Rate Changes on Cash	(.4)	3.7
Decrease in Cash and Cash Items	(52.8)	(89.5)
Cash and Cash Items – Beginning of Year	454.4	422.5
Cash and Cash Items – End of Period	401.6	333.0
Less: Cash and Cash Items – Discontinued Operations	—	13.5
Cash and Cash Items – Continuing Operations	\$ 401.6	\$ 319.5

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 unless otherwise indicated, except for share data)

1. BASIS OF PRESENTATION AND MAJOR ACCOUNTING POLICIES

Refer to our 2012 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 fiscal year 2013.

The consolidated financial statements of Air Products and Chemicals, Inc. and its subsidiaries (“we”, “our”, “us”, the “Company”, “Air Products”, or “registrant”) included herein have been prepared by us, without audit, pursuant to the rules and regulations of the Securities and Exchange Commission (SEC). 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 our opinion, 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. The interim results for the periods indicated herein, however, do not reflect certain adjustments, such as the valuation of inventories on the LIFO cost basis, which are only 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 our latest 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 GUIDANCE

Accounting Guidance Implemented in 2013

Goodwill Impairment

In September 2011, the Financial Accounting Standards Board (FASB) issued authoritative guidance that amends previous guidance related to the manner in which entities test goodwill for impairment. The new guidance provides an entity the option to first perform a qualitative assessment to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If it is determined to be more likely than not that the fair value of a reporting unit is less than its carrying amount, entities must perform the quantitative analysis of the goodwill impairment test. Otherwise, the quantitative test is optional. This guidance is effective for annual and interim goodwill impairment tests performed this fiscal year. The implementation of this guidance does not impact our consolidated financial statements.

Indefinite-lived Intangible Asset Impairment

In July 2012, the FASB amended the guidance on indefinite-lived intangible asset impairment testing to allow companies the option to first perform a qualitative assessment to determine whether it is more likely than not that the fair value of an indefinite-lived asset is less than its carrying amount. If it is determined to be more likely than not that the fair value of an indefinite-lived asset is less than its carrying amount, entities must perform the quantitative analysis of the asset impairment test. Otherwise, the quantitative test is optional. The guidance is effective for annual and interim impairment tests performed this fiscal year. The implementation of this guidance does not impact our consolidated financial statements.

New Accounting Guidance to be Implemented

Amounts Reclassified out of Accumulated Other Comprehensive Income

In February 2013, the FASB issued disclosure guidance to improve the transparency of items reclassified out of accumulated other comprehensive income to net income. The guidance requires an entity to present, in a single location; information about the amounts reclassified out of accumulated other comprehensive income, by component, including the income statement line items affected by the reclassification. This guidance will be effective for us beginning in the first quarter of our fiscal year 2014, with early adoption permitted. This guidance requires additional disclosure and should not have a material impact on our consolidated financial statements upon adoption.

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Cumulative Translation Adjustment

In March 2013, the FASB issued an update to clarify existing guidance for the release of cumulative translation adjustments into net income when a parent sells a part or all of its investments in a foreign entity or achieves a business combination of a foreign entity in stages. This guidance will be effective for us beginning in the first quarter of our fiscal year 2015, with early adoption permitted. We are evaluating the impact of this guidance but do not expect it to have a material impact on our consolidated financial statements.

3. DISCONTINUED OPERATIONS

In January 2012, the Board of Directors authorized the sale of our Homecare business, which had previously been reported as part of the Merchant Gases operating segment. On 8 January 2012, we reached an agreement for The Linde Group (Linde) to purchase our Homecare business in Belgium, Germany, France, Portugal and Spain. This business represented approximately 80% of our total Homecare business revenues.

The transaction with Linde closed on 30 April 2012. Total sale proceeds of €590 million (\$777) were received in cash at closing. This amount included contingent proceeds of €110 million (\$144) related to the outcome of certain retender arrangements. The contingent proceeds are deferred in other noncurrent liabilities until the contingencies are resolved. As of 31 March 2013, there has been no change to our assessment of this liability. As part of the sale, we subsequently received €32 million (\$42) of additional cash proceeds based upon collection of certain accounts receivable balances. A gain of \$207.4 (\$150.3 after-tax, or \$.70 per share) was recognized on the sale of this business in the third quarter of fiscal year 2012.

We are actively marketing the remaining portion of the Homecare business, which is primarily in the United Kingdom and Ireland. We expect to close on the sale of this business by the end of fiscal year 2013.

The Homecare business is being accounted for as a discontinued operation. The results of operations and cash flows of this business have been reclassified from the results of continuing operations for all periods presented. The assets and liabilities of discontinued operations have been reclassified and are segregated in the consolidated balance sheets.

The results of discontinued operations are summarized below:

	Three Months Ended 31 March		Six Months Ended 31 March	
	2013	2012	2013	2012
Sales	\$13.5	\$95.5	\$27.3	\$197.0
Income before taxes	\$ 1.4	\$25.2	\$ 2.8	\$ 56.1
Income tax provision	.3	8.2	.3	16.9
Income from Discontinued Operations, net of tax	\$ 1.1	\$17.0	\$ 2.5	\$ 39.2

Assets and liabilities of discontinued operations consist of the following:

	31 March 2013	30 September 2012
Trade receivables, net	\$12.7	\$15.0
Inventories	.4	.5
Other current assets	—	.1
Total Current Assets	\$13.1	\$15.6
Plant and equipment, net	\$22.3	\$27.2
Total Noncurrent Assets	\$22.3	\$27.2
Payables and accrued liabilities	\$ 5.2	\$ 6.0
Total Current Liabilities	\$ 5.2	\$ 6.0
Other noncurrent liabilities	\$—	\$.2
Total Noncurrent Liabilities	\$—	\$.2

4. BUSINESS RESTRUCTURING AND COST REDUCTION PLANS

In 2012, we recorded an expense of \$327.4 (\$222.4 after-tax, or \$1.03 per share) for business restructuring and cost reduction plans in our Polyurethane Intermediates, Electronics, and European Merchant businesses.

During the second quarter of 2012, we recorded an expense of \$86.8 (\$60.6 after-tax, or \$.28 per share) for actions to remove stranded costs resulting from our decision to exit the Homecare business, the reorganization of the Merchant business, and actions to right-size our European cost structure in light of the challenging economic outlook. This charge is reflected on the consolidated income statements as “Business restructuring and cost reduction plans.” This charge included \$80.8 for severance and other costs associated with the elimination of approximately 600 positions and \$6.0 for the write-down of certain assets. The charge related to the businesses at the segment level as follows: \$77.3 in Merchant Gases, \$3.8 in Tonnage Gases, and \$5.7 in Electronics and Performance Materials. As of 31 March 2013, the planned actions were substantially completed. The majority of the remaining accrued severance and other benefits will be paid out during the third quarter of fiscal year 2013.

During the fourth quarter of 2012, we completed actions in the Polyurethane Intermediates (PUI) business to improve costs, resulting in a net expense of \$54.6 (\$34.8 after-tax, or \$.16 per share). We sold certain assets and the rights to a supply contract for \$32.7 in cash at closing. A supply arrangement with terms at fair market value was established with the buyer to serve the retained product supply contracts so that our PUI production facility in Pasadena, Texas could permanently close. In connection with these actions, we recognized an expense of \$26.6, for the net book value of assets sold and those committed to be disposed of other than by sale. The remaining charge was primarily related to contract terminations and an environmental liability. The PUI facility is currently being dismantled, with completion expected in fiscal year 2014. The costs to dismantle are expensed as incurred and reflected in continuing operations in the Tonnage Gases business segment. Since we have a material ongoing involvement with the business through retained PUI product supply contracts, the results of this business continue to be reflected in continuing operations in the Tonnage Gases segment.

During the fourth quarter of 2012, we completed an assessment of our position in the photovoltaic (PV) market, resulting in \$186.0 of expense (\$127.0 after-tax, or \$.59 per share) primarily related to the Electronics and Performance Materials segment. Air Products supplies the PV market with both bulk and onsite supply of gases, including silane. The PV market has not developed as expected, and as a result, the market capacity to produce silane is expected to exceed demand for the foreseeable future. As a result, we recorded a charge of \$93.5 for an offer that we made to terminate a long term take-or-pay silane contract. Although any settlement could differ from this amount, we do not expect it to be material to our financial position. It is uncertain when a settlement will be reached. The remaining charge was recorded in connection with the expected loss on purchase commitments, the disposal of certain assets serving PV and Electronics customers, the write-down of inventory to its net realizable value, and the write-down of accounts receivable.

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The following table summarizes the carrying amount of the accrual for the plans at 31 March 2013:

	Severance and Other Benefits	Asset Actions	Contract Actions	Other Costs	Total
Second quarter charge – Cost reduction plan	\$ 80.8	\$ 6.0	\$ —	\$ —	\$ 86.8
Fourth quarter charge – PUI business actions ^(A)	2.7	26.6	6.5	18.8	54.6
Fourth quarter charge – PV market actions ^(B)	—	34.7	93.5	57.8	186.0
2012 Charge	\$ 83.5	\$ 67.3	\$100.0	\$ 76.6	\$327.4
Amount reflected in environmental liability ^(C)	—	—	—	(9.0)	(9.0)
Amount reflected in pension liability	(7.5)	—	—	—	(7.5)
Noncash expenses	(.4)	(67.3)	—	(19.3)	(87.0)
Cash expenditures	(32.8)	—	—	(.1)	(32.9)
Currency translation adjustment	(1.6)	—	—	—	(1.6)
30 September 2012	\$ 41.2	\$ —	\$100.0	\$ 48.2	\$189.4
Cash expenditures	(27.3)	—	(2.7)	(10.5)	(40.5)
Currency translation adjustment	.2	—	—	—	.2
Accrued Balance	\$ 14.1	\$ —	\$ 97.3	\$ 37.7	\$149.1

(A) Charge is net of \$32.7 in proceeds received in cash at closing for certain PUI assets and the rights to a supply contract.

(B) Other includes the write-down of inventory to its net realizable value, the write-down of accounts receivable, and expected losses on purchase commitments.

(C) Reflected in accrual for environmental obligations. See Note 11, Commitments and Contingencies.

5. BUSINESS COMBINATIONS

INDURA S.A.

On 1 July 2012, we acquired a 51.8% controlling equity interest in the outstanding shares of Indura S.A. from the majority shareholder. On 3 July 2012, we acquired an additional 13.0% equity interest from other shareholders. We paid cash consideration in Chilean pesos (CLP) of 345.5 billion (\$690) and assumed debt of CLP113.8 billion (\$227) for these interests. Under the purchase agreement, the largest minority shareholder has a right to exercise a put option to require Air Products to purchase up to a 30.5% equity interest during the two-year period beginning on 1 July 2015, at a redemption value equal to fair market value (subject to a minimum price based upon the acquisition date value escalated by an inflation factor). Under the agreement, we also had an obligation to purchase 2.0% of the remaining shares of Indura S.A. within twelve months of the acquisition date. Subsequently, the agreement was modified so that the shares must be purchased no later than 3 November 2013. As of 31 March 2013, we recorded a liability of \$11 related to this obligation.

Prior to the acquisition, Indura S.A. was the largest independent industrial gas company in South America. Indura S.A.'s integrated gas and retail business comprises packaged gases and hardgoods, liquid bulk, healthcare, and on-sites. We expect the transaction to enhance our growth opportunities in South America.

