

PPG INDUSTRIES INC  
Form 10-Q  
July 29, 2013  
Table of Contents

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

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FORM 10-Q

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QUARTERLY REPORT UNDER SECTION 13 or 15(d) OF  
THE SECURITIES EXCHANGE ACT OF 1934  
For Quarter Ended June 30, 2013  
Commission File Number 1-1687

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PPG INDUSTRIES, INC.  
(Exact name of registrant as specified in its charter)

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Pennsylvania	25-0730780
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

One PPG Place, Pittsburgh, Pennsylvania	15272
(Address of principal executive offices)	(Zip Code)
(412) 434-3131	
(Registrant's telephone number, including area code)	

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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, 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	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>

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

As of June 30, 2013, 142,907,798 shares of the Registrant's common stock, par value \$1.66-2/3 per share, were outstanding.

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Table of Contents

PPG INDUSTRIES, INC. AND SUBSIDIARIES  
INDEX

	PAGE(S)
<u>Part I. Financial Information</u>	
Item 1. <u>Financial Statements (Unaudited):</u>	
<u>Condensed Consolidated Statement of Income</u>	<u>2</u>
<u>Condensed Consolidated Statement of Comprehensive Income</u>	<u>3</u>
<u>Condensed Consolidated Balance Sheet</u>	<u>4</u>
<u>Condensed Consolidated Statement of Cash Flows</u>	<u>5</u>
<u>Notes to Condensed Consolidated Financial Statements</u>	<u>6</u>
Item 2. <u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	<u>36</u>
Item 3. <u>Quantitative and Qualitative Disclosures About Market Risk</u>	<u>45</u>
Item 4. <u>Controls and Procedures</u>	<u>45</u>
<u>Part II. Other Information</u>	
Item 1. <u>Legal Proceedings</u>	<u>46</u>
Item 1A. <u>Risk Factors</u>	<u>46</u>
Item 2. <u>Unregistered Sales of Equity Securities and Use of Proceeds</u>	<u>46</u>
Item 6. <u>Exhibits</u>	<u>47</u>
Signature	<u>48</u>

Table of Contents

## PART I. FINANCIAL INFORMATION

## Item 1. Financial Statements

## PPG INDUSTRIES, INC. AND SUBSIDIARIES

## Condensed Consolidated Statement of Income (Unaudited)

(Millions, except per share amounts)

	Three Months		Six Months	
	Ended June 30		Ended June 30	
	2013	2012	2013	2012
Net sales	\$4,095	\$3,528	\$7,426	\$6,861
Cost of sales, exclusive of depreciation and amortization	2,343	2,066	4,290	4,012
Selling, general and administrative	981	792	1,778	1,615
Depreciation	90	76	171	155
Amortization (Note 7)	34	26	60	55
Research and development	124	113	239	223
Interest expense	47	50	100	101
Interest income	(9	) (9	) (19	) (19
Business restructuring (Note 8)	—	—	—	208
Asbestos settlement – net (Note 20)	3	3	6	6
Other charges (Note 20)	23	16	48	186
Other earnings	(30	) (31	) (54	) (60
Income before income taxes	489	426	807	379
Income tax expense (Note 12)	118	98	182	67
Income from continuing operations	371	328	625	312
Income from discontinued operations, net of income taxes (Note 5)	—	68	2,191	135
Net income attributable to the controlling and noncontrolling interests	371	396	2,816	447
Less: Net income attributable to noncontrolling interests	(30	) (34	) (65	) (72
Net income (attributable to PPG)	\$341	\$362	\$2,751	\$375
Amounts attributable to PPG:				
Income from continuing operations, net of tax	\$341	\$297	\$560	\$247
Income from discontinued operations, net of tax (Note 5)	—	65	2,191	128
Net income (attributable to PPG)	\$341	\$362	\$2,751	\$375
Earnings per common share (Note 11):				
Income from continuing operations, net of tax	\$2.38	\$1.94	\$3.86	\$1.61
Income from discontinued operations, net of tax	—	0.43	15.11	0.84
Net income (attributable to PPG)	\$2.38	\$2.37	\$18.97	\$2.45
Earnings per common share – assuming dilution (Note 11):				
Income from continuing operations, net of tax	\$2.35	\$1.92	\$3.82	\$1.60
Income from discontinued operations, net of tax	—	0.42	14.94	0.82
Net income (attributable to PPG)	\$2.35	\$2.34	\$18.76	\$2.42

Dividends per common share

\$0.61      \$0.59      \$1.20      \$1.16

The accompanying notes to the condensed consolidated financial statements are an integral part of this condensed consolidated statement.



Table of Contents

## PPG INDUSTRIES, INC. AND SUBSIDIARIES

## Condensed Consolidated Statement of Comprehensive Income (Unaudited)

(Millions)

	Three Months Ended June 30		Six Months Ended June 30	
	2013	2012	2013	2012
Net income attributable to the controlling and noncontrolling interests	\$371	\$396	\$2,816	\$447
Other comprehensive (loss) income, net of tax (Note 15):				
Pension and other postretirement benefits	17	50	198	58
Unrealized currency translation adjustment	(59	) (184	) (190	) (47
Unrealized losses on marketable securities	1	—	1	—
Net change – derivatives	2	(12	) 7	(6
Other comprehensive (loss) income, net of tax	\$(39	) \$(146	) \$16	\$5
Total comprehensive income	332	250	2,832	452
Less: amounts attributable to noncontrolling interests:				
Net income	(30	) (34	) (65	) (72
Unrealized currency translation adjustment	8	6	11	2
Comprehensive income attributable to PPG	\$310	\$222	\$2,778	\$382

The accompanying notes to the condensed consolidated financial statements are an integral part of this condensed consolidated statement.

Table of Contents

## PPG INDUSTRIES, INC. AND SUBSIDIARIES

## Condensed Consolidated Balance Sheet (Unaudited)

(Millions)

	June 30, 2013	December 31, 2012
Assets		
Current assets:		
Cash and cash equivalents	\$1,243	\$1,306
Short-term investments	538	1,087
Receivables (less allowance for doubtful accounts of \$81 and \$77)	3,223	2,813
Inventories (Note 6)	1,862	1,687
Other	844	822
Total current assets	7,710	7,715
Property (net of accumulated depreciation of \$4,636 and \$6,142)	2,637	2,888
Investments	402	422
Goodwill (Note 7)	2,937	2,761
Identifiable intangible assets - net (Note 7)	1,374	1,085
Other assets	1,006	1,007
Total	\$16,066	\$15,878
Liabilities and Shareholders' Equity		
Current liabilities:		
Short-term debt and current portion of long-term debt (Note 9)	\$24	\$642
Asbestos settlement (Note 20)	703	683
Accounts payable and accrued liabilities	3,343	3,061
Business restructuring (Note 8)	36	75
Total current liabilities	4,106	4,461
Long-term debt (Note 9)	3,355	3,368
Asbestos settlement (Note 20)	239	237
Deferred income taxes	224	231
Accrued pensions (Note 13)	914	1,057
Other postretirement benefits (Note 13)	1,116	1,287
Other liabilities	811	915
Total liabilities	10,765	11,556
Commitments and contingent liabilities (Note 20)		
Shareholders' equity (Note 14):		
Common stock	484	484
Additional paid-in capital	907	870
Retained earnings	12,450	9,871
Treasury stock, at cost	(7,160)	(5,496)
Accumulated other comprehensive loss	(1,639)	(1,666)
Total PPG shareholders' equity	5,042	4,063
Noncontrolling interests	259	259
Total shareholders' equity	5,301	4,322
Total	\$16,066	\$15,878

The accompanying notes to the condensed consolidated financial statements are an integral part of this condensed consolidated statement.



Table of Contents

## PPG INDUSTRIES, INC. AND SUBSIDIARIES

## Condensed Consolidated Statement of Cash Flows (Unaudited)

(Millions)

	Six Months Ended June 30	
	2013	2012
Operating activities:		
Net income attributable to controlling and noncontrolling interests	\$2,816	\$447
Less: Income from discontinued operations, net of income taxes (Note 5)	(2,191)	(135)
Income from continuing operations	625	312
Adjustments to reconcile net income to cash from operations:		
Depreciation and amortization	231	211
Pension expense (Note 13)	56	72
Canadian Pension Settlement Charge (Note 13)	18	—
Business restructuring (Note 8)	—	208
Environmental remediation charge (Note 20)	12	159
Equity affiliate earnings, net of dividends	7	(6)
Asbestos settlement, net of tax	4	4
Cash contributions to pension plans	(28)	(46)
Restructuring cash spending (Note 8)	(37)	(33)
Change in certain asset and liability accounts:		
(Increase) in receivables	(468)	(389)
(Increase) in inventories	(23)	(124)
(Increase) in other current assets	(40)	(22)
Increase in accounts payable and accrued liabilities	97	99
(Increase) in noncurrent assets	(25)	(4)
(Decrease) in noncurrent liabilities	(34)	(14)
Change in accrued tax and interest	31	(82)
Other	64	(23)
Cash from operating activities - Continuing Operations	490	322
Cash from operating activities - Discontinued Operations	4	112
Cash from operating activities	494	434
Investing activities:		
Capital spending:		
Additions to property and long-term investments	(155)	(123)
Business acquisitions, net of cash balances acquired (Note 4)	(975)	(52)
Proceeds from separation and merger of commodity chemicals business, net (Note 5)	940	19
Deposit of cash into escrow (Note 4)	(4)	(26)
Release of cash held in escrow	—	19
Purchase of short-term investments	(564)	(250)
Proceeds from maturity of short-term investments	1,174	25
Payments on cross currency swap contracts	(23)	(41)
Proceeds from termination of cross currency swap contracts	—	1
Reductions of other property and investments	2	21
Cash from (used for) investing activities - Continuing Operations	395	(407)
Cash used for investing activities - Discontinued Operations	(1)	(23)
Cash from (used for) investing activities	394	(430)
Financing activities:		
Debt:		
Net change in borrowings with maturities of three months or less	(18)	10



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Proceeds from other debt	1	—	
Repayment of long-term debt (Note 9)	(600	) (71	)
Repayment of acquired debt (Note 9)	—	(117	)
Repayment of other debt	(3	) (3	)
Other financing activities:			
Issuance of treasury stock (Note 14)	45	71	
Purchase of treasury stock (Note 14)	(140	) (92	)
Dividends paid (Note 14)	(171	) (177	)
Dividends paid on subsidiary common stock to noncontrolling interests (Note 14)	(38	) (39	)
Other	—	(12	)
Cash used for financing activities - Continuing Operations	(924	) (430	)
Cash used for financing activities - Discontinued Operations	—	(13	)
Cash used for financing activities	(924	) (443	)
Effect of currency exchange rate changes on cash and cash equivalents	(27	) (1	)
Net decrease in cash and cash equivalents	(63	) (440	)
Cash and cash equivalents, beginning of period	1,306	1,457	
Cash and cash equivalents, end of period	\$1,243	\$1,017	

The accompanying notes to the condensed consolidated financial statements are an integral part of this condensed consolidated statement.