The acquisition of Indura S.A. was accounted for as a business combination. Following the acquisition date, 100% of the Indura S.A. results were consolidated in our Merchant Gases business segment. The portion of the business that is not owned by the Company is recorded as noncontrolling interests.

The following table summarizes the fair value of identifiable assets acquired and liabilities assumed in the acquisition of Indura S.A. and the resulting goodwill as of the acquisition date. The purchase price and related allocation is not considered final, as valuation of the identifiable assets acquired and liabilities assumed has not been finalized. We will finalize the amounts recognized when we obtain the necessary information to complete the analysis, but no later than one year from the acquisition date.

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Allocation of Purchase Price	
Trade receivables, net	\$ 131.2
Inventories	103.5
Other current assets and (liabilities) ^(A)	(67.5)
Plant and equipment	399.3
Intangible assets	382.1
Current portion of long-term debt and short-term borrowings	(70.8)
Long-term debt	(279.8)
Deferred income taxes	(132.5)
Other noncurrent assets and (liabilities)	(9.6)
Fair Value of Identifiable Net Assets Acquired	\$ 455.9
Goodwill	622.6
Noncontrolling interests (including redeemable noncontrolling interest)	(388.9)
Total	\$ 689.6

(A) Includes cash and cash items, prepaid expenses, other current assets, payables and accrued liabilities, and other current liabilities.

The noncontrolling interests of Indura S.A., including redeemable noncontrolling interest, were recorded on the acquisition date at fair value. Refer to Note 14, Noncontrolling Interests, for additional information.

For additional information on this acquisition, refer to Note 5, Business Combinations, in our 2012 Form 10-K.

6. INVENTORIES

The components of inventories are as follows:

	31 March 2013	30 September 2012
Finished goods	\$548.7	\$617.9
Work in process	36.2	36.7
Raw materials, supplies and other	238.0	220.0
	822.9	874.6
Less: Excess of FIFO cost over LIFO cost	(94.8)	(88.0)
	\$728.1	\$786.6

FIFO cost approximates replacement cost. Our 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.

7. GOODWILL

Changes to the carrying amount of consolidated goodwill by segment for the six months ended 31 March 2013 are as follows:

	30 September 2012	Acquisitions and Adjustments	Currency Translation	31 March 2013
Merchant Gases	\$1,138.6	\$1.8	\$.2	\$1,140.6
Tonnage Gases	14.7	—	(.1)	14.6
Electronics and Performance Materials	445.1	2.0	(6.6)	440.5
	\$1,598.4	\$3.8	\$(6.5)	\$1,595.7

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.

8. FINANCIAL INSTRUMENTS

Currency Price Risk Management

Our 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 our policy to minimize our cash flow volatility from changes in currency exchange rates. This is accomplished by identifying and evaluating the risk that our cash flows will change in value due to changes in exchange rates and by executing the appropriate strategies necessary to manage such exposures. Our objective is to maintain economically balanced currency risk management strategies that provide adequate downside protection.

Forward Exchange Contracts

We enter 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. The maximum remaining term of any forward exchange contract currently outstanding and designated as a cash flow hedge at 31 March 2013 is 3.0 years. 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 we have a net equity position. The primary currency pair in this portfolio of forward exchange contracts is the Euro/U.S. dollar.

In addition to the forward exchange contracts that are designated as hedges, we utilize forward exchange contracts that are not designated as hedges. These contracts are used to economically hedge foreign currency-denominated monetary assets and liabilities, primarily working capital. The primary objective of these forward exchange 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. This portfolio of forward exchange contracts comprises many different foreign currency pairs, with a profile that changes from time to time depending on business activity and sourcing decisions.

The table below summarizes our outstanding currency price risk management instruments:

	31 March 2013		30 September 2012	
	US\$ Notional	Years Average Maturity	US\$ Notional	Years Average Maturity
Forward exchange contracts:				
Cash flow hedges	\$1,379.5	.5	\$1,348.8	.6
Net investment hedges	813.3	1.9	779.2	2.5
Not designated	363.3	.1	477.7	.1
Total Forward Exchange Contracts	\$2,556.1	.9	\$2,605.7	1.0

In addition to the above, we use foreign currency-denominated debt to hedge the foreign currency exposures of our net investment in certain foreign subsidiaries. The designated foreign currency denominated debt at 31 March 2013 included €791.4 million (\$1,014.5) and 30 September 2012 included €888.2 million (\$1,142.2).

Debt Portfolio Management

It is our policy 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 are managed with the objectives and intent to (1) reduce funding risk with respect to borrowings made by us to preserve our 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 Management Contracts

We enter into interest rate swaps to change the fixed/variable interest rate mix of our 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 manage interest rate risks and costs inherent in our debt portfolio. Our interest rate management portfolio generally consists of fixed to floating interest rate swaps (which are designated as fair value hedges), pre-issuance interest rate swaps and treasury locks (which hedge the interest rate risk associated with anticipated fixed-rate debt issuances and are designated as cash flow hedges), and floating to fixed interest rate swaps (which are designated as cash flow hedges). At 31 March 2013, outstanding interest rate swaps were denominated in U.S. dollars and Chilean Pesos. The maximum remaining term of any interest rate swap designated as a cash flow hedge is 1.9 years. The notional amount of the interest rate swap agreements are equal to or less than the designated debt being hedged. When interest rate swaps are used to hedge variable-rate debt, the indices of the swaps and the debt to which they are designated are the same. It is our policy not to enter into any interest rate management contracts which lever a move in interest rates on a greater than one-to-one basis.

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Cross Currency Interest Rate Swap Contracts

We enter into cross currency interest rate swap contracts when our risk management function deems necessary. 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 we have a net equity position while changing the interest rate characteristics of the instrument. The contracts are used to hedge either certain net investments in foreign operations or non-functional currency cash flows related to intercompany loans. The current cross currency interest rate swap portfolio consists of fixed-to-fixed swaps between U.S. dollars and British Pound Sterling, U.S. dollars and Chilean Pesos, as well as U.S. dollars and offshore Chinese Renminbi.

The following table summarizes our outstanding interest rate management contracts and cross currency interest rate swaps:

	31 March 2013				30 September 2012			
	US\$ Notional	Pay %	Average Receive %	Years Average Maturity	US\$ Notional	Pay %	Average Receive %	Years Average Maturity
Interest rate swaps (fair value hedge)	\$300.0	LIBOR	3.61%	6.4	\$450.0	LIBOR	3.23%	4.7
Cross currency interest rate swaps (net investment hedge)	\$243.5	3.95%	.96%	2.7	\$243.5	3.95%	.96%	3.2
Interest rate swaps (cash flow hedge)	\$ 53.1	6.84%	Various	1.9	\$452.8	2.75%	Various	.6
Cross currency interest rate swaps (cash flow hedge)	\$114.6	3.50%	2.17%	4.4	\$ —	—	—	—

The table below summarizes the fair value and balance sheet location of our outstanding derivatives:

	Balance Sheet Location	31 March 2013	30 September 2012	Balance Sheet Location	31 March 2013	30 September 2012
Derivatives Designated as Hedging Instruments:						
Forward exchange contracts	Other receivables	\$ 43.4	\$ 12.7	Accrued liabilities	\$ 19.8	\$ 17.0
Interest rate management contracts	Other receivables	—	1.1	Accrued liabilities	1.3	15.6
Forward exchange contracts	Other noncurrent assets	47.9	64.3	Other noncurrent liabilities	.9	2.5
Interest rate management contracts	Other noncurrent assets	42.6	48.6	Other noncurrent liabilities	9.1	9.5
Total Derivatives Designated as Hedging Instruments		\$ 133.9	\$ 126.7		\$ 31.1	\$ 44.6
Derivatives Not Designated as Hedging Instruments:						
Forward exchange contracts	Other receivables	\$ 2.4	\$.9	Accrued liabilities	\$ 1.8	\$ 2.2
Total Derivatives		\$ 136.3	\$ 127.6		\$ 32.9	\$ 46.8

Refer to Note 9, Fair Value Measurements, which defines fair value, describes the method for measuring fair value, and provides additional disclosures regarding fair value measurements.

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The table below summarizes the gain or loss related to our cash flow hedges, fair value hedges, net investment hedges, and derivatives not designated as hedging instruments:

	Three Months Ended 31 March							
	Forward		Foreign Currency		Other ^(A)		Total	
	Exchange Contracts		Debt					
	2013	2012	2013	2012	2013	2012	2013	2012
Cash Flow Hedges, net of tax:								
Net gain (loss) recognized in OCI (effective portion)	\$ (7.2)	\$ (2.5)	\$ —	\$ —	\$ 4.7	\$ 1.4	\$(2.5)	\$ (1.1)
Net (gain) loss reclassified from OCI to sales/cost of sales (effective portion)	—	.2	—	—	—	—	—	.2
Net (gain) loss reclassified from OCI to other income, net (effective portion)	6.8	1.8	—	—	—	—	6.8	1.8
Net (gain) loss reclassified from OCI to interest expense (effective portion)	(.6)	(.3)	—	—	.2	.3	(.4)	—
Net (gain) loss reclassified from OCI to other income, net (ineffective portion)	.2	.1	—	—	—	—	.2	.1
Fair Value Hedges:								
Net gain (loss) recognized in interest expense ^(B)	\$ —	\$ —	\$ —	\$ —	\$(3.3)	\$(4.0)	\$(3.3)	\$ (4.0)
Net Investment Hedges, net of tax:								
Net gain (loss) recognized in OCI	\$ 13.5	\$ (16.1)	\$ 18.3	\$ (34.3)	\$(2.6)	\$ (.7)	\$29.2	\$(51.1)
Derivatives Not Designated as Hedging Instruments:								
Net gain (loss) recognized in other income, net ^(C)	\$ (.7)	\$.9	\$ —	\$ —	\$—	\$—	\$ (.7)	\$.9
	Six Months Ended 31 March							
	Forward		Foreign Currency		Other ^(A)		Total	
	Exchange Contracts		Debt					
	2013	2012	2013	2012	2013	2012	2013	2012
Cash Flow Hedges, net of tax:								
Net gain (loss) recognized in OCI (effective portion)	\$ 7.7	\$ (15.3)	\$ —	\$ —	\$ 5.8	\$ 4.9	\$13.5	\$(10.4)
Net (gain) loss reclassified from OCI to sales/cost of sales (effective portion)	.7	.5	—	—	—	—	.7	.5
Net (gain) loss reclassified from OCI to other income, net (effective portion)	(8.3)	10.3	—	—	—	—	(8.3)	10.3
Net (gain) loss reclassified from OCI to interest expense (effective portion)	(1.0)	.4	—	—	.6	.6	(.4)	1.0
Net (gain) loss reclassified from OCI to other income, net (ineffective portion)	.3	.2	—	—	—	—	.3	.2
Fair Value Hedges:								
Net gain (loss) recognized in interest expense ^(B)	\$ —	\$ —	\$ —	\$ —	\$(7.0)	\$(4.9)	\$(7.0)	\$ (4.9)
Net Investment Hedges, net of tax:								
Net gain (loss) recognized in OCI	\$.2	\$ (7.0)	\$ (.5)	\$ 3.0	\$(2.3)	\$ (.5)	\$(2.6)	\$ (4.5)
Derivatives Not Designated as Hedging Instruments:								
Net gain (loss) recognized in other income, net ^(C)	\$ (.8)	\$ (1.2)	\$ —	\$ —	\$—	\$—	\$ (.8)	\$ (1.2)

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- (A) Other includes the impact on other comprehensive income (OCI) and earnings primarily related to interest rate and cross currency interest rate swaps.
- (B) The impact of fair value hedges noted above was largely offset by gains and losses resulting from the impact of changes in related interest rates on recognized outstanding debt.
- (C) 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 nonfunctional currencies.

The amount of cash flow hedges' unrealized gains and losses at 31 March 2013 that are expected to be reclassified to earnings in the next twelve months are not material.

The cash flows related to all derivative contracts are reported in the operating activities section of the consolidated statements of cash flows.

Credit Risk-Related Contingent Features

Certain derivative instruments are executed under agreements that require us to maintain a minimum credit rating with both Standard & Poor's and Moody's. If our credit rating falls below this threshold, 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 was \$12.8 as of 31 March 2013 and \$13.8 as of 30 September 2012. Because our current credit rating is above the various pre-established thresholds, no collateral has been posted on these liability positions.

Counterparty Credit Risk Management

We execute all financial derivative transactions with counterparties that are highly rated financial institutions, all of which are investment grade at this time. Some of our underlying derivative agreements give us the right to require the institution to post collateral if its credit rating falls below the pre-established thresholds with Standard & Poor's or 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 was \$92.6 as of 31 March 2013 and \$90.1 as of 30 September 2012. No financial institution is required to post collateral at this time, as all have credit ratings at or above the threshold.

9. FAIR VALUE MEASUREMENTS

Fair value is defined 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). The methods and assumptions used to measure the fair value of financial instruments are as follows:

Derivatives

The fair value of our interest rate management contracts and forward exchange contracts are quantified using the income approach and are based on estimates using standard pricing models. These models take into account the value of future cash flows as of the balance sheet date, discounted to a present value using discount factors that match both the time to maturity and currency of the underlying instruments. 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, we randomly test a subset of our valuations against valuations received from the transaction's counterparty to validate the accuracy of our standard pricing models. Counterparties to these derivative contracts are highly rated financial institutions.

Refer to Note 8, Financial Instruments, for a description of derivative instruments, including details on the balance sheet line classifications.

Long-term Debt

The fair value of our debt is based on estimates using standard pricing models that take into account the value of future cash flows as of the balance sheet date, discounted to a present value using discount factors that match both the time to maturity and currency of the underlying instruments. These standard valuation models utilize observable market data such as interest rate yield curves and currency spot rates. Therefore, the fair value of our debt is classified as a level 2 measurement. We generally perform the computation of the fair value of these instruments.

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The carrying values and fair values of financial instruments were as follows:

	31 March 2013		30 September 2012	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Assets				
Derivatives				
Forward exchange contracts	\$ 93.7	\$ 93.7	\$ 77.9	\$ 77.9
Interest rate management contracts	42.6	42.6	49.7	49.7
Liabilities				
Derivatives				
Forward exchange contracts	\$ 22.5	\$ 22.5	\$ 21.7	\$ 21.7
Interest rate management contracts	10.4	10.4	25.1	25.1
Long-term debt, including current portion	4,741.4	5,045.7	4,658.5	5,005.9

The carrying amounts reported in the balance sheet for cash and cash items, trade receivables, payables and accrued liabilities, accrued income taxes, and short-term borrowings approximate fair value due to the short-term nature of these instruments. Accordingly, these items have been excluded from the above table.

The fair value hierarchy prioritizes the inputs to valuation techniques used to measure fair value into three broad levels as follows:

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 our 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 sheets:

	31 March 2013				30 September 2012			
	Total	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3
Assets at Fair Value								
Derivatives								
Forward exchange contracts	\$ 93.7	\$—	\$ 93.7	\$—	\$ 77.9	\$—	\$ 77.9	\$—
Interest rate management contracts	42.6	—	42.6	—	49.7	—	49.7	—
Total Assets at Fair Value	\$136.3	\$—	\$136.3	\$—	\$127.6	\$—	\$127.6	\$—
Liabilities at Fair Value								
Derivatives								
Forward exchange contracts	\$ 22.5	\$—	\$ 22.5	\$—	\$ 21.7	\$—	\$ 21.7	\$—
Interest rate management contracts	10.4	—	10.4	—	25.1	—	25.1	—
Total Liabilities at Fair Value	\$ 32.9	\$—	\$ 32.9	\$—	\$ 46.8	\$—	\$ 46.8	\$—

Refer to Note 1, Major Accounting Policies, in our 2012 Form 10-K and Note 8, Financial Instruments, in this quarterly filing for additional information on our accounting and reporting of the fair value of financial instruments.

10. RETIREMENT BENEFITS

The components of net periodic benefit cost for the defined benefit pension and other postretirement benefit plans for the three and six months ended 31 March 2013 and 2012 were as follows:

	Pension Benefits				Other Benefits	
	2013		2012		2013	2012
	U.S.	International	U.S.	International		
Three Months Ended 31 March						
Service cost	\$ 13.0	\$ 8.0	\$ 11.2	\$ 6.1	\$ 1.1	\$ 1.1
Interest cost	29.2	14.3	31.0	15.5	.5	1.0
Expected return on plan assets	(47.7)	(17.6)	(44.5)	(16.5)	—	—
Prior service cost amortization	.7	.1	.6	.1	—	—
Actuarial loss amortization	29.1	6.6	19.7	3.8	.6	.7
Special termination benefits	—	—	4.6	2.2	—	—
Other	—	.5	—	.7	—	—
Net periodic benefit cost	\$ 24.3	\$ 11.9	\$ 22.6	\$ 11.9	\$ 2.2	\$ 2.8

	Pension Benefits				Other Benefits	
	2013		2012		2013	2012
	U.S.	International	U.S.	International		
Six Months Ended 31 March						
Service cost	\$ 26.0	\$ 16.3	\$ 22.5	\$ 12.1	\$ 2.1	\$ 2.2
Interest cost	58.4	29.0	62.1	31.2	1.0	2.0
Expected return on plan assets	(92.6)	(35.9)	(89.0)	(33.3)	—	—
Prior service cost amortization	1.4	.2	1.3	.2	—	—
Actuarial loss amortization	58.2	13.4	39.3	7.7	1.2	1.4
Special termination benefits	—	—	4.6	2.2	—	—
Other	—	1.1	—	1.3	—	—
Net periodic benefit cost	\$ 51.4	\$ 24.1	\$ 40.8	\$ 21.4	\$ 4.3	\$ 5.6

Special termination benefits for the three and six months ended 31 March 2012 are related to the cost reduction plan initiated in the second quarter. For additional information regarding this plan, see Note 4, Business Restructuring and Cost Reduction Plans.

For the six months ended 31 March 2013 and 2012, our cash contributions to funded pension plans and benefit payments under unfunded pension plans were \$238.9 and \$23.4, respectively. Total contributions for fiscal 2013 are expected to be approximately \$280 to \$290. During fiscal 2012, total contributions were \$76.4.

11. COMMITMENTS AND CONTINGENCIES

Litigation

We are involved in various legal proceedings, including competition, environmental, health, safety, product liability, and insurance matters. In September 2010, the Brazilian Administrative Council for Economic Defense (CADE) issued a decision against our Brazilian subsidiary, Air Products Brasil Ltda., and several other Brazilian industrial gas companies for alleged anticompetitive activities. CADE imposed a civil fine of R\$179.2 million (approximately \$89 at 31 March 2013) on Air Products Brasil Ltda. This fine was based on a recommendation by a unit of the Brazilian Ministry of Justice whose investigation began in 2003 alleging violation of competition laws with respect to the sale of industrial and medical gases. The fines are based on a percentage of our total revenue in Brazil in 2003.

We have denied the allegations made by the authorities and filed an appeal in October 2010 with the Brazilian courts. Certain of our defenses, if successful, could result in the matter being dismissed with no fine against us. We, with advice of our outside legal counsel, have assessed the status of this matter and have concluded that, although an adverse final judgment after exhausting all appeals is reasonably possible, such a judgment is not probable. As a result, no provision has been made in the consolidated financial statements. We estimate the maximum possible loss to be the full amount of the fine of R\$179.2 million (approximately \$89 at 31 March 2013) plus interest accrued thereon until final disposition of the proceedings.

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We are required to provide security for the payment of the fine (and interest) in order to suspend execution of the judgment during the appeal process, during which time interest will accrue on the fine. The security is only collectible by the court in the event we are not successful in our appeal and do not timely pay the fine. The security could be in the form of a bank guarantee or in other forms which the courts deem acceptable. The form of security to be provided by us has not been finally determined.

While we do not expect that any sums we may have to pay in connection with this or any other legal proceeding would have a material adverse effect on our consolidated financial position or net cash flows, a future charge for regulatory fines or damage awards could have a significant impact on our net income in the period in which it is recorded.

Environmental

In the normal course of business, we are involved in legal proceedings under the Comprehensive Environmental Response, Compensation, and Liability Act (the federal Superfund law), similar state environmental laws, and the Resource Conservation and Recovery Act (RCRA) relating to the designation of certain sites for investigation or remediation. Presently, there are approximately 34 sites on which a final settlement has not been reached where we, along with others, have been designated a potentially responsible party by the Environmental Protection Agency or are otherwise engaged in investigation or remediation, including cleanup activity at certain of our current and former manufacturing sites. We continually monitor these sites for which we have environmental exposure.

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 consistent with the policy set forth in Note 1, Major Accounting Policies, to the consolidated financial statements in our 2012 Form 10-K. The consolidated balance sheets at 31 March 2013 and 30 September 2012 included an accrual of \$86.8 and \$87.5, respectively, primarily as part of other noncurrent liabilities. The environmental liabilities will be paid over a period of up to 30 years. We estimate the exposure for environmental loss contingencies to range from \$86 to a reasonably possible upper exposure of \$100 as of 31 March 2013.

Actual costs to be incurred at identified sites in future periods may vary from the estimates, given inherent uncertainties in evaluating environmental exposures. Using reasonably possible alternative assumptions of the exposure level could result in an increase to the environmental accrual. Due to the inherent uncertainties related to environmental exposures, a significant increase to the reasonably possible upper exposure level could occur if a new site is designated, the scope of remediation is increased, a different remediation alternative is identified, or a significant increase in our proportionate share occurs. We do not expect that any sum we may have to pay in connection with environmental matters in excess of the amounts recorded or disclosed above would have a material adverse impact on our financial position or results of operations in any one year.

PACE

At 31 March 2013, \$33.6 of the environmental accrual was related to the Pace facility.

In 2006, we sold our Amines business, which included operations at Pace, Florida and recognized a liability for retained environmental obligations associated with remediation activities at Pace. We are required by the Florida Department of Environmental Protection (FDEP) and the United States Environmental Protection Agency (USEPA) to continue our remediation efforts. We estimated that it would take about 20 years to complete the groundwater remediation, and the costs through completion were estimated to range from \$42 to \$52. As no amount within the range was a better estimate than another, we recognized a pretax expense in fiscal 2006 of \$42.0 as a component of income from discontinued operations and recorded an environmental accrual of \$42.0 in continuing operations on the consolidated balance sheets. There has been no change to the estimated exposure range related to the Pace facility.