Table of Contents

PPG INDUSTRIES, INC. AND SUBSIDIARIES

Notes to Condensed Consolidated Financial Statements (Unaudited)

1. Basis of Presentation

The condensed consolidated financial statements included herein are unaudited. In the opinion of management, these statements include all adjustments, consisting only of normal, recurring adjustments, necessary for a fair presentation of the financial position of PPG Industries, Inc. and its subsidiaries (the "Company" or "PPG") as of June 30, 2013, and the results of their operations for the three and six months ended June 30, 2013 and 2012 and their cash flows for the six months then ended. These condensed consolidated financial statements should be read in conjunction with the consolidated financial statements and notes included in PPG's Annual Report on Form 10-K for the year ended December 31, 2012.

The results of operations for the six months ended June 30, 2013 are not necessarily indicative of the results to be expected for the full year.

On January 28, 2013, PPG completed the separation of its commodity chemicals business and the merger of the subsidiary holding the PPG commodity chemicals business with a subsidiary of the Georgia Gulf Corporation ("Georgia Gulf"). The combined company formed by uniting Georgia Gulf with PPG's former commodity chemicals business is named Axiall Corporation ("Axiall"). PPG holds no ownership interest in Axiall. The Company concluded that the accounting requirements for reporting the results of operations and cash flows of its former commodity chemicals business as discontinued operations were met when its separation and merger was completed. The accompanying condensed consolidated statements of income for the three and six months ended June 30, 2012, the condensed consolidated statement of cash flows for the six months ended June 30, 2012, and the amounts in these notes to the condensed consolidated financial statements related to 2012 have been adjusted to reflect the presentation of the results of operations and cash flows of the former commodity chemicals business as discontinued operations. Refer to Note 5 for additional information relating to this transaction.

2. New Accounting Standards

On February 5, 2013, the Financial Accounting Standards Board issued an amendment to the disclosure requirements for reporting reclassifications out of accumulated other comprehensive income ("AOCI"). The new requirements were effective for the first interim or annual period beginning after December 15, 2012. The amendment requires companies to present information about reclassification adjustments from accumulated other comprehensive income to the income statement, including the income statement line items affected by the reclassification. The information must be presented in the financial statements in a single note or on the face of the financial statements. The new accounting guidance also requires the disclosure to be cross referenced to other financial statement disclosures for reclassification items that are not reclassified directly to net income in their entirety in the same reporting period. PPG adopted the new requirements in the first quarter of 2013; however, the adoption of this guidance did not have an effect on its consolidated financial position, results of operations or cash flows (see Note 15, "Accumulated Other Comprehensive Income").

3. Fair Value Measurement

The accounting guidance on fair value measurement establishes a hierarchy with three levels of inputs used to determine fair value. Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets and liabilities, considered to be the most reliable evidence of fair value, and should be used whenever available. Level 2 inputs are observable prices that are not quoted on active exchanges. Level 3 inputs are unobservable inputs used for measuring the fair value of assets or liabilities.

Table of Contents

Assets and liabilities reported at fair value on a recurring basis:

(Millions)

	Level 1	Level 2	Level 3	Total
At June 30, 2013				
Short-term investments:				
Commercial paper and certificates of deposit	\$—	\$125	\$—	\$125
Other current assets:				
Marketable equity securities	5	—	—	5
Foreign currency contracts <sup>(1)</sup>	—	11	—	11
Equity forward arrangement <sup>(1)</sup>	—	147	—	147
Investments:				
Marketable equity securities	63	—	—	63
Accounts payable and accrued liabilities:				
Foreign currency contracts <sup>(1)</sup>	—	2	—	2
Other liabilities:				
Cross currency swaps <sup>(1)</sup>	—	61	—	61
At December 31, 2012				
Short-term investments:				
Commercial paper and certificates of deposit	\$—	\$455	\$—	\$455
Other current assets:				
Marketable equity securities	5	—	—	5
Foreign currency contracts <sup>(1)</sup>	—	3	—	3
Equity forward arrangement <sup>(1)</sup>	—	130	—	130
Investments:				
Marketable equity securities	60	—	—	60
Accounts payable and accrued liabilities:				
Foreign currency contracts <sup>(1)</sup>	—	1	—	1
Other liabilities:				
Cross currency swaps <sup>(1)</sup>	—	95	—	95

(1) This balance is designated as a hedging instrument under U.S. GAAP.

Assets and liabilities reported at fair value on a nonrecurring basis:

As a result of finalizing a restructuring plan, as discussed in Note 8, "Business Restructuring", long-lived assets with a carrying amount of \$10 million were written-down to their fair value of \$7 million, resulting in a charge of \$3 million, which was included in the business restructuring expense reported in the six months ended June 30, 2012. These long-lived assets were valued using Level 3 inputs.

## 4. Acquisitions

During the six month period ended June 30, 2013, the Company completed the acquisition of two coatings businesses. The Company spent \$975 million on these acquisitions, net of cash acquired and including purchase price adjustments related to acquisitions that were completed prior to December 31, 2012.

On April 1, 2013, PPG finalized the acquisition of the North American architectural coatings business of Akzo Nobel N.V., Amsterdam, the Netherlands ("Legacy Akzo") for \$957 million, net of cash acquired of \$14 million, and including a preliminary working capital adjustment. The purchase price is subject to customary post closing adjustments. The acquisition further extends PPG's architectural coatings business in the United States, Canada and the Caribbean. With this acquisition, PPG has expanded its reach in all three major North American architectural coatings distribution channels, including home centers, independent paint dealers and company-owned paint stores. Since April 1, 2013, the results of this acquired business have been included in the results of the architectural coatings - Americas and Asia Pacific operating segment, within the Performance Coatings reportable segment.



Table of Contents

PPG is in the process of completing valuations of assets acquired and liabilities assumed. As such, the allocation of the purchase price is subject to revision. The following table summarizes the estimated fair value of assets acquired and liabilities assumed as reflected in the preliminary purchase price allocation for the Legacy Akzo acquisition.

	(Millions)	
Current assets	\$555	
Property, plant, and equipment	189	
Acquired trademarks with indefinite lives	174	
Identifiable intangible assets with finite lives	196	
Goodwill	257	
Other non-current assets	32	
Total assets	\$1,403	
Current liabilities	(335)	)
Accrued pensions	(29)	)
Other post-retirement benefits	(40)	)
Other long-term liabilities	(42)	)
Net assets	\$957	
Total purchase price, net of cash acquired	\$957	

The following information reflects the net sales of PPG for the six months ended June 30, 2013 and the three and six months ended June 30, 2012 on a pro forma basis as if the acquisition of Legacy Akzo had been completed on January 1, 2012.

Condensed Consolidated Pro Forma information (unaudited)

Millions	Three months ended June 30, 2012	Six months ended June 30, 2012	Six months ended June 30, 2013
Net sales	\$4,004	\$7,691	\$7,798

The pro forma impact on PPG's results of operations, including the pro forma effect of events that are directly attributable to the acquisition, factually supportable and expected to have a continuing impact on the combined results, was not significant. While calculating this impact, no cost savings or operating synergies that may result from the acquisition were included.

Also during the three and six months ended June 30, 2013, the Company completed the acquisition of certain assets of Deft Incorporated, a privately-owned specialty coatings company based in Irvine, Calif. The acquisition enhances the coatings capabilities of PPG's aerospace business. Deft products include structural primers and military topcoats for the North American aviation industry. In addition, Deft produces some architectural and general industrial coatings. During the six months ended June 30, 2012, the Company closed two acquisitions related to its coatings businesses. The total cost of these acquisitions was \$207 million, including debt assumed of \$122 million. These acquisitions also provide for contingent payments and escrowed holdbacks.

In early January 2012, PPG completed the purchase of European coatings company Dyrup A/S ("Dyrup"), based in Copenhagen, Denmark, from its owner, Monberg & Thorsen A/S, a public holding company, for \$44 million, of which \$26 million is currently being held in escrow. As part of the transaction, PPG assumed debt of \$120 million and acquired cash of \$6 million. Dyrup, a producer of architectural coatings and woodcare products, operates six manufacturing facilities throughout Europe, and its products are sold primarily in Denmark, France, Germany, Portugal, Poland, and Spain through professional and do-it-yourself channels.

Also in early January 2012, PPG completed the purchase of the coatings businesses of Colpisa Colombiana de Pinturas and its affiliate, Colpisa Ecuador ("Colpisa"), for \$38 million, of which \$2 million is held back as contingent payments at June 30, 2013. Colpisa manufactures and distributes coatings for automotive OEM, automotive refinish and industrial coatings customers in Colombia and Ecuador.



Table of Contents

The purchase price allocations related to the acquisitions made in 2012 resulted in an excess of purchase price over the fair value of the tangible and identifiable intangible assets acquired and liabilities assumed, which was recorded as an addition to "Goodwill".

The following table summarizes the fair value of assets acquired and liabilities assumed as reflected in the final purchase price allocations for the Dyrup and Colpisa acquisitions.