We have implemented many of the remedial corrective measures at the Pace, Florida facility required under 1995 Consent Orders issued by the FDEP and the USEPA. Contaminated soils have been bioremediated, and the treated soils have been secured in a lined on-site disposal cell. Several groundwater recovery systems have been installed to contain and remove contamination from groundwater. We completed an extensive assessment of the site to determine how well existing measures are working, what additional corrective measures may be needed, and whether newer remediation technologies that were not available in the 1990s might be suitable to more quickly and effectively remove groundwater contaminants. Based on assessment results, we completed a focused feasibility study that appears to have identified new and alternative approaches that should more effectively remove contaminants and achieve the targeted remediation goals. We continue to review the new approaches with the FDEP.

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PIEDMONT

At 31 March 2013, \$20.0 of the environmental accrual was related to the Piedmont site.

On 30 June 2008, we sold our Elkton, Maryland and Piedmont, South Carolina production facilities and the related North American atmospheric emulsions and global pressure sensitive adhesives businesses. In connection with the sale, we recognized a liability for retained environmental obligations associated with remediation activities at the Piedmont site. This site is under active remediation for contamination caused by an insolvent prior owner. The sale of the site triggered expense recognition. Prior to the sale, remediation costs had been capitalized since they improved the property as compared to its condition when originally acquired. We are required by the South Carolina Department of Health and Environmental Control to address both contaminated soil and groundwater. Numerous areas of soil contamination have been addressed, and contaminated groundwater is being recovered and treated. We estimate that it will take until 2017 to complete source area remediation and another 15 years thereafter to complete groundwater recovery, with costs through completion estimated to be \$24. We recognized a pretax expense in 2008 of \$24.0 as a component of income from discontinued operations and recorded an environmental liability of \$24.0 in continuing operations on the consolidated balance sheets. There has been no change to the estimated exposure.

PAULSBORO

At 31 March 2013, \$6.2 of the environmental accrual was related to the Paulsboro site.

During the first quarter of 2009, management committed to a plan to sell the production facility in Paulsboro, New Jersey and recognized a \$16.0 environmental liability associated with this site. The change in the liability balance since it was established is a result of spending and changes in the estimated exposure. In December 2009, we completed the sale of this facility. We are required by the New Jersey state law to investigate and, if contaminated, remediate a site upon its sale. We estimate that it will take several years to complete the investigation/remediation efforts at this site.

PASADENA

At 31 March 2013, \$12.9 of the environmental accrual was related to the Pasadena site.

During the fourth quarter of 2012, management committed to permanently shutting down our PUI production facility in Pasadena, Texas. In shutting down and dismantling the facility, we will undertake certain remediation obligations related to soil and groundwater contaminants. We have been pumping and treating the groundwater to control off-site migration of contaminated groundwater in compliance with regulatory requirements and under the approval of the Texas Commission on Environmental Quality (TCEQ). We estimate that we will continue this program for 30 years subsequent to the shutdown of the PUI production facility. In addition, we will perform additional work to address other environmental obligations at the site. This additional work includes addressing the RCRA permitted hazardous waste management units, investigating other potential solid waste management units, performing post closure care for two closed RCRA surface impoundment units and establishing engineering controls. In 2012, we estimated the total exposure at this site to be \$13.0. There has been no change to the estimated exposure.

12. SHARE-BASED COMPENSATION

We have various share-based compensation programs, which include stock options, deferred stock units, and restricted stock. Under all programs, the terms of the awards are fixed at the grant date. We issue shares from treasury stock upon the exercise of stock options, the payout of deferred stock units, and the issuance of restricted stock awards. As of 31 March 2013, there were 6,577,502 shares available for future grant under our Long-Term Incentive Plan, which is shareholder approved.

During the six months ended 31 March 2013, we granted 1,131,315 stock options at a weighted-average exercise price of \$81.58 and an estimated fair value of \$19.85 per option. The fair value of these options was estimated using a Black Scholes option valuation model that used the following assumptions:

Expected volatility	28.6%–30.4%
Expected dividend yield	2.4%
Expected life (in years)	7.3–9.1
Risk-free interest rate	1.2%–1.5%

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In addition, we granted 259,170 deferred stock units at a weighted-average grant-date fair value of \$82.15 and 33,632 restricted shares at a weighted-average grant-date fair value of \$81.57. Refer to Note 18, Share-Based Compensation, in our 2012 Form 10-K for information on the valuation and accounting for these programs.

Share-based compensation cost recognized in the consolidated income statement is summarized below:

	Three Months Ended 31 March		Six Months Ended 31 March	
	2013	2012	2013	2012
Before-Tax Share-Based Compensation Cost	\$ 12.3	\$ 15.6	\$ 22.4	\$ 27.4
Income tax benefit	(4.5)	(5.8)	(8.1)	(9.9)
After-Tax Share-Based Compensation Cost	\$ 7.8	\$ 9.8	\$ 14.3	\$ 17.5

Before-tax share-based compensation cost is primarily included in selling and administrative expense on our consolidated income statements. The amount of share-based compensation cost capitalized in 2013 and 2012 was not material.

13. EQUITY

The following is a summary of the changes in total equity for the three and six months ended 31 March:

	Three Months Ended 31 March					
	2013			2012		
	Air Products	Non- controlling Interests	Total Equity	Air Products	Non- controlling Interests	Total Equity
Balance at 31 December	\$6,299.3	\$151.9	\$6,451.2	\$5,909.0	\$148.1	\$6,057.1
Net income ^(A)	290.4	7.1	297.5	296.0	6.2	302.2
Other comprehensive income (loss)	(131.7)	(2.8)	(134.5)	147.5	3.4	150.9
Dividends on common stock (per share \$.71, \$.64)	(147.9)	—	(147.9)	(135.3)	—	(135.3)
Dividends to noncontrolling interests	—	(4.3)	(4.3)	—	(13.0)	(13.0)
Share-based compensation expense	12.3	—	12.3	15.2	—	15.2
Purchase of treasury shares	—	—	—	(53.1)	—	(53.1)
Issuance of treasury shares for stock option and award plans	34.7	—	34.7	64.1	—	64.1
Tax benefit of stock option and award plans	9.5	—	9.5	21.2	—	21.2
Purchase of noncontrolling interests	(.3)	—	(.3)	—	—	—
Other equity transactions	(.8)	—	(.8)	(1.9)	—	(1.9)
Balance at 31 March	\$6,365.5	\$151.9	\$6,517.4	\$6,262.7	\$144.7	\$6,407.4

	Six Months Ended 31 March					
	2013			2012		
	Air Products	Non-controlling Interests	Total Equity	Air Products	Non-controlling Interests	Total Equity
Balance at 30 September	\$6,477.2	\$146.1	\$6,623.3	\$5,795.8	\$142.9	\$5,938.7
Net income ^(A)	568.7	13.9	582.6	544.1	14.4	558.5
Other comprehensive income (loss)	(28.3)	(1.7)	(30.0)	125.3	4.1	129.4
Dividends on common stock (per share \$1.35, \$1.22)	(280.8)	—	(280.8)	(257.5)	—	(257.5)
Dividends to noncontrolling interests	—	(6.4)	(6.4)	—	(13.0)	(13.0)
Share-based compensation expense	22.4	—	22.4	27.0	—	27.0
Purchase of treasury shares	(461.6)	—	(461.6)	(53.1)	—	(53.1)
Issuance of treasury shares for stock option and award plans	49.5	—	49.5	61.8	—	61.8
Tax benefits of stock option and award plans	19.7	—	19.7	25.4	—	25.4
Purchase of noncontrolling interests	(.3)	—	(.3)	(4.4)	(1.9)	(6.3)
Other equity transactions	(1.0)	—	(1.0)	(1.7)	(1.8)	(3.5)
Balance at 31 March	\$6,365.5	\$151.9	\$6,517.4	\$6,262.7	\$144.7	\$6,407.4

(A) Net income attributable to noncontrolling interests for the three and six months ended 31 March 2013 excludes net income of \$2.1 and \$4.2, respectively, related to redeemable noncontrolling interests, which are not part of total equity. There were no redeemable noncontrolling interests recorded at 31 March 2012. Refer to Note 14, Noncontrolling Interests, for additional information.

14. NONCONTROLLING INTERESTS

INDURA S.A.

Redeemable Noncontrolling Interest

The largest minority shareholder in Indura S.A. has the right to exercise a put option to require us to purchase up to a 30.5% equity interest during the two-year period beginning on 1 July 2015, at a redemption value equal to fair market value (subject to a minimum price based upon the acquisition date value escalated by an inflation factor). We determined that the put option is embedded within the minority interest shares that are subject to the put option. The redemption feature requires classification of the minority shareholder's interest in the consolidated balance sheet outside of equity under the caption "Redeemable Noncontrolling Interest."

The redeemable noncontrolling interest of Indura S.A. was recorded on the acquisition date based on the estimated fair value of the shares including the embedded put option. As Indura S.A. shares are not publicly traded, the fair value of the shares was estimated based on trading multiples for similar companies in the Chilean stock market and recent transactions. The fair value of the put option was estimated using standard equity option pricing techniques, expected dividend payouts, and assumptions that market participants would use regarding equity volatility and the risk free rate of return. Subsequent adjustments to the value of the redeemable noncontrolling interest due to the redemption feature, if any, will be recognized as they occur and recorded within capital in excess of par value. Refer to Note 5, Business Combinations, for additional information on the Indura S.A. transaction.

The following is a rollforward of the redeemable noncontrolling interest:

Balance at 30 September 2011	\$ —
Indura acquisition	374.1
Net loss	(2.4)
Currency translation adjustment	20.8
Balance at 30 September 2012	\$392.5
Net income	4.2
Currency translation adjustment	2.0
Balance at 31 March 2013	\$398.7

15. 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	
	2013	2012	2013	2012
NUMERATOR				
Income from continuing operations	\$ 289.3	\$ 279.0	\$ 566.2	\$ 504.9
Income from discontinued operations	1.1	17.0	2.5	39.2
Net Income Attributable to Air Products	\$ 290.4	\$ 296.0	\$ 568.7	\$ 544.1
DENOMINATOR (in millions)				
Weighted average common shares – Basic	208.4	211.1	209.2	210.7
Effect of dilutive securities				
Employee stock option and other award plans	2.6	3.9	2.6	3.8
Weighted average common shares – Diluted	211.0	215.0	211.8	214.5
BASIC EPS ATTRIBUTABLE TO AIR PRODUCTS				
Income from continuing operations	\$ 1.38	\$ 1.32	\$ 2.71	\$ 2.39
Income from discontinued operations	.01	.08	.01	.19
Net Income Attributable to Air Products	\$ 1.39	\$ 1.40	\$ 2.72	\$ 2.58
DILUTED EPS ATTRIBUTABLE TO AIR PRODUCTS				
Income from continuing operations	\$ 1.37	\$ 1.30	\$ 2.67	\$ 2.36
Income from discontinued operations	.01	.08	.01	.18
Net Income Attributable to Air Products	\$ 1.38	\$ 1.38	\$ 2.68	\$ 2.54

Options on 2.2 million and 3.7 million shares were antidilutive and therefore excluded from the computation of diluted earnings per share for the three and six months ended 31 March 2013, respectively. Options on 2.2 million and 3.2 million shares were antidilutive and therefore excluded from the computation of diluted earnings per share for the three and six months ended 31 March 2012, respectively.