	(Millions)	
Cash	\$6	
Current assets	131	
Property, plant, and equipment	79	
Goodwill	24	
Other intangibles	26	
Other non-current assets	19	
Total assets	\$285	
Short-term debt	(110)	)
Current liabilities	(64)	)
Long-term debt	(10)	)
Other long-term liabilities	(19)	)
Net assets	\$82	
Total purchase price including cash in escrow and contingent payments	\$82	

#### 5. Separation and Merger Transaction

On January 28, 2013, the Company completed the previously announced separation of its commodity chemicals business and merger of its wholly-owned subsidiary, Eagle Spinco Inc., with a subsidiary of Georgia Gulf Corporation in a tax efficient Reverse Morris Trust transaction (the "Transaction"). Pursuant to the merger, Eagle Spinco, the entity holding PPG's former commodity chemicals business, is now a wholly-owned subsidiary of Georgia Gulf. The closing of the merger followed the expiration of the related exchange offer and the satisfaction of certain other conditions. The combined company formed by uniting Georgia Gulf with PPG's former commodity chemicals business is named Axiall Corporation ("Axiall"). PPG holds no ownership interest in Axiall. PPG received the necessary ruling from the Internal Revenue Service and as a result this Transaction was generally tax free to PPG and its shareholders. Under the terms of the exchange offer, 35,249,104 shares of Eagle Spinco common stock were available for distribution in exchange for shares of PPG common stock accepted in the offer. Following the merger, each share of Eagle Spinco common stock automatically converted into the right to receive one share of Axiall Corporation common stock. Accordingly, PPG shareholders who tendered their shares of PPG common stock as part of this offer received 3.2562 shares of Axiall common stock for each share of PPG common stock accepted for exchange. PPG was able to accept the maximum of 10,825,227 shares of PPG common stock for exchange in the offer, and thereby, reduced its outstanding shares by approximately 7 percent. The completion of this exchange offer was a non-cash financing transaction, which resulted in an increase in "Treasury stock" at a cost of \$1.562 billion based on the PPG closing stock price on January 25, 2013.

Under the terms of the Transaction, PPG received \$900 million of cash and 35.2 million shares of Axiall common stock (market value of \$1.8 billion on January 25, 2013) which was distributed to PPG shareholders by the exchange offer as described above. In addition, PPG received \$67 million in cash for a preliminary post-closing working capital adjustment under the terms of the Transaction agreements. The net assets transferred to Axiall included \$27 million of cash on the books of the business transferred. The cash consideration is subject to post-closing adjustments, including a final working capital adjustment, under the terms of the Transaction agreements. In the Transaction, PPG transferred environmental remediation liabilities, defined benefit pension plan assets and liabilities and other post-employment benefit liabilities related to the commodity chemicals business to Axiall.

During the first quarter of 2013, PPG recorded a gain on the Transaction reflecting the excess of the sum of the cash proceeds received and the cost (closing stock price on January 25, 2013) of the PPG shares tendered and accepted in the exchange for the 35.2 million shares of Axiall common stock over the net book value of the net assets of PPG's

former commodity chemicals business. The Transaction resulted in a net partial settlement loss of \$33 million associated with the spin out and termination of defined benefit pension liabilities and the transfer of other post-retirement benefit liabilities under the terms of the Transaction. The Company also incurred \$14 million of pretax expense, primarily for



Table of Contents

professional services related to the Transaction during the first six months of 2013 as well as approximately \$2 million of net expense related to certain retained obligations and post closing adjustments under the terms of the Transaction agreements. The net gain on the Transaction of \$2.2 billion includes these related losses and expenses.

The results of operations and cash flows of PPG's former commodity chemicals business for January 2013 and the net gain on the Transaction are reported as results from discontinued operations for the six months ending June 30, 2013.

In prior periods presented, the results of operations and cash flows of PPG's former commodity chemicals business have been reclassified from continuing operations and presented as results from discontinued operations.

PPG will provide Axiall with certain transition services for up to 24 months following the closing date of the Transaction. These services include logistics, purchasing, finance, information technology, human resources, tax and payroll processing.

Net sales and earnings from discontinued operations are presented in the table below for the three and six months ended June 30, 2013 and 2012:

Millions	Three Months Ended June 30		Six Months Ended June 30	
	2013	2012	2013	2012
Net sales	\$—	\$427	\$108	\$846
Income from operations	\$—	\$101	\$—	\$199
Net gain from separation and merger of commodity chemicals business	—	—	2,192	—
Income tax expense	—	(33)	(1)	(64)
Income from discontinued operations, net of tax	—	68	2,191	135
Less: Net income attributable to non-controlling interests, discontinued operations	—	3	—	7
Net income from discontinued operations (attributable to PPG)	\$—	\$65	\$2,191	\$128

Income from discontinued operations before income taxes for the three and six months ended June 30, 2012 is \$5 million and \$7 million lower, respectively than segment earnings for the PPG Commodity Chemicals segment previously reported for these periods. These differences are due to the inclusion of certain gains, losses and expenses associated with the chlor-alkali and derivatives business that were not reported in the PPG Commodity Chemicals segment earnings in accordance with the accounting guidance on segment reporting.

Table of Contents

The major classes of assets and liabilities of the commodity chemicals business included in the PPG balance sheet at December 31, 2012 were as follows:

	December 31,	
Millions	2012	
Cash	\$ 29	
Receivables	245	
Inventory	76	
Other current assets	23	
Property, plant, and equipment	380	
Goodwill	6	
Other non-current assets	29	
Total assets of the commodity chemicals business	\$ 788	
Accounts payable	(100)	)
Other current liabilities	(91)	)
Accrued pensions and other post-retirement benefits	(233)	)
Environmental contingencies	(31)	)
Other long-term liabilities	(59)	)
Noncontrolling interests	\$(18)	)
Net assets of the commodity chemicals business	\$ 256	

The total assets of the commodity chemicals business presented above are \$50 million higher than the assets of the PPG Commodity Chemicals segment reported at December 31, 2012 principally due to the inclusion of cash and deferred tax assets which were included in corporate assets for PPG segment reporting.

## 6. Inventories

Inventories as of June 30, 2013 and December 31, 2012 are detailed below:

	June 30, 2013	December 31,
	(Millions)	2012
Finished products	\$ 1,170	\$ 980
Work in process	157	144
Raw materials	466	443
Supplies	69	120
Total	\$ 1,862	\$ 1,687

Most U.S. inventories are valued using the last-in, first-out method. These inventories represented approximately 30% and 36% of total inventories at June 30, 2013 and December 31, 2012, respectively. If the first-in, first-out method of inventory valuation had been used, inventories would have been \$197 million and \$243 million higher as of June 30, 2013 and December 31, 2012, respectively.

Table of Contents

## 7. Goodwill and Other Identifiable Intangible Assets

The change in the carrying amount of goodwill attributable to each reportable segment for the six months ended June 30, 2013 was as follows:

	Performance Coatings	Industrial Coatings	Architectural Coatings – EMEA	Optical and Specialty Materials	Commodity Chemicals	Glass	Total
	(Millions)						
Balance, Dec. 31, 2012	\$1,173	\$512	\$970	\$48	\$6	\$52	\$2,761
Acquisitions	258	—	—	—	—	—	258
Separation of commodity chemicals (Note 5)	—	—	—	—	(6	) —	(6
Currency	(43	) (10	) (21	) —	—	(2	) (76
Balance, June 30, 2013	\$1,388	\$502	\$949	\$48	\$—	\$50	\$2,937

The carrying amount of acquired trademarks with indefinite lives as of June 30, 2013 and December 31, 2012 totaled \$490 million and \$324 million, respectively.

The Company's identifiable intangible assets with finite lives are being amortized over their estimated useful lives and are detailed below:

	June 30, 2013			December 31, 2012		
	Gross Carrying Amount	Accumulated Amortization	Net	Gross Carrying Amount	Accumulated Amortization	Net
	(Millions)					
Acquired technology	\$520	\$(350	) \$170	\$516	\$(342	) \$174
Customer-related intangibles	1,140	(496	) 644	1,010	(491	) 519
Tradenames	121	(55	) 66	120	(57	) 63
Other	30	(26	) 4	34	(29	) 5
Balance	\$1,811	\$(927	) \$884	\$1,680	\$(919	) \$761

Aggregate amortization expense related to these identifiable intangible assets for the three and six months ended June 30, 2013 was \$34 million and \$60 million, respectively, and for the three and six months ended June 30, 2012 was \$26 million and \$55 million, respectively. As of June 30, 2013, estimated future amortization expense of identifiable intangible assets is as follows: \$63 million for the remaining six months of 2013 and approximately \$120 million, \$120 million, \$101 million, \$93 million and \$91 million in 2014, 2015, 2016, 2017 and 2018, respectively.

## 8. Business Restructuring

On July 17, 2013, the Board of Directors of the Company approved a business restructuring plan that will result in a pre-tax charge of \$102 million in the third quarter results of operations. The approved actions are focused on achieving cost synergies related to the recent North American architectural coatings acquisition, including actions in the acquired business as well as in PPG's legacy architectural business. Additionally, smaller targeted actions were approved for businesses where market conditions remain very challenging, most notably protective and marine coatings and certain European businesses such as architectural coatings and fiber glass. The restructuring actions will impact about 1,200 employees.

The charge of \$102 million is comprised of employee severance and other cash costs of approximately \$97 million and asset write-offs and other non-cash items of approximately \$5 million. Of the approximate \$97 million of cash costs, about 55 percent is expected to be spent in 2013, with the remainder spent in 2014. The actions in the restructuring plan are expected to be completed by the end of 2014.

The Company will also incur additional expenses of approximately \$5 million that are directly associated with the restructuring actions but, based on accounting guidance related to restructuring costs, these costs will be charged to expense as incurred and therefore are not part of the restructuring charge. The Company expects to incur these additional, related expenses by the end of 2014.



Table of Contents

In March 2012, the Company finalized a restructuring plan to reduce its cost structure, primarily due to continuing weak economic conditions in Europe and in the commercial and residential construction markets in the U.S. and Europe. As part of this restructuring plan, PPG closed several laboratory, warehouse and distribution facilities and small production units and reduced staffing. The restructuring impacted a number of businesses globally, primarily the global architectural businesses and general and administrative functions in Europe.

As a result of this restructuring plan, in March 2012 the Company recorded a charge of \$208 million for business restructuring, including severance and other costs of \$160 million, asset write-offs of \$53 million, and a net pension curtailment gain of \$5 million. The Company also recognized additional costs directly associated with the restructuring actions for demolition, dismantling, relocation and training that were charged to expense as incurred, totaling \$5 million, most of which was incurred by December 31, 2012.

In the fourth quarter of 2012, adjustments of approximately \$12 million were recorded to reduce the restructuring reserve established in the first quarter of 2012 to reflect the estimated cost to complete these actions. Also in the fourth quarter of 2012, some additional restructuring actions were approved and charges of approximately \$12 million for the estimated cost of these actions were recorded. The additional actions increased the number of employees impacted by 273.