16. INCOME TAXES

During the first quarter of 2012, we reached a settlement with the Spanish tax authorities for €41.3 million (\$56) in resolution of tax deductions claimed by certain of our Spanish subsidiaries during fiscal years 2005-2011. Of this settlement, \$43.8 (\$.20 per share) increased our income tax expense and had a 6.7% impact on our effective tax rate for the six months ended 31 March 2012. The cash payment for the settlement was principally paid in January 2012.

During the second quarter of 2012, we received a favorable ruling by the Spanish Supreme Court over tax benefits related to certain transactions of a Spanish subsidiary for years 1991 and 1992, a period before we controlled this subsidiary. As a result, in the second quarter of 2012, we recorded a reduction in income tax expense of \$58.3 (\$.27 per share), including interest and penalties. This reduction in income tax expense had a 19.8% and 8.9% impact on our effective tax rate for the three and six months ended 31 March 2012, respectively.

On 2 January 2013, the American Taxpayer Relief Act of 2012 (Act) was signed into law which includes retroactive extensions of certain business tax provisions that had expired. This Act did not have a material impact on our consolidated financial statements.

17. SUPPLEMENTAL INFORMATION

Debt

We have classified a 3.75% Eurobond for €300 (\$385) maturing in November 2013 as long-term debt because we have the ability to refinance the debt under our \$2,170.0 committed credit facility maturing in June 2015. Our current intent is to refinance this debt via the U.S. or European public or private placement markets.

On 4 February 2013, we issued a \$400.0 senior fixed-rate 2.75% note that matures on 3 February 2023.

Share Repurchase Program

On 15 September 2011, the Board of Directors authorized the repurchase of up to \$1,000 of our outstanding common stock. We repurchase shares pursuant to Rules 10b5-1 and 10b-18 under the Securities Exchange Act of 1934, as amended, through repurchase agreements established with several brokers. During the first six months of fiscal year 2013, we purchased 5.7 million of our outstanding shares at a cost of \$461.6. At 31 March 2013, \$485.3 in share repurchase authorization remains.

18. BUSINESS SEGMENT AND GEOGRAPHIC INFORMATION

Our segments are organized based on differences in product and/or type of customer. We have 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	
	2013	2012	2013	2012
Sales to External Customers				
Merchant Gases	\$1,003.2	\$ 883.6	\$2,012.3	\$1,771.3
Tonnage Gases	808.5	783.5	1,706.9	1,593.3
Electronics and Performance Materials	548.8	567.0	1,097.8	1,102.2
Equipment and Energy	123.7	110.2	229.6	199.0
Segment and Consolidated Totals	\$2,484.2	\$2,344.3	\$5,046.6	\$4,665.8
Operating Income				
Merchant Gases	\$ 168.1	\$ 152.5	\$ 339.1	\$ 318.8
Tonnage Gases	123.2	125.4	261.3	236.8
Electronics and Performance Materials	77.5	85.5	138.8	163.6
Equipment and Energy	20.6	9.8	29.0	17.1
Segment Total	\$ 389.4	\$ 373.2	\$ 768.2	\$ 736.3
Business restructuring and cost reduction plans ^(A)	—	(86.8)	—	(86.8)
Other	.3	1.5	(6.1)	(7.8)
Consolidated Total	\$ 389.7	\$ 287.9	\$ 762.1	\$ 641.7

^(A) Information about how this charge related to the businesses at the segment level is discussed in Note 4, Business Restructuring and Cost Reduction Plans.

	31 March 2013	30 September 2012
Identifiable Assets (A)		
Merchant Gases	\$ 6,512.2	\$ 6,428.5
Tonnage Gases	5,221.4	5,059.8
Electronics and Performance Materials	2,874.4	2,930.3
Equipment and Energy	472.0	379.3
Segment total	\$15,080.0	\$14,797.9
Other	907.6	925.4
Discontinued operations	35.4	42.8
Consolidated Total	\$16,023.0	\$15,766.1

^(A) Identifiable assets are equal to total assets less investment in net assets of and advances to equity affiliates.

Geographic Information

	Three Months Ended 31 March		Six Months Ended 31 March	
	2013	2012	2013	2012
Sales to External Customers				
U.S./Canada	\$1,095.6	\$1,082.9	\$2,221.3	\$2,152.7
Europe	649.0	661.5	1,296.6	1,293.1
Asia	560.4	547.4	1,166.0	1,120.7
Latin America	179.2	52.5	362.7	99.3
Consolidated Total	\$2,484.2	\$2,344.3	\$5,046.6	\$4,665.8

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

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 our 2012 Form 10-K. An analysis of results for the second quarter and first six months of 2013 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 (GAAP), except as noted.

Captions such as income from continuing operations attributable to Air Products, net income attributable to Air Products, and diluted earnings per share attributable to Air Products are simply referred to as "income from continuing operations," "net income," and "diluted earnings per share" throughout this Management's Discussion and Analysis, unless otherwise stated.

The discussion of second quarter and year to date results that follows includes comparisons to non-GAAP financial measures. These non-GAAP measures exclude the cost reduction plan charge, the Spanish tax settlement, and the Spanish tax ruling, all which occurred in 2012. The presentation of non-GAAP measures is intended to enhance the usefulness of financial information by providing measures that our management uses internally to evaluate our baseline performance on a comparable basis. The reconciliation of reported GAAP results to non-GAAP measures is presented on page 37.

SECOND QUARTER 2013 VS. SECOND QUARTER 2012

SECOND QUARTER 2013 IN SUMMARY

- Sales of \$2,484.2 increased 6%, or \$139.9. Underlying sales decreased 2%, with volumes down 2% and pricing flat. Sales decreased as a result of our previous decision to exit the polyurethane intermediates (PUI) business and lower volumes in Merchant Gases and Electronics and Performance Materials partially offset by new plants in Tonnage Gases and higher Equipment sales. The acquisitions of Indura S.A. (Indura) and DA NanoMaterials increased sales by 6%.
- Operating income of \$389.7 increased 35%, or \$101.8, and operating margin of 15.7% increased 340 basis points (bp) as the prior year included a charge of \$86.8 for the cost reduction plan. On a non-GAAP basis, operating income increased 4%, or \$15.0, and operating margin decreased 30 bp, primarily from the impact of acquisitions and higher pension expense partially offset by better cost performance.
- Income from continuing operations of \$289.3 increased 4%, or \$10.3, and diluted earnings per share from continuing operations of \$1.37 increased 5%, or \$.07. On a non-GAAP basis, income from continuing operations increased 3%, or \$8.0, and diluted earnings per share from continuing operations increased 5%, or \$.06. A summary table of changes in diluted earnings per share is presented below.
- We increased our quarterly dividend by 11% from \$.64 to \$.71 per share. This represents the 31st consecutive year that we have increased our dividend payment.

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Changes in Diluted Earnings per Share Attributable to Air Products

	Three Months Ended 31 March		Increase (Decrease)
	2013	2012	
Diluted Earnings per Share			
Net Income	\$ 1.38	\$ 1.38	\$ —
Income from Discontinued Operations	.01	.08	(.07)
Income from Continuing Operations – GAAP Basis	\$ 1.37	\$ 1.30	\$.07
Cost reduction plan	—	.28	(.28)
Spanish tax ruling	—	(.27)	.27
Income from Continuing Operations – Non-GAAP Basis	\$ 1.37	\$ 1.31	\$.06
Operating Income (after-tax) – Non-GAAP Basis			
Underlying business			
Volume/Acquisitions			\$.04
Price/raw materials			(.04)
Costs			.08
Currency			(.02)
Operating Income			.06
Other (after-tax)			
Equity affiliates' income			.01
Interest expense			(.02)
Noncontrolling interests			(.01)
Weighted average diluted shares			.02
Other			—
Total Change in Diluted Earnings per Share from Continuing Operations – Non-GAAP Basis			\$.06

RESULTS OF OPERATIONS
Discussion of Consolidated Results

	Three Months Ended 31 March			
	2013	2012	\$ Change	Change
Sales	\$2,484.2	\$2,344.3	\$ 139.9	6%
Operating income – GAAP Basis	389.7	287.9	101.8	35%
Operating margin – GAAP Basis	15.7%	12.3%	—	340bp
Equity affiliates' income	39.8	35.5	4.3	12%
Operating income – Non-GAAP Basis	389.7	374.7	15.0	4%
Operating margin – Non-GAAP Basis	15.7%	16.0%	—	(30bp)

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Sales

	% Change from Prior Year
Underlying business	
Volume	(2)%
Price	— %
Acquisitions	6%
Currency	— %
Energy and raw material cost pass-through	2%
Total Consolidated Change	6%

Underlying sales decreased 2% with volumes down 2% and pricing flat. Sales decreased as a result of our previous decision to exit the PUI business and lower volumes in Merchant Gases and Electronics and Performance Materials, partially offset by new plants in Tonnage Gases and higher Equipment sales. The Indura and DA NanoMaterials acquisitions increased sales by 6%. Higher energy and raw material contractual cost pass-through to customers increased sales by 2%.

Operating Income

Operating income of \$389.7 increased 35%, or \$101.8. The prior year included a charge of \$86.8 for a cost reduction plan. On a non-GAAP basis, operating income of \$389.7 increased 4%, or \$15.0. The increase was primarily due to lower costs of \$19 and acquisitions of \$18, partially offset by lower volumes of \$11 and lower recovery of raw material costs in pricing of \$9. The lower costs include the effects of our cost reduction plan in Europe and improved operating efficiencies. Current year operating income includes the gain on a sale of our investment in an equity affiliate of \$5. Unfavorable currency translation and foreign exchange impacts decreased operating income by \$6.

Equity Affiliates' Income

Income from equity affiliates of \$39.8 increased \$4.3, primarily due to better performance in our Mexican equity affiliate.

Selling and Administrative Expense (S&A)

S&A expense of \$266.6 increased \$29.3, primarily due to the acquisition of Indura. S&A, as a percent of sales, increased from 10.1% to 10.7%.

Research and Development (R&D)

R&D expense of \$32.3 increased \$2.5, primarily due to inflation and the acquisition of DA NanoMaterials. R&D, as a percent of sales, was 1.3% in both 2013 and 2012.

Business Restructuring and Cost Reduction Plans

During fiscal year 2012, we recorded an expense of \$327.4 (\$222.4 after-tax, or \$1.03 per share) for business restructuring and cost reduction plans in our Polyurethane Intermediates, Electronics and European Merchant businesses. Refer to Note 4, Business Restructuring and Cost Reduction Plans, in our notes to the consolidated financial statements for additional information regarding these actions.

Included in the 2012 expense was a second quarter charge of \$86.8 for actions to remove stranded costs resulting from our decision to exit the Homecare business, reorganize the Merchant business, and right size our European cost structure in light of the challenging economic outlook. As of 31 March 2013, the planned actions were substantially completed. The majority of the remaining accrued severance and other benefits will be paid out during the third quarter of fiscal year 2013.

Other Income, Net

Other income of \$18.0 increased \$4.7, primarily due to the sale of our investment in an equity affiliate in the current year, partially offset by an unfavorable currency impact. Otherwise, no individual items were significant in comparison to the prior year.

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Interest Expense

	Three Months Ended 31 March	
	2013	2012
Interest incurred	\$39.9	\$36.8
Less: capitalized interest	4.7	7.4
Interest expense	\$35.2	\$29.4

Interest incurred increased \$3.1. The increase was driven primarily by a higher average debt balance, partially offset by a lower average interest rate on the debt portfolio. The change in capitalized interest is due to a decrease in project spending.