The following table summarizes the restructuring plan and the activity in the restructuring reserve during the six months ended June 30, 2013:

(Millions, except no. of employees)	Severance and Other Costs	Pension Curtailment (Gains)/Losses	Asset Write-offs	Total Reserve	Employees Impacted
Performance Coatings	\$55	\$ 1	\$12	\$68	867
Industrial Coatings	38	(1 )	8	45	394
Architectural Coatings - EMEA	61	(5 )	3	59	881
Optical & Specialty Materials	2	—	30	32	50
Glass	3	—	—	3	36
Corporate	1	—	—	1	4
Total	\$160	\$ (5 )	\$53	\$208	2,232
Activity to date	(120 )	5	(53 )	(168 )	(2,137 )
Currency Impact	(4 )	—	—	(4 )	—
Balance as of June 30, 2013	\$36	\$ —	\$—	\$36	95

In addition to the amounts related to the 2012 restructuring reserve, there were also cash payments of approximately \$3 million related to prior restructuring programs made during the six months ended June 30, 2012.

## 9. Debt

In March 2013, the Company repaid the \$600 million of 5.75% notes due March 15, 2013. During the six months ended June 30, 2012, the Company assumed \$120 million of debt in the Dyrup acquisition; repaid \$117 million of that debt, and repaid \$71 million of 6 7/8% notes upon their maturity.

## 10. Investments

Until January 28, 2013, PPG had a 50 percent ownership interest in RS Cogen, L.L.C., which toll produced electricity and steam that were primarily sold to PPG's former Lake Charles, La. commodity chemicals facility and its joint venture partner under take-or-pay contracts with terms that extended to 2022. PPG's purchases of electricity and steam from the joint venture for the years ended December 31, 2012, 2011 and 2010 were \$25 million, \$23 million and \$23 million, respectively. During the first quarter 2013, PPG's ownership interest in RS Cogen, L.L.C. and its future purchase obligations under the take-or-pay commitments were transferred with the assets of the commodity chemicals business in the Transaction (see Note 5).

Table of Contents

## 11. Earnings Per Common Share

The following table presents the earnings per common share calculations for the three and six months ended June 30, 2013 and 2012.

(Millions, except per share amounts)	Three Months Ended June 30		Six Months Ended June 30	
	2013	2012	2013	2012
Earnings per common share (attributable to PPG)				
Income from continuing operations, net of tax	\$ 341	\$ 297	\$ 560	\$ 247
Income from discontinued operations, net of tax	—	65	2,191	128
Net income (attributable to PPG)	\$ 341	\$ 362	\$ 2,751	\$ 375
Weighted average common shares outstanding	143.4	153.2	145.0	153.0
Earnings per common share (attributable to PPG):				
Income from continuing operations, net of tax	\$ 2.38	\$ 1.94	\$ 3.86	\$ 1.61
Income from discontinued operations, net of tax	—	0.43	15.11	0.84
Net income (attributable to PPG)	\$ 2.38	\$ 2.37	\$ 18.97	\$ 2.45
Earnings per common share - assuming dilution (attributable to PPG)				
Income from continuing operations, net of tax	\$ 341	\$ 297	\$ 560	\$ 247
Income from discontinued operations, net of tax	—	65	2,191	128
Net income (attributable to PPG)	\$ 341	\$ 362	\$ 2,751	\$ 375
Weighted average common shares outstanding	143.4	153.2	145.0	153.0
Effect of dilutive securities:				
Stock options	0.9	0.9	0.9	0.9
Other stock compensation plans	0.7	0.9	0.8	0.8
Potentially dilutive common shares	1.6	1.8	1.7	1.7
Adjusted weighted average common shares outstanding	145.0	155.0	146.7	154.7
Earnings per common share - assuming dilution (attributable to PPG):				
Income from continuing operations, net of tax	\$ 2.35	\$ 1.92	\$ 3.82	\$ 1.60
Income from discontinued operations, net of tax	—	0.42	14.94	0.82
Net income (attributable to PPG)	\$ 2.35	\$ 2.34	\$ 18.76	\$ 2.42

There were no antidilutive outstanding stock options for the three and six month periods ended June 30, 2013 and 2012.

Table of Contents

## 12. Income Taxes

The effective tax rate on pretax income from continuing operations for the six months ended June 30, 2013 was approximately 23 percent and 18 percent for the first six months of 2013 and 2012, respectively. The effective tax rate on pretax income from continuing operations for the six months ended June 30, 2013 includes tax benefits of \$4 million or 37.4 percent on environmental remediation; \$5 million or 26.7 percent on the settlement loss related to certain legacy pension plans and \$8 million or 28.5 percent on certain acquisition-related costs. The tax rate for the first six months of 2013 also includes an after-tax benefit of \$10 million for the retroactive impact of U.S. tax law changes that were enacted in early 2013 and that were not included in previously reported 2012 earnings. The effective tax rate on the remaining pre-tax earnings from continuing operations was approximately 24 percent resulting in tax expense for the period of \$209 million.

The effective tax rate on pretax earnings from continuing operations for the six months ended June 30, 2012 included tax benefits of \$60 million or 37.7 percent for estimated environmental remediation costs primarily at sites in New Jersey, \$45 million or 21.4 percent for business restructuring charges and \$2 million or 28.6 percent for acquisition-related expenses stemming from the acquisitions of Dyrup in Europe and Colpisa in Latin America. The effective tax rate on the remaining pre-tax earnings from continuing operations was approximately 23 percent resulting in tax expense of \$174 million.

The effective tax rate on pretax income from discontinued operations for the six months ended June 30, 2013 was approximately 0.1 percent. The effective tax rate for the six months ended June 30, 2013 includes tax benefits of \$1 million or 20 percent related to PPG costs associated with the Transaction. The separation and merger of PPG's commodity chemicals business with a subsidiary of Georgia Gulf (See Note 5) was generally tax free to PPG, as a result of this, the deductibility for U.S. federal tax purposes of the costs associated with the Transaction is expected to be limited. We currently estimate that approximately 20 percent of the associated costs incurred to date will be tax deductible. The effective tax rate on pretax income from discontinued operations for the six months ended June 30, 2012 was approximately 32 percent.

The Company files federal, state and local income tax returns in numerous domestic and foreign jurisdictions. In most tax jurisdictions, returns are subject to examination by the relevant tax authorities for a number of years after the returns have been filed. The Company is no longer subject to examinations by tax authorities in any major tax jurisdiction for years before 2003. Additionally, the Internal Revenue Service ("IRS") has completed its examination of the Company's U.S. federal income tax returns filed for years through 2010. The IRS is currently conducting its examination of the Company's U.S. federal income tax return for 2011, which is expected to be completed during 2014.

## 13. Pensions and Other Postretirement Benefits

Net periodic benefit cost is included in "Cost of sales, exclusive of depreciation and amortization", "Selling, general and administrative" and "Research and development" in the accompanying condensed consolidated statement of income. The net periodic benefit costs for the three and six months ended June 30, 2013 and 2012 were as follows:

	Pensions			
	Three Months Ended June 30		Six Months Ended June 30	
	2013	2012	2013	2012
(Millions)				
Service cost	\$14	\$13	\$29	\$28
Interest cost	54	56	106	112
Expected return on plan assets	(75)	(67)	(139)	(134)
Amortization of actuarial losses	32	34	60	66
Settlement losses	—	—	18	—
Net periodic pension cost	\$25	\$36	\$74	\$72

PPG does not have a mandatory contribution to make to its U.S. defined benefit pension plans in 2013 and does not plan to make a voluntary contribution in 2013. PPG expects to make mandatory contributions to its non-U.S. plans in 2013 of approximately \$77 million, of which \$28 million was made as of June 30, 2013.





Table of Contents

The net periodic other postretirement benefit costs for the three and six months ended June 30, 2013 and 2012 were as follows:

	Other Postretirement Benefits			
	Three Months		Six Months	
	Ended June 30		Ended June 30	
	2013	2012	2013	2012
	(Millions)			
Service cost	\$5	\$4	\$10	\$9
Interest cost	13	12	25	26
Amortization of prior service credit	(3)	(3)	(5)	(4)
Amortization of actuarial losses	7	6	14	15
Net periodic other postretirement benefit cost	\$22	\$19	\$44	\$46

#### Separation and Merger

On January 28, 2013, PPG completed the separation of its commodity chemicals business and the merger of the subsidiary holding the PPG commodity chemicals business with a subsidiary of Georgia Gulf (see Note 5). PPG transferred the defined benefit pension plan and other postretirement benefit liabilities for the affected employees in the U.S., Canada, and Taiwan resulting in a net partial settlement loss of \$33 million that was recorded in the first quarter of 2013 in "Income from discontinued operations". This Transaction lowered the projected benefit obligation of PPG's defined benefit pension plans by approximately \$550 million and the accumulated benefit obligation of the other postretirement benefit plans by approximately \$165 million. PPG also transferred to Georgia Gulf related pension assets of approximately \$480 million. The pension asset transfer will be adjusted when the amount required to be transferred under ERISA is finalized. Pension and other postretirement benefit expense of \$2 million and \$13 million is recorded in "Income from discontinued operations" for the six-month periods ended June 30, 2013 and 2012, respectively. These amounts have been excluded from the tables presented above.

#### Legacy Canadian settlement charges

As part of a restructuring plan announced by PPG in September 2008, PPG closed its glass manufacturing facility in Owen Sound, Ont., Canada. Under Canadian pension regulations, this plant closure resulted in a full windup of the pension plan for the former hourly employees of this plant. The settlement charge is recorded following the approval of the windup by the Canadian pension authorities and when all of the related cash contributions are completed. Cash contributions are made to plans based on estimated cash requirements and must be completed by the end of the five year period from the effective date of the windup. The full windup of the Owen Sound plan was previously approved by the Canadian pension authorities and the Company made the final contributions to this plan in the first quarter of 2013. As a result, the Company recorded a settlement charge in the amount of \$16 million related to the net unrecognized actuarial losses associated with the pension plan. There will be additional windup charges of \$15-\$20 million related to this plant closure as well as another Canadian location closed by PPG in 2009, which are expected to be incurred in 2015 and 2016. The expected cash contributions related to these windups total \$5-\$10 million from 2013 to 2016.