Effective Tax Rate

The effective tax rate equals the income tax provision divided by income from continuing operations before taxes. On a GAAP basis, the effective tax rate was 24.3% and 3.0% in the second quarter of 2013 and 2012, respectively. The prior year effective tax rate included reductions in income tax expense of \$58.3 related to a Spanish tax ruling and \$26.2 related to the cost reduction plan. Refer to Note 4, Business Restructuring and Cost Reduction Plans, and Note 16, Income Taxes, to the consolidated financial statements for details on these items. On a non-GAAP basis, the effective tax rate was 24.3% and 24.5% in the second quarter of 2013 and 2012, respectively. The current year effective tax rate includes the impact of the retroactive extension of certain business tax provisions enacted on 2 January 2013 under the American Taxpayer Relief Act of 2012.

Discontinued Operations

In January 2012, the Board of Directors authorized the sale of our Homecare business, which had previously been reported as part of the Merchant Gases operating segment. On 8 January 2012, we reached an agreement for The Linde Group to purchase our Homecare business in Belgium, Germany, France, Portugal, and Spain. This business represented approximately 80% of our total Homecare business revenues. We are actively marketing the remaining portion of the Homecare business, which is primarily in the United Kingdom and Ireland. We expect to close on the sale of this business by the end of fiscal year 2013.

The Homecare business is being accounted for as a discontinued operation. The results of operations and cash flows of this business have been reclassified from the results of continuing operations for all periods presented. Refer to Note 3, Discontinued Operations, to the consolidated financial statements for additional details on this transaction.

Segment Analysis

Merchant Gases

	Three Months Ended 31 March			
	2013	2012	\$ Change	Change
Sales	\$1,003.2	\$883.6	\$119.6	14%
Operating income	168.1	152.5	15.6	10%
Operating margin	16.8%	17.3%	—	(50bp)
Equity affiliates' income	34.2	31.2	3.0	10%

Merchant Gases Sales

	% Change from Prior Year
Underlying business	
Volume	(2)%
Price	1%
Acquisitions	15%
Currency	— %
Total Merchant Gases Sales Change	14%

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Underlying sales decreased 1% as the impact of lower volumes of 2% was partially offset by higher pricing of 1%. The acquisition of Indura increased sales by 15%.

In the U.S./Canada, sales decreased 1%, with volumes down 2% and price up 1%. Volumes were down as helium supply limitations and softer liquid argon demand were partially offset by higher liquid oxygen and liquid nitrogen volumes primarily to the metals processing and primary materials end markets. Pricing was higher primarily in helium. In Europe, sales decreased 5%, with volumes down 5%. Volumes were down due to weaker demand across most end markets, particularly food, metals, and construction. Pricing was flat as higher helium pricing was offset by some pressure on liquid products. In Asia, sales increased 4%, with increased pricing of 2% and a favorable currency impact of 2%. Volumes were flat as higher liquid oxygen and liquid nitrogen volumes were offset by lower liquid argon volumes to photovoltaic and fabrication customers. Pricing increased primarily in helium.

Merchant Gases Operating Income and Margin

Operating income was higher due to the impact of the Indura acquisition of \$15. Additionally, lower operating costs, including the effects of our cost reduction plan in Europe, increased operating income by \$12. Operating income decreased due to lower volumes of \$9 and lower price recovery of power and distribution costs of \$6. The current year also included the gain on a sale of our investment in an equity affiliate of \$5. Operating margin decreased 50 bp from prior year, primarily due to the impact of the Indura acquisition.

Merchant Gases Equity Affiliates' Income

Merchant Gases equity affiliates' income of \$34.2 increased \$3.0, primarily as a result of better performance in our Mexican equity affiliate.

Tonnage Gases

	Three Months Ended 31 March		\$ Change	Change
	2013	2012		
Sales	\$808.5	\$783.5	\$ 25.0	3%
Operating income	123.2	125.4	(2.2)	(2)%
Operating margin	15.2%	16.0%	—	(80bp)

Tonnage Gases Sales

	% Change from Prior Year
Underlying business	
Volume	(3)%
Energy and raw material cost pass-through	6%
Currency	— %
Total Tonnage Gases Sales Change	3%

Sales increased 3%, or \$25.0. Volumes decreased 3% as the impact of our previous decision to exit our PUI business was partially offset by new plants. Base business volumes were relatively flat, as planned customer maintenance outages in Europe were mostly offset by stronger volumes in the U.S. Gulf Coast region. Higher energy and raw material contractual cost pass-through to customers increased sales by 6%.

Tonnage Gases Operating Income and Margin

Operating income was lower by 2% as lower volumes in the PUI business were partially offset by stronger new plant volumes and improved plant efficiencies. Operating margin decreased 80 bp from the prior year, primarily due to bonus timing and the higher energy cost pass-through impacts in revenue.

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Electronics and Performance Materials

	Three Months Ended 31 March		\$ Change	Change
	2013	2012		
Sales	\$548.8	\$567.0	\$(18.2)	(3)%
Operating income	77.5	85.5	(8.0)	(9)%
Operating margin	14.1%	15.1%	—	(100bp)

Electronics and Performance Materials Sales

	% Change from Prior Year
Underlying business	
Volume	(6)%
Price	(1)%
Acquisitions	4%
Currency	— %
Total Electronics and Performance Materials Sales Change	(3)%

Sales decreased 3% as growth of 4% from our DA NanoMaterials acquisition was more than offset by lower volumes of 6% and lower pricing of 1%. Electronics sales were down 3% with weaker materials volumes and equipment sales partially offset by acquisition growth. Performance Materials sales decreased 3% primarily due to lower volumes to select construction markets and marine coatings and lower pricing due to business mix.

Electronics and Performance Materials Operating Income and Margin

Operating income of \$77.5 decreased 9%, or \$8.0, and operating margin of 14.1% decreased 100 bp primarily due to lower volumes.

Equipment and Energy

	Three Months Ended 31 March		\$ Change	Change
	2013	2012		
Sales	\$123.7	\$110.2	\$13.5	12%
Operating income	20.6	9.8	10.8	110%

Equipment and Energy Sales and Operating Income

Sales of \$123.7 increased primarily from higher LNG project activity. Operating income of \$20.6 increased from the higher LNG activity and lower development spending.

The sales backlog for the Equipment business at 31 March 2013 was \$326 compared to \$450 at 30 September 2012.

Other

Other operating income (loss) primarily includes other expense and income that cannot be directly associated with the business segments, including foreign exchange gains and losses. Also included are LIFO inventory adjustments, as the business segments use FIFO, and the LIFO pool adjustments are not allocated to the business segments. Other also included stranded costs resulting from discontinued operations, as these costs were not reallocated to the businesses in 2012.

Other operating income was \$.3 versus \$1.5 in the prior year. The decrease in income was primarily due to unfavorable currency impacts partially offset by stranded costs from discontinued operations in the prior year. No other individual items were significant in comparison to the prior year.

FIRST SIX MONTHS 2013 VS. FIRST SIX MONTHS 2012

FIRST SIX MONTHS 2013 IN SUMMARY

- Sales of \$5,046.6 increased 8%, or \$380.8. Volumes were flat as higher volumes in the Tonnage Gases, Performance Materials and Equipment businesses were offset by lower volumes in our European Merchant Gases and Electronics businesses and our previous decision to exit the PUI business. Pricing was flat as higher pricing in Merchant Gases was offset by lower pricing in Performance Materials. The acquisitions of Indura and DA NanoMaterials increased sales by 7%.
- Operating income of \$762.1 increased 19%, or \$120.4, and operating margin of 15.1% increased 130 bp as the prior year included a charge of \$86.8 for the cost reduction plan. On a non-GAAP basis, operating income increased 5%, or \$33.6, and operating margin decreased 50 bp, primarily due to higher pension costs and the Indura acquisition.
- Income from continuing operations of \$566.2 increased 12%, or \$61.3, and diluted earnings per share from continuing operations of \$2.67 increased 13%, or \$.31. On a non-GAAP basis, income from continuing operations increased 3%, or \$15.2, and diluted earnings per share from continuing operations increased 4%, or \$.10. A summary table of changes in diluted earnings per share is presented below.
- We purchased 5.7 million of our outstanding shares at a cost of \$461.6 under the \$1,000 share repurchase program announced in the fourth quarter of 2011. At 31 March 2013, \$485.3 in share repurchase authorization remains.
- We increased our quarterly dividend by 11% from \$.64 to \$.71 per share. This represents the 31st consecutive year that we have increased our dividend payment.

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Changes in Diluted Earnings per Share Attributable to Air Products

	Six Months Ended 31 March		Increase (Decrease)
	2013	2012	
Diluted Earnings per Share			
Net Income	\$2.68	\$2.54	\$.14
Income from Discontinued Operations	.01	.18	(.17)
Income from Continuing Operations – GAAP Basis	\$2.67	\$2.36	\$.31
Cost reduction plan	—	.28	(.28)
Spanish tax settlement	—	.20	(.20)
Spanish tax ruling	—	(.27)	.27
Income from Continuing Operations – Non-GAAP Basis	\$2.67	\$2.57	\$.10
Operating Income (after-tax) – Non-GAAP Basis			
Underlying business			
Volume/Acquisitions			.16
Price/raw materials			(.08)
Costs			.03
Operating Income			.11
Other (after-tax)			
Equity affiliates' income			.03
Interest expense			(.04)
Income tax rate			(.02)
Noncontrolling interests			(.01)
Weighted average diluted shares			.03
Other			(.01)
Total Change in Diluted Earnings per Share from Continuing Operations – Non-GAAP Basis			\$.10

RESULTS OF OPERATIONS
Discussion of Consolidated Results

	Six Months Ended 31 March			
	2013	2012	\$ Change	Change
Sales	\$5,046.6	\$4,665.8	\$380.8	8%
Operating income – GAAP Basis	762.1	641.7	120.4	19%
Operating margin – GAAP Basis	15.1%	13.8%	—	130bp
Equity affiliates' income	81.2	72.6	8.6	12%
Operating income – Non-GAAP Basis	762.1	728.5	33.6	5%
Operating margin – Non-GAAP Basis	15.1%	15.6%	—	(50bp)

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Sales

	% Change from Prior Year
Underlying business	
Volume	— %
Price	— %
Acquisitions	7%
Currency	— %
Energy and raw material cost pass-through	1%
Total Consolidated Change	8%

Volumes were flat as higher volumes in the Tonnage Gases, Performance Materials, and Equipment businesses were offset by lower volumes in Merchant Gases and Electronics and our previous decision to exit the PUI business. Pricing was flat as higher pricing in Merchant Gases was offset by lower pricing in Performance Materials. The acquisitions of Indura and DA NanoMaterials increased sales by 7%. Higher energy and raw material contractual cost pass-through to customers increased sales by 1%.

Operating Income

Operating income of \$762.1 increased 19%, or \$120.4. On a GAAP basis, prior year operating income included a charge of \$86.8 for the cost reduction plan. On a non-GAAP basis, operating income of \$762.1 increased 5%, or \$33.6. The increase was primarily due to higher volumes, including acquisitions, of \$39 and lower costs of \$6, partially offset by lower recovery of raw material costs in pricing of \$16. The decrease in costs includes the benefits of the cost reduction plan. Current year operating income includes the gain on a sale of our investment in an equity affiliate of \$5.

Equity Affiliates' Income

Income from equity affiliates of \$81.2 increased \$8.6, primarily due to better performance in our Mexican equity affiliate.

Selling and Administrative Expense (S&A)

S&A expense of \$534.8 increased \$66.4 primarily due to the acquisition of Indura. S&A, as a percent of sales, increased to 10.6% from 10.0%.

Research and Development (R&D)

R&D expense of \$65.6 increased \$7.8 primarily due to inflation and the acquisition of DA NanoMaterials. R&D, as a percent of sales, increased to 1.3% from 1.2%.

Business Restructuring and Cost Reduction Plans

During fiscal year 2012, we recorded an expense of \$327.4 (\$222.4 after-tax, or \$1.03 per share) for business restructuring and cost reduction plans in our Polyurethane Intermediates, Electronics and European Merchant businesses. Refer to Note 4, Business Restructuring and Cost Reduction Plans, in our notes to the consolidated financial statements for additional information regarding these actions.

Included in the expense was a second quarter charge of \$86.8 for actions to remove stranded costs resulting from our decision to exit the Homecare business, reorganize the Merchant business, and right size our European cost structure in light of the challenging economic outlook. As of 31 March 2013, the planned actions were substantially completed. The majority of the remaining accrued severance and other benefits will be paid out during the third quarter of fiscal year 2013.

Other Income, Net

Other income of \$29.6 increased \$2.6, primarily due to the sale of our investment in an equity affiliate in the current year. Otherwise, no individual items were significant in comparison to the prior year.

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Interest Expense

	Six Months Ended 31 March	
	2013	2012
Interest incurred	\$82.6	\$74.1
Less: capitalized interest	11.6	15.3
Interest expense	\$71.0	\$58.8

Interest incurred increased \$8.5. The increase was driven primarily by a higher average debt balance, partially offset by a lower average interest rate on the debt portfolio. The change in capitalized interest was driven by a decrease in project spending.

Effective Tax Rate

The effective tax rate equals the income tax provision divided by income from continuing operations before taxes. On a GAAP basis, the effective tax rate was 24.3% and 20.8% in 2013 and 2012, respectively. The prior year effective tax rate included reductions in income tax expense of \$58.3 related to the second quarter Spanish tax ruling and \$26.2 related to the cost reduction plan, partially offset by an increase to income tax expense of \$43.8 related to the Spanish tax settlement. Refer to Note 4, Business Restructuring and Cost Reduction Plans, and Note 16, Income Taxes, to the consolidated financial statements for details on these items. On a non-GAAP basis, the effective tax rate was 24.3% and 23.8% in 2013 and 2012, respectively. The prior year effective tax rate included the impact of non-recurring credits and adjustments in the first quarter.

Discontinued Operations

In January 2012, the Board of Directors authorized the sale of our Homecare business, which had previously been reported as part of the Merchant Gases operating segment. On 8 January 2012, we reached an agreement for The Linde Group to purchase our Homecare business in Belgium, Germany, France, Portugal, and Spain. This business represented approximately 80% of our total Homecare business revenues. We are actively marketing the remaining portion of the Homecare business, which is primarily in the United Kingdom and Ireland. We expect to close on the sale of this business by the end of fiscal year 2013.

The Homecare business is being accounted for as a discontinued operation. The results of operations and cash flows of this business have been reclassified from the results of continuing operations for all periods presented. Refer to Note 3, Discontinued Operations, to the consolidated financial statements for additional details on this transaction.

Segment Analysis

Merchant Gases

	Six Months Ended 31 March			
	2013	2012	\$ Change	Change
Sales	\$2,012.3	\$1,771.3	\$241.0	14%
Operating income	339.1	318.8	20.3	6%
Operating margin	16.9%	18.0%	—	(110bp)
Equity affiliates' income	69.9	63.3	6.6	10%

Merchant Gases Sales

	% Change from Prior Year
Underlying business	
Volume	(2)%
Price	1%
Acquisitions	15%
Total Merchant Gases Sales Change	14%

Underlying sales decreased 1% due to lower volumes of 2% and higher pricing of 1%. The acquisition of Indura increased sales by 15%.

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In the U.S./Canada, sales increased 1%, with price up 2% and volumes down 1%. Volumes were down as softer liquid argon demand and helium supply limitations were partially offset by higher liquid oxygen and liquid nitrogen volumes to the metals processing and primary materials end markets. Pricing was higher primarily in helium. In Europe, sales decreased 6%, with volumes down 5% and unfavorable currency impacts of 1%. Volumes were down primarily due to overall economic weakness in the region. In Asia, sales increased 4%, due to higher pricing of 2% and a favorable currency impact of 2%. Pricing was higher primarily due to helium.

Merchant Gases Operating Income and Margin

Operating income was higher due to the impact of the Indura acquisition of \$30. Additionally, lower operating costs, including the effects of our cost reduction plan in Europe, increased operating income by \$16. Operating income decreased due to lower volumes of \$21 and lower price recovery of power and distribution costs of \$9. The current year also includes the gain on a sale of our investment in an equity affiliate of \$5. Operating margin decreased 110 bp from prior year, primarily due to lower volumes and the Indura acquisition.

Merchant Gases Equity Affiliates' Income

Merchant Gases equity affiliates' income of \$69.9 increased \$6.6, primarily as a result of improved performance in our Mexican equity affiliate.

Tonnage Gases

	Six Months Ended 31 March		\$ Change	Change
	2013	2012		
Sales	\$1,706.9	\$1,593.3	\$113.6	7%
Operating income	261.3	236.8	24.5	10%
Operating margin	15.3%	14.9%	—	40bp

Tonnage Gases Sales

	% Change from Prior Year
Underlying business	
Volume	4%
Energy and raw material cost pass-through	3%
Total Tonnage Gases Sales Change	7%

Volumes increased 4% as the impact of new plants was partially offset by our previous decision to exit the PUI business. Higher energy and raw material contractual cost pass-through to customers increased sales by 3%.

Tonnage Gases Operating Income and Margin

Operating income increased primarily due to higher volumes of \$19 and lower costs of \$5. Operating margin increased 40 bp from prior year, primarily due to higher volumes.

Electronics and Performance Materials

	Six Months Ended 31 March		\$ Change	Change
	2013	2012		
Sales	\$1,097.8	\$1,102.2	\$ (4.4)	— %
Operating income	138.8	163.6	(24.8)	(15)%
Operating margin	12.6%	14.8%	—	(220bp)

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Electronics and Performance Materials Sales

	% Change from Prior Year
Underlying business	
Volume	(3)%
Price	(1)%
Acquisitions	4%
Total Electronics and Performance Materials Sales Change	— %

Sales were flat as acquisitions of 4% were offset by lower volumes of 3% and lower pricing of 1%. Electronics sales decreased 1% as weaker materials volumes and equipment sales were partially offset by the acquisition of DA NanoMaterials. Performance Materials sales increased 1% as higher volumes of 4% were partially offset by lower pricing of 2% and unfavorable currency of 1%.

Electronics and Performance Materials Operating Income and Margin

Operating income of \$138.8 decreased 15%, or \$24.8, from higher operating costs of \$21, unfavorable price and mix impacts of \$7, and lower volumes of \$6, partially offset by acquisitions of \$6 and favorable currency of \$3. The higher operating costs primarily include an unfavorable impact associated with inventory revaluation resulting from lower raw material costs. Operating margin of 12.6% decreased 220 bp primarily due to the inventory adjustment.

Equipment and Energy

	Six Months Ended 31 March		\$ Change	Change
	2013	2012		
Sales	\$229.6	\$199.0	\$30.6	15%
Operating income	29.0	17.1	11.9	70%

Equipment and Energy Sales and Operating Income

Sales of \$229.6 and operating income of \$29.0 increased primarily from higher LNG project activity.

The sales backlog for the Equipment business at 31 March 2013 was \$326, compared to \$450 at 30 September 2012.

Other

Other operating loss was \$(6.1) compared to \$(7.8) in the prior year. The decrease in loss was primarily due to stranded costs from discontinued operations in the prior year partially offset by the year on year LIFO pool adjustment and an unfavorable currency impact. No other individual items were significant in comparison to the prior year.

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RECONCILIATION OF NON-GAAP FINANCIAL MEASURES

The discussion of second quarter and year to date results includes comparisons to non-GAAP financial measures. The presentation of non-GAAP measures is intended to enhance the usefulness of financial information by removing certain items which management does not believe to be indicative of on-going business trends and allow evaluation of our baseline performance on a comparable basis. Definitions of these non-GAAP measures may not be comparable to similar definitions used by other companies and are not a substitute for similar GAAP measures. Presented below are reconciliations of the reported GAAP results to the non-GAAP measures.

CONSOLIDATED RESULTS

	Q2	Q2	Q2	Q2	YTD	YTD	YTD	YTD
	Continuing Operations							
	Operating Income	Operating Margin ^(a)	Income	Diluted EPS	Operating Income	Operating Margin ^(a)	Income	Diluted EPS
2013 GAAP	\$389.7	15.7%	\$289.3	\$1.37	\$762.1	15.1%	\$566.2	\$2.67
2012 GAAP	287.9	12.3%	279.0	1.30	641.7	13.8%	504.9	2.36
Change GAAP	\$101.8	340bp	\$ 10.3	\$.07	\$120.4	130bp	\$ 61.3	\$.31
% Change GAAP	35%		4%	5%	19%		12%	13%
2013 GAAP	\$389.7	15.7%	\$289.3	\$1.37	\$762.1	15.1%	\$566.2	\$2.67
2013 Non-GAAP Measure	\$389.7	15.7%	\$289.3	\$1.37	\$762.1	15.1%	\$566.2	\$2.67
2012 GAAP	\$287.9	12.3%	\$279.0	\$1.30	\$641.7	13.8%	\$504.9	\$2.36
Cost reduction plan (tax impact \$26.2)	86.8	3.7%	60.6	.28	86.8	1.8%	60.6	.28
Spanish tax settlement	—	—	—	—	—	—	43.8	.20
Spanish tax ruling	—	—	(58.3)	(.27)	—	—	(58.3)	(.27)
2012 Non-GAAP Measure	\$374.7	16.0%	\$281.3	\$1.31	\$728.5	15.6%	\$551.0	\$2.57
Change Non-GAAP Measure	\$ 15.0	(30bp)	\$ 8.0	\$.06	\$ 33.6	(50bp)	\$ 15.2	\$.10
% Change Non-GAAP Measure	4%		3%	5%	5%		3%	4%

	Effective Tax Rate			
	Q2	Q2	YTD	YTD
	2013	2012	2013	2012
Income Tax Provision — GAAP	\$ 95.8	\$ 8.8	\$188.0	\$136.2
Income from continuing operations before taxes — GAAP	\$394.3	\$294.0	\$772.3	\$655.5
Effective Tax Rate — GAAP	24.3%	3.0%	24.3%	20.8%
Income Tax Provision — GAAP	\$ 95.8	\$ 8.8	\$188.0	\$136.2
Cost reduction plan tax impact	—	26.2	—	26.2
Spanish tax settlement	—	—	—	(43.8)
Spanish tax ruling	—	58.3	—	58.3
Income Tax Provision — Non-GAAP Measure	\$ 95.8	\$ 93.3	\$188.0	\$176.9
Income from continuing operations before taxes — GAAP	\$394.3	\$294.0	\$772.3	\$655.5
Cost reduction plan	—	86.8	—	86.8
Income from continuing operations before taxes — Non-GAAP Measure	\$394.3	\$380.8	\$772.3	\$742.3
Effective Tax Rate — Non-GAAP Measure	24.3%	24.5%	24.3%	23.8%

^(a) Operating Margin is calculated by dividing operating income by sales.