PPG has also retained certain liabilities for pension and postretirement benefits earned for service up to the 2008 date of sale of its former automotive glass and service business for both active and retired employees as of the divestiture date. In 2009, the acquirer ceased production at the Oshawa, Ont., Canada plant and closed its Hawkesbury, Canada plant in 2010. Under Canadian pension regulations, these plant closures resulted in five partial windups of defined benefit pension plans covering former employees of these plants in Canada. One of the partial windups was previously approved by the Canadian pension authorities and final cash contributions were made by PPG in the first quarter of 2013. As such, the Company recorded a settlement charge in the amount of \$2 million related to the net unrecognized actuarial losses associated with this plan. The proposed effective dates of the remaining partial windups are in 2009 and 2010. Cash contributions are currently being made to the plans based on estimated cash requirements and must be completed by the end of the five year period following the proposed effective dates of the partial windups. The settlement charges will be recorded following the approval of the partial windups by the Canadian pension authorities.

and when the related cash contributions are completed. The remaining partial windups will result in additional settlement charges against PPG earnings, which are expected to be incurred in 2014-2015, of approximately \$40-\$50 million and require cash contributions to the plans totaling approximately \$5-\$10 million.

Table of Contents

## 14. Shareholders' Equity

The following tables present the change in total shareholders' equity for the six months ended June 30, 2013 and 2012, respectively:

(Millions)	Total PPG Shareholders' Equity	Non- controlling Interests	Total
Balance, January 1, 2013	\$4,063	\$259	\$4,322
Net income	2,751	65	2,816
Other comprehensive income, net of tax	27	(11)	16
Cash dividends	(171)	—	(171)
Issuance of treasury stock	60	—	60
Purchase of treasury stock	(140)	—	(140)
Stock-based compensation activity	14	—	14
Increase in treasury stock (Note 5)	(1,562)	—	(1,562)
Reduction in non-controlling interests (Note 5)	—	(16)	(16)
Dividends paid on subsidiary common stock to noncontrolling interests	—	(38)	(38)
Balance, June 30, 2013	\$5,042	\$259	\$5,301

  

(Millions)	Total PPG Shareholders' Equity	Non- controlling Interests	Total
Balance, January 1, 2012	\$3,249	\$197	\$3,446
Net income	375	72	447
Other comprehensive income, net of tax	7	(2)	5
Cash dividends	(177)	—	(177)
Issuance of treasury stock	80	—	80
Purchase of treasury stock	(92)	—	(92)
Stock-based compensation activity	19	—	19
Dividends paid on subsidiary common stock to noncontrolling interests (a)	—	(52)	(52)
Other changes in noncontrolling interests	—	(1)	(1)
Balance, June 30, 2012	\$3,461	\$214	\$3,675

(a) - \$13 million of this amount relates to noncontrolling interests of the commodity chemicals business separated in January 2013 (see Note 5). As such, this amount is presented in the condensed consolidated statement of cash flows within "Cash used for financing activities - Discontinued Operations".

Table of Contents

## 15. Accumulated Other Comprehensive Income

(Millions)	Unrealized Currency Translation Adjustments	Pension and Other Postretirement Benefit Adjustments	Unrealized Gain (Loss) on Marketable Securities	Unrealized Gain (Loss) on Derivatives	Accumulated Other Comprehensive (Loss) Income
Balance, December 31, 2012	\$6	\$(1,597 )	\$—	\$(75 )	\$(1,666 )
Current year deferrals to AOCI	(179 )	121	1	13	(44 )
Separation and Merger Transaction	—	33 (3)	—	4 (3)	37
Reclassifications from AOCI to Net income	—	44 (1)	—	(10 )(2)	34
Net Change	(179 )	198	1	7	27
Balance, June 30, 2013	\$(173)	\$(1,399 )	\$1	\$(68 )	\$(1,639 )

(1) - Reclassifications from AOCI are included in the computation of net periodic benefit costs (See Note 13, "Pension and Other Postretirement Benefits").

(2) - Reclassifications from AOCI are included in the gain or loss recognized on cash flow hedges (See Note 17, "Derivative Financial Instruments and Hedge Activities").

(3) Amounts in AOCI related to the commodity chemicals business were removed from the balance sheet in connection with recording the gain on the separation and merger of this business (See Note 5).

With the exception of unrealized currency translation adjustments, all other components of accumulated other comprehensive loss are reported net of tax. Unrealized currency translation adjustments related to translation of foreign denominated balance sheets are not presented net of tax given that no deferred U.S. income taxes have been provided on undistributed earnings of non-U.S. subsidiaries because they are deemed to be reinvested for an indefinite period of time. The tax cost related to unrealized currency translation adjustments other than translation of foreign denominated balance sheets for the period ended June 30, 2013 was \$7 million.

The tax cost related to the adjustment for pension and other postretirement benefits for the period ended June 30, 2013 was approximately \$75 million. The cumulative tax benefit related to the adjustment for pension and other postretirement benefits at June 30, 2013 and December 31, 2012 was approximately \$885 million and \$960 million, respectively. The tax cost related to the change in the unrealized gain on derivatives for the period ended June 30, 2013 was \$5 million.

## 16. Financial Instruments, Excluding Derivative Financial Instruments

Included in PPG's financial instrument portfolio are cash and cash equivalents, short-term investments, cash held in escrow, marketable equity securities, company-owned life insurance and short and long-term debt instruments. The fair values of these financial instruments approximated their carrying values at June 30, 2013 and December 31, 2012, in the aggregate, except for long-term debt.

Long-term debt (excluding capital lease obligations) had carrying and fair values totaling \$3,327 million and \$3,693 million, respectively, as of June 30, 2013. Long-term debt (excluding capital lease obligations) had carrying and fair values totaling \$3,939 million and \$4,484 million, respectively, as of December 31, 2012. The fair values of the debt instruments were based on discounted cash flows and interest rates then currently available to the Company for instruments of the same remaining maturities. The fair value of debt is measured using level 2 inputs.

Table of Contents

## 17. Derivative Financial Instruments and Hedge Activities

The Company recognizes all derivative financial instruments as either assets or liabilities at fair value on the balance sheet. The accounting for changes in the fair value of a derivative depends on the use of the instrument. To the extent that a derivative is effective as a hedge of an exposure to future changes in cash flows, the change in fair value of the instrument is deferred in accumulated other comprehensive (loss) income ("AOCI"). Any portion considered to be ineffective is reported in earnings immediately, including changes in value related to credit risk. To the extent that a derivative is effective as a hedge of an exposure to future changes in fair value, the change in the derivative's fair value is offset in the condensed consolidated statement of income by the change in fair value of the item being hedged. To the extent that a derivative or a financial instrument is effective as a hedge of a net investment in a foreign operation, the change in the derivative's fair value or the financial instrument's carrying value is deferred as an unrealized currency translation adjustment in AOCI.

PPG's policies do not permit speculative use of derivative financial instruments. PPG uses forward currency and option contracts as hedges against its exposure to variability in exchange rates on short-term intercompany transactions, unrecognized firm sales commitments and cash flows denominated in foreign currencies. PPG uses foreign denominated debt and cross currency swap contracts to hedge net investments in foreign operations. PPG also uses an equity forward arrangement to hedge the Company's exposure to changes in the fair value of PPG stock that is to be contributed to the asbestos settlement trust as discussed in Note 20, "Commitments and Contingent Liabilities."

Interest rate swaps are used from time to time to manage the Company's exposure to changing interest rates as such rate changes affected the fair value of fixed rate borrowings. No interest rate swaps were outstanding in the three and six-month periods ended June 30, 2013 and 2012. Forward starting swaps were used in the first six months of 2012 to lock-in a fixed interest rate, to which was added a corporate spread, related to future long-term debt refinancings. PPG also used derivative instruments to manage its exposure to fluctuating natural gas prices through the use of natural gas swap contracts in the three and six-month periods in 2012.

PPG enters into derivative financial instruments with high credit quality counterparties and diversifies its positions among such counterparties in order to reduce its exposure to credit losses. The Company did not realize a credit loss on derivatives during the three or six-month periods ended June 30, 2013 or 2012.

PPG centrally manages certain of its foreign currency transaction risks to minimize the volatility in cash flows caused by currency fluctuations. Decisions on whether to use derivative financial instruments to hedge the net transaction exposures related to all regions of the world are made based on the amount of those exposures by currency and, in certain situations, an assessment of the near-term outlook for certain currencies. This net hedging strategy does not qualify for hedge accounting; therefore, the change in the fair value of these instruments is recorded in "Other charges" in the accompanying condensed consolidated statement of income in the period of change. As of June 30, 2013 and December 31, 2012, the fair value of these contracts was an asset of \$0.3 million and an asset of less than \$0.1 million, respectively.

PPG designates forward currency contracts as hedges against the Company's exposure to variability in exchange rates on short-term intercompany borrowings and transactions denominated in foreign currencies. To the extent effective, changes in the fair value of these instruments are deferred in AOCI and subsequently reclassified to "Other charges" in the accompanying condensed consolidated statement of income as foreign exchange gains and losses are recognized on the related intercompany transactions. The portion of the change in fair value considered to be ineffective is recognized immediately in "Other charges" in the accompanying condensed consolidated statement of income. All amounts related to these instruments deferred in AOCI as of June 30, 2013 will be reclassified to earnings within the next twelve months. As of June 30, 2013 and December 31, 2012, the fair value of these instruments was a net asset of \$9 million and a net liability of \$1 million, respectively.

PPG designates forward currency contracts as hedges against the Company's exposure to future changes in fair value related to certain firm sales commitments denominated in foreign currencies. These contracts are designated as fair value hedges. As such, they are reported at fair value in the Company's condensed consolidated balance sheet, with changes in the fair value of these contracts and that of the related firm sales commitments reported in net sales. As of June 30, 2013, these contracts converted \$33.5 million to the South Korean won over the 24 month period ending June 30, 2015. As of December 31, 2012, these contracts converted \$56 million to the South Korean won over the 21

month period ending September 30, 2014. As of June 30, 2013 and December 31, 2012, the fair value of the contracts was a net liability of \$0.6 million and a net asset of \$3 million, respectively.

Table of Contents

As of January 1, 2012, PPG had nine U.S. dollar to euro cross currency swap contracts with a total notional amount of \$1.16 billion, of which \$600 million were to settle on March 15, 2013 and \$560 million were to settle on March 15, 2018. In June 2012, \$600 million of swaps, with a settlement date of March 15, 2013, were settled with PPG receiving \$1 million in cash. On settlement of the remaining outstanding contracts, PPG will receive \$560 million U.S. dollars and pay euros to the counterparties to the contracts. During the term of these contracts, PPG will receive semiannual payments in March and September of each year based on U.S. dollar, long-term fixed interest rates, and PPG will make annual payments in March of each year to the counterparties based on euro, long-term fixed interest rates. The Company designated all of the cross currency swaps as hedges of its net investment in certain European businesses and, as a result, the mark to fair value adjustments of the swaps outstanding have been and will be recorded as a component of AOCI, and the cash flow impact of these swaps has been and will be classified as investing activities in the condensed consolidated statement of cash flows. As of June 30, 2013 and December 31, 2012, the fair value of these contracts was a net liability of \$61 million and \$95 million, respectively.