[Table of Contents](#)**PENSION BENEFITS**

Refer to Note 10, Retirement Benefits, to the consolidated financial statements for details on pension cost and cash contributions. For additional information on our pension benefits and associated accounting policies, refer to the Pension Benefits section of Management's Discussion and Analysis and Note 15, Retirement Benefits, to the consolidated financial statements in our 2012 Form 10-K.

LIQUIDITY AND CAPITAL RESOURCES

We have maintained a strong financial position through the first six months of 2013. We continue to have consistent access to commercial paper markets and cash flows from operations and financing activities are expected to meet liquidity needs for the foreseeable future.

As of 31 March 2013, we had \$388.4 of foreign cash and cash items compared to total cash and cash items of \$401.6. If the foreign cash and cash items are needed for operations in the U.S. or we otherwise elect to repatriate the funds, we may be required to accrue and pay U.S. taxes on a significant portion of these amounts. However, since we have significant current investment plans outside the U.S., it is our intent to permanently reinvest the majority of our foreign cash and cash items outside the U.S. Current financing alternatives do not require the repatriation of foreign funds.

The narrative below refers to the consolidated statements of cash flows included on page 6.

Operating Activities

For the first six months of 2013, cash provided by operating activities was \$598.2, primarily driven by income from continuing operations of \$566.2. Income from continuing operations is adjusted for non-cash items that include depreciation and amortization, undistributed earnings of equity affiliates, share-based compensation expense, and noncurrent capital lease receivables. Cash used in working capital of \$172.4 was driven by a decrease in payables and accrued liabilities and included payments related to the business restructuring and cost reduction plans of \$40.5 and a reduction in accrued interest of \$17.3.

We contributed \$238.9 to our pension plans, primarily for plans in the U.S. Management considers various factors when making pension funding decisions, including tax, cash flow, and regulatory implications.

For the first six months of 2012, cash provided by operating activities was \$731.2, primarily driven by income from continuing operations of \$504.9. Income from continuing operations reflected a non-cash tax benefit of \$58.3 as a result of a Spanish tax ruling. Cash used in working capital of \$112.3 was primarily from a reduction in accrued income taxes and payable and accrued liabilities which were partially offset by the provision for the cost reduction plan of \$86.8.

Investing Activities

For the first six months of 2013, cash used for investing activities was \$702.2, primarily driven by capital expenditures for plant and equipment of \$707.3.

For the first six months of 2012, cash used for investing activities was \$763.6, primarily driven by capital expenditures for plant and equipment of \$734.9.

Capital expenditures are detailed in the table below:

	Six Months Ended 31 March	
	2013	2012
Additions to plant and equipment	\$707.3	\$734.9
Acquisitions, less cash acquired	—	26.4
Investment in and advances to unconsolidated affiliates	(.2)	21.2
Capital expenditures on a GAAP basis	\$707.1	\$782.5
Capital lease expenditures ^(A)	126.7	76.0
Purchase of noncontrolling interests ^(A)	.3	6.3
Capital expenditures on a Non-GAAP basis	\$834.1	\$864.8

^(A) We utilize a non-GAAP measure in the computation of capital expenditures and include spending associated with facilities accounted for as capital leases and purchases of noncontrolling interests. Certain contracts associated with

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facilities that are built to provide product to a specific customer are required to be accounted for as leases, and such spending is reflected as a use of cash within cash provided by operating activities, if the arrangements qualifies as a capital lease. Additionally, the purchase of noncontrolling interests in a subsidiary is accounted for as an equity transaction and is reflected as a financing activity in the statement of cash flows. The presentation of this non-GAAP measure is intended to enhance the usefulness of information by providing a measure which our management uses internally to evaluate and manage our expenditures.

Financing Activities

For the first six months of 2013, cash provided by financing activities was \$42.7. Our borrowings (short- and long-term proceeds, net of repayments) were a net source of cash of \$716.4, driven primarily by an increase in commercial paper and short-term borrowings of \$604.4 and the issuance of a \$400.0 senior fixed-rate 2.75% note on 4 February 2013 which was partially offset by the repayment of a \$300.0 senior fixed-rate 4.15% note on 1 February 2013. Primary uses of cash were to purchase 5.7 million shares of treasury stock for \$461.6 and to pay dividends of \$268.9.

For the first six months of 2012, cash used for financing activities was \$73.1. Our borrowings (short- and long-term proceeds, net of repayments) were a net source of cash of \$201.3, driven primarily by the issuance of a \$400.0 senior fixed-rate 3.0% note on 3 November 2011 which was partially offset by repayments of commercial paper and short-term borrowings of \$190.2. Primary cash uses were to pay dividends of \$244.1 and to purchase subsidiary shares of CryoService Limited from noncontrolling interests for \$58.4.

Financing and Capital Structure

Total debt at 31 March 2013 and 30 September 2012, expressed as a percentage of the sum of total debt and total equity, was 47.9% and 44.4%, respectively. Total debt increased from \$5,291.9 at 30 September 2012 to \$5,981.2 at 31 March 2013.

During fiscal year 2011, we increased our total multicurrency facility to a total of \$2,170.0 maturing on 30 June 2015. Our only financial covenant is a leverage ratio (long-term debt divided by the sum of long-term debt plus equity) of no greater than 60%. As of 31 March 2013, no borrowings were outstanding under these commitments. Effective 11 June 2012, we entered into an offshore Chinese Renminbi (RMB) syndicated credit facility of RMB1,000.0 million (\$161.2), maturing in June 2015. There are RMB250.0 million (\$40.3) in outstanding borrowings under this commitment at 31 March 2013. Additional commitments totaling \$394.0 are maintained by our foreign subsidiaries, of which \$337.4 was borrowed and outstanding at 31 March 2013.

As of 31 December 2012, we are in compliance with all of the financial and other covenants under our debt agreements.

We have classified a 3.75% Eurobond for €300 (\$385) maturing in November 2013 as long-term debt because we have the ability to refinance the debt under our \$2,170.0 committed credit facility maturing in 2015. Our current intent is to refinance this debt via the U.S. or European public or private placement markets.

On 15 September 2011, the Board of Directors authorized the repurchase of up to \$1,000 of our outstanding common stock. During the first six months of fiscal year 2013, 5.7 million of our outstanding shares were purchased at a cost of \$461.6. At 31 March 2013, \$485.3 in share repurchase authorization remains.

CONTRACTUAL OBLIGATIONS

We are obligated to make future payments under various contracts such as debt agreements, lease agreements, unconditional purchase obligations, and other long-term obligations. Other than the \$400.0 senior fixed-rate 2.75% note issued on 4 February 2013, there have been no material changes to contractual obligations as reflected in the Management's Discussion and Analysis in our 2012 Form 10-K.

COMMITMENTS AND CONTINGENCIES

Refer to Note 16, Commitments and Contingencies, to the consolidated financial statements in our 2012 Form 10-K and for current updates on Litigation and Environmental matters refer to Note 11, Commitments and Contingencies, in this quarterly filing.

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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 our 2012 Form 10-K. We are not a primary beneficiary in any material variable interest entity. Our off-balance sheet arrangements are not reasonably likely to have a material impact on financial condition, changes in financial condition, and results of operations or liquidity.

RELATED PARTY TRANSACTIONS

Our principal related parties are equity affiliates operating in the industrial gas business. We 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.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Management's Discussion and Analysis of our 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.

Our significant accounting policies are described in Note 1, Major Accounting Policies, to the consolidated financial statements and the critical accounting policies and estimates are described in the Management's Discussion and Analysis included in our 2012 Form 10-K. Information concerning our implementation and impact of new accounting standards issued by the FASB is included in Note 2, New Accounting Guidance, to the consolidated financial statements. There have been no changes in accounting policy in the current period that had a material impact on our financial condition, change in financial condition, liquidity, or results of operations.

NEW ACCOUNTING GUIDANCE

See Note 2, New Accounting Guidance, to the consolidated financial statements for information concerning our implementation and impact of new accounting guidance.

FORWARD-LOOKING STATEMENTS

This report contains "forward-looking statements" within the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, including statements about management's expectations. These forward-looking statements are based on management's reasonable expectations and assumptions as of the date this report is filed. 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, deterioration in global or regional economic and business conditions; weakening demand for the Company's products and services; future financial and operating performance of major customers; unanticipated contract terminations or customer cancellations or postponement of projects and sales; the success of commercial negotiations; asset impairments or losses due to a decline in profitability of or demand for certain of the Company's products or businesses, or specific product or customer events; 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; successful development and market acceptance of new products and applications; the ability to attract, hire and retain qualified personnel in all regions of the world where the Company operates; the success of productivity programs; the success and impact of restructuring and cost reduction initiatives; achieving anticipated acquisition synergies; the timing, impact, and other uncertainties of future acquisitions or divestitures; significant fluctuations in interest rates and foreign currencies from that currently anticipated; the continued availability of capital funding sources for all of the Company's foreign operations; the impact of 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 guidance; the impact on the effective tax rate of changes in the mix of earnings among our U.S. and international operations; and other risk factors described in the Company's Form 10-K for its fiscal year ended 30 September 2012. 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.

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Item 3. Quantitative and Qualitative Disclosures About Market Risk

Information on our utilization of financial instruments and an analysis of the sensitivity of these instruments to selected changes in market rates and prices is included in our 2012 Form 10-K.

There were no material changes to the sensitivity analysis related to interest rate risk on the fixed portion of our debt portfolio since 30 September 2012.

There were no material changes to the sensitivity analysis related to the variable portion of our debt portfolio since 30 September 2012.

There were no material changes to market risk sensitivities for foreign exchange rate risk since 30 September 2012.

The net financial instrument position increased from a liability of \$4,925.1 at 30 September 2012 to a liability of \$4,942.3 at 31 March 2013. The increase is primarily due to the impact of a higher book value of long-term debt (excluding exchange rate impacts).

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). As of 31 March 2013 (the Evaluation Date), an evaluation of the effectiveness 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 end of the period covered by this report these disclosure controls and procedures were effective.

The Company acquired a controlling equity interest in the outstanding shares of Indura S.A. on 1 July 2012. Management is in the process of incorporating the acquired entity into its evaluation of internal control over financial reporting for the fiscal year ending 30 September 2013.

During the quarter ended on the Evaluation Date, other than the above, there has been 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.

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PART II. OTHER INFORMATION

Item 6. Exhibits.

Exhibits required by Item 601 of Regulation S-K

10.1	Amended and Restated Long-Term Incentive Plan of the Company effective 24 January 2013.
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. †
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema
101.CAL	XBRL Taxonomy Extension Calculation Linkbase
101.LAB	XBRL Taxonomy Extension Label Linkbase
101.PRE	XBRL Taxonomy Extension Presentation Linkbase
101.DEF	XBRL Taxonomy Extension Definition Linkbase

† The certification attached as Exhibit 32 that accompanies this Quarterly Report on Form 10-Q, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Air Products and Chemicals, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of this Form 10-Q, irrespective of any general incorporation language contained in such filing.

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.

Date: 25 April 2013

Air Products and Chemicals, Inc.

(Registrant)

By: _____ /s/ M. Scott Crocco
M. Scott Crocco
Senior Vice President and Chief Financial Officer

EXHIBIT INDEX

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