As of June 30, 2013 and December 31, 2012, PPG designated €300 million euro-denominated borrowings as a hedge of a portion of PPG's net investment in the Company's European operations. As a result, the change in book value from adjusting these foreign denominated borrowings to current spot rates was deferred in AOCI.

As of June 30, 2013 and December 31, 2012 the Company had accumulated pretax unrealized translation gains in AOCI of \$26 million and \$9 million, respectively, which related to both the euro-denominated borrowings and the cross currency swaps that have been designated as hedges of net investments.

Deferrals in AOCI related to hedges of the Company's net investments in European operations would be reclassified and recognized in earnings upon a substantial liquidation, sale or partial sale of such investments or upon impairment of all or a portion of such investments.

The Company manages its interest rate risk by balancing its exposure to fixed and variable rates while attempting to minimize its interest costs. Generally, the Company maintains variable interest rate debt at a level of approximately 25 percent to 50 percent of total borrowings. PPG principally manages its fixed and variable interest rate risk by retiring and issuing debt from time to time and through the use of interest rate swaps. During the year ended December 31, 2012, PPG settled all outstanding interest rate swaps, which had converted \$445 million of fixed rate debt to variable rate debt, and received \$29 million from such settlements. When outstanding, the swaps were designated as fair value hedges. As such, they were carried at fair value. Changes in the fair value of these swaps and that of the related debt were recorded in "Interest expense" in the accompanying condensed consolidated statement of income.

The Company entered into forward starting swaps in 2009 and in the second quarter of 2010 to effectively lock-in a fixed interest rate for future debt refinancings with an anticipated term of 10 years based on the ten year swap rate, to which was added a corporate spread. The notional amount of the swaps outstanding totaled \$400 million, which were settled on July 30, 2012, resulting in a cash payment of \$121 million. To the extent that the swaps were effective, changes in the fair values of the swap contracts were deferred in AOCI. The portion of the change in fair value considered to be ineffective was recognized immediately in Other charges in the accompanying condensed consolidated statement of income. As of June 30, 2013, the amount deferred in AOCI was \$110 million. This balance will be amortized to interest expense over the remaining term of the ten-year debt that was issued on July 31, 2012. Derivative instruments have been used to manage the Company's exposure to fluctuating natural gas prices through the use of natural gas swap contracts. There were no natural gas swap contracts outstanding as of June 30, 2013 as the price of natural gas has declined for the past four years and is not expected to be as volatile over the next 12 to 18 months as continued development of shale oil and gas reserves will maintain downward pressure on the price of natural gas. In addition, the separation and merger of the former commodity chemicals business (see Note 5) reduces PPG's annual natural gas usage by approximately 70 percent. To the extent that these instruments were effective in hedging PPG's exposure to price changes, changes in the fair values of the hedge contracts were deferred in AOCI and reclassified to "Cost of sales, exclusive of depreciation and amortization" as the natural gas was purchased. The amount of ineffectiveness was reported in "Other charges" in the accompanying condensed consolidated statement of income immediately. There was no balance in AOCI as of June 30, 2013 or December 31, 2012 related to the contracts.

PPG entered into a one-year renewable equity forward arrangement with a bank in 2003 in order to mitigate the impact on PPG earnings of changes in the fair value of 1,388,889 shares of PPG stock that are to be contributed to the asbestos settlement trust as discussed in Note 20, "Commitments and Contingent Liabilities." This instrument, which has been renewed, is recorded at fair value as an asset or liability and changes in the fair value of this instrument are reflected in the "Asbestos settlement – net" caption of the accompanying condensed consolidated statement of income.



## Table of Contents

The total principal amount payable for these shares is \$62 million. PPG will pay to the bank interest based on the principal amount and the bank will pay to PPG an amount equal to the dividends paid on these shares during the period this instrument is outstanding. The difference between the principal amount and any amounts related to unpaid interest or dividends and the current market price for these shares, adjusted for credit risk, represents the fair value of the instrument as well as the amount that PPG would pay or receive if the bank chose to net settle the instrument. Alternatively, the bank may, at its option, require PPG to purchase the shares covered by the arrangement at the principal amount adjusted for unpaid interest and dividends as of the date of settlement. As of June 30, 2013 and December 31, 2012, the fair value of this contract was an asset of \$147 million and \$130 million, respectively. No derivative instrument initially designated as a hedge instrument was undesignated or discontinued as a hedging instrument during the three and six-month periods ended June 30, 2013 or 2012. Nor were any amounts deferred in AOCI reclassified to earnings during these periods related to hedges of anticipated transactions that were no longer expected to occur.

All of the outstanding derivative instruments are subject to accelerated settlement in the event of PPG's failure to meet its debt obligations or payment obligations under the terms of the instruments' contractual provisions. In addition, should the Company be acquired and its payment obligations under the derivative instruments' contractual arrangements not be assumed by the acquirer, or should PPG enter into bankruptcy, receivership or reorganization proceedings, the instruments would also be subject to accelerated settlement.

For the first six months of 2013, "Other comprehensive income" included a pretax net gain due to cash flow hedge derivatives of \$12 million (\$7 million, net of tax). This net gain was comprised of realized gains of \$10 million and unrealized gains of \$22 million. The realized gains related to foreign currency contracts offset in part by the amortization of a portion of the balance deferred related to forward starting swaps. In addition, amounts deferred in AOCI related to the commodity chemicals business were removed from the balance sheet in connection with recording the gain on the separation and merger of this business. The unrealized gains related to the change in fair value of the foreign currency contracts.

For the first six months of 2012, "Other comprehensive income" included a pretax net loss due to cash flow hedge derivatives of \$9 million (\$6 million, net of tax). This net loss was comprised of realized losses of \$23 million and unrealized losses of \$32 million. The realized losses related to the settlement during the period of natural gas contracts, interest rate swaps owned by RS Cogen (Refer to Note 10, "Investments" for a discussion regarding this equity method investment), and foreign currency contracts. The unrealized losses related to the change in fair value of forward starting swaps, natural gas and foreign currency contracts.

Refer to Note 3, "Fair Value Measurement," for additional disclosures related to the Company's derivative instruments outstanding as of June 30, 2013 and December 31, 2012.

Table of Contents

The following table provides details for the six month period ended June 30, 2013 related to fair value, cash flow and net investment hedges by type of derivative and financial instrument. All amounts are pretax:

(Millions)	Gain (Loss)	Gain (Loss) Recognized	
Hedge Type	Deferred in OCI	Amount	Caption
Fair Value			
Interest rate swaps	Not applicable	\$6	Interest expense
Foreign currency contracts (a)	Not applicable	—	Sales
Equity forward arrangements (b)	Not applicable	16	Asbestos - net
Total Fair Value		\$22	
Cash Flow			
Forward starting swaps	—	(6	) Interest expense
Foreign currency contracts (c)	22	23	Other charges
Total Cash Flow	\$22	\$17	
Net Investment			
Cross currency swaps (d)	\$12	\$—	
Foreign denominated debt	5	Not applicable	
Total Net Investment	\$17		
Non-Hedge			
Foreign currency contracts	Not applicable	\$1	Other charges
Total Non-Hedge		\$1	

(a) The ineffective portion related to each of these items was not greater than \$0.2 million of income.

(b) The ineffective portion related to this item was less than \$0.1 million of expense.

(c) The ineffective portion related to this item was \$4 million of expense.

(d) The ineffective portion related to this item was \$1 million of expense.

The following tables provide details for the six month period ended June 30, 2012 related to fair value, cash flow and net investment hedges by type of financial instrument. All amounts are pretax:

(Millions)	Gain (Loss)	Gain (Loss) Recognized	
Hedge Type	Deferred in OCI	Amount	Caption
Fair Value			
Interest rate swaps (a)	Not applicable	\$4	Interest expense
Foreign currency contracts (a)	Not applicable	—	Sales
Equity forward arrangements (a)	Not applicable	33	Asbestos - net
Total Fair Value		\$37	
Cash Flow			
Natural gas swaps (a)	\$(3	) \$(10	) Cost of sales
Interest rate swaps of an equity method investee	—	(1	) Other earnings
Forward starting swaps (a)	(17	) —	
Foreign currency contracts (b)	(12	) (12	) Other charges
Total Cash Flow	\$(32	) \$(23	)
Net Investment			
Cross currency swaps (c)	\$41	\$—	
Foreign denominated debt	9	Not applicable	
Total Net Investment	\$50		
Non-Hedge			
Foreign currency contracts	Not applicable	\$—	Other charges
Total Non-Hedge		\$—	

(a) The ineffective portion related to each of these items was not greater than \$0.3 million of income or expense.

- (b) The ineffective portion related to this item was \$4 million of expense.
- (c) The ineffective portion related to this item was \$1 million of expense.

Table of Contents

## 18. Cash Flow Information

Cash payments for interest were \$114 million for both the six months ended June 30, 2013 and 2012. Cash payments for income taxes were \$154 million and \$225 million for the six months ended June 30, 2013 and 2012, respectively.

## 19. Stock-Based Compensation

The Company's stock-based compensation includes stock options, restricted stock units ("RSUs") and grants of contingent shares that are earned based on achieving targeted levels of total shareholder return. All current grants of stock options, RSUs and contingent shares are made under the PPG Industries, Inc. Amended and Restated Omnibus Incentive Plan (the "PPG Amended Omnibus Plan"), which was amended and restated effective April 21, 2011. Shares available for future grants under the PPG Amended Omnibus Plan were 7.4 million as of June 30, 2013.

Total stock-based compensation expense was \$17 million and \$32 million for the three and six months ended June 30, 2013, respectively, and \$17 million and \$31 million for the three and six months ended June 30, 2012, respectively.

The total income tax benefit recognized in the accompanying condensed consolidated statement of income related to the stock-based compensation was \$6 million and \$11 million for the three and six months ended June 30, 2013, respectively, and \$6 million and \$11 million for the three and six months ended June 30, 2012, respectively.

## Stock Options

PPG has outstanding stock option awards that have been granted under two stock option plans: the PPG Industries, Inc. Stock Plan ("PPG Stock Plan") and the PPG Amended Omnibus Plan. Under the PPG Amended Omnibus Plan and the PPG Stock Plan, certain employees of the Company have been granted options to purchase shares of common stock at prices equal to the fair market value of the shares on the date the options were granted. The options are generally exercisable beginning from six to 48 months after being granted and have a maximum term of 10 years. Upon exercise of a stock option, shares of Company stock are issued from treasury stock. The PPG Stock Plan includes a restored option provision for options originally granted prior to January 1, 2003 that allows an optionee to exercise options and satisfy the option price by certifying ownership of mature shares of PPG common stock with a market value equal to the option cost.

In the first half of 2013, PPG granted 519,299 stock options under the PPG Amended Omnibus Plan at a weighted average exercise price of \$131.55 per share. The weighted average fair value of options granted was \$27.36 per share. In the first half of 2012, PPG granted 779,498 stock options under the PPG Omnibus Plan at a weighted average exercise price of \$89.94 per share. The weighted average fair value of options granted was \$17.90 per share.

The fair value of stock options issued to employees is measured on the date of grant and is recognized as expense over the requisite service period. PPG estimates the fair value of stock options using the Black-Scholes option pricing model. The risk-free interest rate is determined by using the U.S. Treasury yield curve at the date of the grant and using a maturity equal to the expected life of the option. The expected life of options is calculated using the average of the vesting term and the maximum term, as prescribed by accounting guidance on the use of the simplified method for determining the expected term of an employee share option. This method is used as the vesting term of stock options was changed to three years in 2004 and, as a result, the historical exercise data does not provide a reasonable basis upon which to estimate the expected life of options. The expected dividend yield and volatility are based on historical stock prices and dividend amounts over past time periods equal in length to the expected life of the options.

The fair value of the first half of 2013 grants was calculated with the following weighted average assumptions:

Risk free interest rate	1.3	%
Expected life of option in years	6.5	
Expected dividend yield	3.2	%
Expected volatility	29.9	%

## Restricted Stock Units

Long-term incentive value is delivered to selected key management employees by granting RSUs, which have either time or performance-based vesting features. The fair value of an RSU is equal to the market value of a share of PPG

stock on the date of grant. Time-based RSUs vest over the three-year period following the date of grant, unless forfeited,

## Table of Contents

and will be paid out in the form of stock, cash or a combination of both at the Company's discretion at the end of the three year vesting period. Performance-based RSUs vest based on achieving specific annual performance targets for earnings per share growth and cash flow return on capital over the three calendar year-end periods following the date of grant. Unless forfeited, the performance-based RSUs will be paid out in the form of stock, cash or a combination of both at the Company's discretion at the end of the three-year performance period if PPG meets the performance targets. The amount paid for performance-based awards may range from 0 percent to 180 percent of the original grant, based upon the frequency with which the annual earnings per share growth and cash flow return on capital performance targets are met over the three calendar year periods. For the purposes of expense recognition, PPG has assumed that performance-based RSUs granted in 2011 will vest at the 180 percent level and those granted in 2012 and 2013 will vest at the 100 percent level. As of December 31, 2012, four of the four possible performance targets had been met for the 2011 grant and two of the two possible performance targets had been met for the 2012 grant.

In the first half of 2013, PPG granted 178,506 RSUs at a weighted average fair value of \$124.74 per share. In the first half of 2012, PPG granted 245,997 RSUs at a weighted average fair value of \$83.27 per share.

### Contingent Share Grants

The Company also provides grants of contingent shares to selected key executives that may be earned based on PPG total shareholder return over the three-year period following the date of grant. Contingent share grants (referred to as "TSR awards") are made annually and are paid out at the end of each three-year period based on the Company's performance. Performance is measured by determining the percentile rank of the total shareholder return of PPG common stock in relation to the total shareholder return of the S&P 500 for the three-year period following the date of grant. This comparison group represents the entire S&P 500 Index as it existed at the beginning of the performance period. The payment of awards following the three-year award period will be based on performance achieved in accordance with the scale set forth in the plan agreement and may range from 0 percent to 220 percent of the initial grant. A payout of 100 percent is earned if the target performance is achieved. Contingent share awards granted in 2011, 2012 and 2013 earn dividend equivalents for the award period, which will be paid to participants with the award payout at the end of the period based on the actual number of contingent shares that are earned. Any payments made at the end of the award period may be in the form of stock, cash or a combination of both. The TSR awards qualify as liability awards, and compensation expense is recognized over the three-year award period based on the fair value of the awards (giving consideration to the Company's percentile rank of total shareholder return) remeasured in each reporting period until settlement of the awards.

### 20. Commitments and Contingent Liabilities

PPG is involved in a number of lawsuits and claims, both actual and potential, including some that it has asserted against others, in which substantial monetary damages are sought. These lawsuits and claims, the most significant of which are described below, relate to contract, patent, environmental, product liability, antitrust and other matters arising out of the conduct of PPG's current and past business activities. To the extent that these lawsuits and claims involve personal injury and property damage, PPG believes it has adequate insurance; however, certain of PPG's insurers are contesting coverage with respect to some of these claims, and other insurers, as they had prior to the asbestos settlement described below, may contest coverage with respect to some of the asbestos claims if the settlement is not implemented. PPG's lawsuits and claims against others include claims against insurers and other third parties with respect to actual and contingent losses related to environmental, asbestos and other matters.

The results of any future litigation and the above lawsuits and claims are inherently unpredictable. However, management believes that, in the aggregate, the outcome of all lawsuits and claims involving PPG, including asbestos-related claims in the event the settlement described below does not become effective, will not have a material effect on PPG's consolidated financial position or liquidity; however, such outcome may be material to the results of operations of any particular period in which costs, if any, are recognized.

### Antitrust Matters

As previously disclosed, in 2010 PPG reached agreements to resolve flat glass antitrust matters in which PPG was a defendant, for approximately \$6 million. The court approved the settlements and distribution of the funds occurred in the first six months of 2012.

In 2010, Transitions Optical, Inc. (“TOI”), a consolidated subsidiary of the Company, entered into a settlement agreement, without admitting liability, with the Federal Trade Commission, which had alleged that TOI violated Section 5 of the Federal Trade Commission Act. Following the announcement of the settlement with the Federal Trade

## Table of Contents

Commission, 30 private putative class cases were filed against TOI, alleging that it has monopolized and/or conspired to monopolize the market for photochromic lenses. All of the federal actions have been transferred and centralized in the Middle District of Florida (the “MDL Action”). Amended complaints in the MDL Action were filed in November and December 2010. In late 2011, the court ruled on TOI’s motion to dismiss and allowed the plaintiffs to file new or further amended complaints. Plaintiffs in the MDL Action include Insight Equity A.P. X, LP, d/b/a Vision-Ease Lens Worldwide, Inc., which has sued on its own behalf, and putative classes of “direct purchasers,” including laboratories and retailers (the “Lab/Retailer Plaintiffs”), and “indirect purchasers,” consisting of end-user consumers. Plaintiffs in the MDL Action generally allege that TOI’s exclusive dealing arrangements resulted in higher prices and seek lost profits and damages determined by the price premium attributable to wrongful exclusive deals. The damages sought are subject to trebling. The Lab/Retailer Plaintiffs also allege that TOI and certain affiliates of Essilor International SA conspired with respect to the wrongful exclusive dealing arrangements. In March 2013, the magistrate judge issued her report and recommendation to deny the class certification motion of the Lab/Retailer Plaintiffs. In May 2013, the magistrate judge issued her report and recommendation to deny the class certification of the end-use consumer plaintiffs. The reports and recommendations on class certification of the magistrate judge will be referred to the district court judge for a final ruling, which is expected to occur in 2013. TOI believes it has meritorious defenses and continues to defend all of the above-described actions vigorously.

### Asbestos Matters

For over 30 years, PPG has been a defendant in lawsuits involving claims alleging personal injury from exposure to asbestos. Most of PPG’s potential exposure relates to allegations by plaintiffs that PPG should be liable for injuries involving asbestos-containing thermal insulation products, known as Unibestos, manufactured and distributed by Pittsburgh Corning Corporation (“PC”). PPG and Corning Incorporated are each 50 percent shareholders of PC. PPG has denied responsibility for, and has defended, all claims for any injuries caused by PC products. As of the April 16, 2000 order which stayed and enjoined asbestos claims against PPG (as discussed below), PPG was one of many defendants in numerous asbestos-related lawsuits involving approximately 114,000 claims served on PPG. During the period of the stay, PPG generally has not been aware of the dispositions, if any, of these asbestos claims.

### Background of PC Bankruptcy Plan of Reorganization

On April 16, 2000, PC filed for Chapter 11 Bankruptcy in the U.S. Bankruptcy Court for the Western District of Pennsylvania located in Pittsburgh, Pa. Accordingly, in the first quarter of 2000, PPG recorded an after-tax charge of \$35 million for the write-off of all of its investment in PC. As a consequence of the bankruptcy filing and various motions and orders in that proceeding, the asbestos litigation against PPG (as well as against PC) has been stayed and the filing of additional asbestos suits against them has been enjoined, until 30 days after the effective date of a confirmed plan of reorganization for PC substantially in accordance with the settlement arrangement among PPG and several other parties discussed below. By its terms, the stay may be terminated if the settlement arrangement set forth below is not likely to be consummated.

On May 14, 2002, PPG announced that it had agreed with several other parties, including certain of its insurance carriers, the official committee representing asbestos claimants in the PC bankruptcy, and the legal representatives of future asbestos claimants appointed in the PC bankruptcy, on the terms of a settlement arrangement relating to certain asbestos claims against PPG and PC (the “2002 PPG Settlement Arrangement”).

On March 28, 2003, Corning Incorporated announced that it had separately reached its own arrangement with the representatives of asbestos claimants for the settlement of certain asbestos claims against Corning Incorporated and PC (the “2003 Corning Settlement Arrangement”).

The terms of the 2002 PPG Settlement Arrangement and the 2003 Corning Settlement Arrangement were incorporated into a bankruptcy reorganization plan for PC along with a disclosure statement describing the plan, which PC filed with the Bankruptcy Court on April 30, 2003. Amendments to the plan and disclosure statement were subsequently filed. On November 26, 2003, after considering objections to the second amended disclosure statement and plan of reorganization, the Bankruptcy Court entered an order approving such disclosure statement and directing that it be sent to creditors, including asbestos claimants, for voting. In March 2004, the second amended PC plan of reorganization (the “second amended PC plan of reorganization”) received the required votes to approve the plan with a channeling injunction for present and future asbestos claimants under §524(g) of the Bankruptcy Code. After voting



results for the second amended PC plan of reorganization were received, the Bankruptcy Court judge conducted a hearing regarding the fairness of the settlement, including whether the plan would be fair with respect to present and future claimants, whether such claimants would be treated in substantially the same manner, and whether the protection provided to PPG and its participating insurers would be fair in view of the assets they would convey to the asbestos settlement

## Table of Contents

trust (the “Trust”) to be established as part of the second amended PC plan of reorganization. At that hearing, creditors and other parties in interest raised objections to the second amended PC plan of reorganization. Following that hearing, the Bankruptcy Court scheduled oral arguments for the contested items.

The Bankruptcy Court heard oral arguments on the contested items on November 17-18, 2004. At the conclusion of the hearing, the Bankruptcy Court agreed to consider certain post-hearing written submissions. In a further development, on February 2, 2005, the Bankruptcy Court established a briefing schedule to address whether certain aspects of a decision of the U.S. Third Circuit Court of Appeals in an unrelated case had any applicability to the second amended PC plan of reorganization. Oral arguments on these matters were subsequently held in March 2005. During an omnibus hearing on February 28, 2006, the Bankruptcy Court judge stated that she was prepared to rule on the PC plan of reorganization in the near future, provided certain amendments were made to the plan. Those amendments were filed, as directed, on March 17, 2006. After further conferences and supplemental briefings, in December 2006, the court denied confirmation of the second amended PC plan of reorganization, on the basis that the plan was too broad in the treatment of allegedly independent asbestos claims not associated with PC.

### Terms of 2002 PPG Settlement Arrangement

PPG had no obligation to pay any amounts under the 2002 PPG Settlement Arrangement until 30 days after the second amended PC plan of reorganization was finally approved by an appropriate court order that was no longer subject to appellate review (the “Effective Date”). If the second amended PC plan of reorganization had been approved as proposed, PPG and certain of its insurers (along with PC) would have made payments on the Effective Date to the Trust, which would have provided the sole source of payment for all present and future asbestos bodily injury claims against PPG, its subsidiaries or PC alleged to be caused by the manufacture, distribution or sale of asbestos products by these companies. PPG would have conveyed the following assets to the Trust: (i) the stock it owns in PC and Pittsburgh Corning Europe, (ii) 1,388,889 shares of PPG’s common stock and (iii) aggregate cash payments to the Trust of approximately \$998 million, payable according to a fixed payment schedule over 21 years, beginning on June 30, 2003, or, if later, the Effective Date. PPG would have had the right, in its sole discretion, to prepay these cash payments to the Trust at any time at a discount rate of 5.5 percent per annum as of the prepayment date. In addition to the conveyance of these assets, PPG would have paid \$30 million in legal fees and expenses on behalf of the Trust to recover proceeds from certain historical insurance assets, including policies issued by certain insurance carriers that were not participating in the settlement, the rights to which would have been assigned to the Trust by PPG.

Under the proposed 2002 PPG Settlement Arrangement, PPG’s participating historical insurance carriers would have made cash payments to the Trust of approximately \$1.7 billion between the Effective Date and 2023. These payments could also have been prepaid to the Trust at any time at a discount rate of 5.5 percent per annum as of the prepayment date. In addition, as referenced above, PPG would have assigned to the Trust its rights, insofar as they related to the asbestos claims to have been resolved by the Trust, to the proceeds of policies issued by certain insurance carriers that were not participating in the 2002 PPG Settlement Arrangement and from the estates of insolvent insurers and state insurance guaranty funds.

Under the proposed 2002 PPG Settlement Arrangement, PPG would have granted asbestos releases to all participating insurers, subject to a coverage-in-place agreement with certain insurers for the continuing coverage of premises claims (discussed below). PPG would have granted certain participating insurers full policy releases on primary policies and full product liability releases on excess coverage policies. PPG would have also granted certain other participating excess insurers credit against their product liability coverage limits.

If the second amended PC plan of reorganization incorporating the terms of the 2002 PPG Settlement Arrangement and the 2003 Corning Settlement Arrangement had been approved by the Bankruptcy Court, the Court would have entered a channeling injunction under §524(g) and other provisions of the Bankruptcy Code, prohibiting present and future claimants from asserting bodily injury claims after the Effective Date against PPG or its subsidiaries or PC relating to the manufacture, distribution or sale of asbestos-containing products by PC or PPG or its subsidiaries. The injunction would have also prohibited codefendants in those cases from asserting claims against PPG for contribution, indemnification or other recovery. All such claims would have been filed with the Trust and only paid from the assets of the Trust.

### Modified Third Amended PC Plan of Reorganization

To address the issues raised by the Bankruptcy Court in its December 2006 ruling, the interested parties engaged in extensive negotiations regarding the terms of a third amended PC plan of reorganization, including modifications to the 2002 PPG Settlement Arrangement. A modified third amended PC plan of reorganization (the “third amended PC

## Table of Contents

plan of reorganization”), including a modified PPG settlement arrangement (the “2009 PPG Settlement Arrangement”), was filed with the Bankruptcy Court on January 29, 2009. The parties also filed a disclosure statement describing the third amended PC plan of reorganization with the court. The third amended PC plan of reorganization also includes a modified settlement arrangement of Corning Incorporated.

Several creditors and other interested parties filed objections to the disclosure statement. Those objections were overruled by the Bankruptcy Court by order dated July 6, 2009 approving the disclosure statement. The third amended PC plan of reorganization and disclosure statement were then sent to creditors, including asbestos claimants, for voting. The report of the voting agent, filed on February 18, 2010, revealed that all voting classes, including asbestos claimants, voted overwhelmingly in favor of the third amended PC plan of reorganization, which included the 2009 PPG Settlement Arrangement. In light of the favorable vote on the third amended PC plan of reorganization, the Bankruptcy Court conducted a hearing regarding the fairness of the proposed plan, including whether (i) the plan would be fair with respect to present and future claimants, (ii) such claimants would be treated in substantially the same manner, and (iii) the protection provided to PPG and its participating insurers would be fair in view of the assets they would convey to the Trust to be established as part of the third amended PC plan of reorganization. The hearing was held in June of 2010. The remaining objecting parties (a number of objections were resolved through plan amendments and stipulations filed before the hearing) appeared at the hearing and presented their cases. At the conclusion of the hearing, the Bankruptcy Court established a briefing schedule for its consideration of confirmation of the plan and the objections to confirmation. That briefing was completed and final oral arguments held in October 2010. On June 16, 2011 the Bankruptcy Court issued a decision denying confirmation of the third amended PC plan of reorganization.

Following the June 16, 2011 ruling, the third amended plan of reorganization was the subject of negotiations among the parties in interest, amendments, proposed amendments and hearings. PC then filed an amended PC plan of reorganization on August 17, 2012. Objections to the plan, as amended, were filed by three entities. One set of objections was resolved by PC and another set merely restated for appellate purposes objections filed by a party that the Bankruptcy Court previously overruled. The Bankruptcy Court heard oral argument on the one remaining set of objections filed by the remaining affiliated insurer objectors on October 10, 2012. At the conclusion of that argument, the Bankruptcy Court set forth a schedule for negotiating and filing language that would resolve some, but not all, of the objections to confirmation advanced by the insurer objectors. On October 25, 2012, PC filed a notice regarding proposed confirmation order language that resolved those specific objections. Following additional hearings and status conferences, technical amendments to the PC plan of reorganization were filed on May 15, 2013. On May 16, 2013, the Bankruptcy Court issued a memorandum opinion and interim order confirming the PC plan of reorganization, as amended, and setting forth a schedule for motions for reconsideration. Following the filing of motions for reconsideration, the Bankruptcy Court, on May 24, 2013, issued a revised memorandum opinion and final order confirming the modified third amended plan of reorganization and issuing the asbestos permanent channeling injunction. The remaining insurer objectors filed a motion for reconsideration on June 6, 2013 and the other remaining objector filed a notice of appeal to the U. S. District Court for the Western District of Pennsylvania. The motion for reconsideration has been set for a hearing on September 9, 2013. If the Bankruptcy Court denies the motion for reconsideration, any remaining objector may file a notice of appeal to the U. S. District Court for the Western District of Pennsylvania within 14 days of the Bankruptcy Court's decision.

Assuming that the motion for reconsideration is denied and the District Court ultimately affirms the confirmation order, the remaining objectors could appeal the order to the U.S. Third Circuit Court of Appeals and subsequently could seek review by the U.S. Supreme Court.

The 2009 PPG Settlement Arrangement will not become effective until certain conditions precedent are satisfied or waived and the amended PC plan of reorganization is finally approved by an appropriate court order that is no longer subject to appellate review, and PPG's initial contributions will not be due until 30 business days thereafter (the “Funding Effective Date”).

### Asbestos Claims Subject to Bankruptcy Court's Channeling Injunction

The Bankruptcy Court's channeling injunction entered under §524(g) of the Bankruptcy Code and which will become effective after the order confirming the modified third amended plan of reorganization is no longer subject to appellate

review, will prohibit present and future claimants from asserting asbestos claims against PC. With regard to PPG, the channeling injunction by its terms will prohibit present and future claimants from asserting claims against PPG that arise, in whole or in part, out of exposure to Unibestos, or any other asbestos or asbestos-containing products manufactured, sold and/or distributed by PC, or asbestos on or emanating from any PC premises. The injunction by its terms will also prohibit codefendants in these cases that are subject to the channeling injunction from asserting claims against PPG for contribution, indemnification or other recovery. Such injunction will also preclude the prosecution

Table of Contents

of claims against PPG arising from alleged exposure to asbestos or asbestos-containing products to the extent that a claimant is alleging or seeking to impose liability, directly or indirectly, for the conduct of, claims against or demands on PC by reason of PPG's: (i) ownership of a financial interest in PC; (ii) involvement in the management of PC, or service as an officer, director or employee of PC or a related party; (iii) provision of insurance to PC or a related party; or (iv) involvement in a financial transaction affecting the financial condition of PC or a related party. The foregoing PC related claims are referred to as "PC Relationship Claims" and constitute, in PPG management's opinion, the vast majority of the pending asbestos personal injury claims against PPG. All claims channeled to the Trust will be paid only from the assets of the Trust.

**Asbestos Claims Retained by PPG**

The channeling injunction will not extend to any claim against PPG that arises out of exposure to any asbestos or asbestos-containing products manufactured, sold and/or distributed by PPG or its subsidiaries that is not a PC Relationship Claim, and in this respect differs from the channeling injunction contemplated by the second amended PC plan of reorganization filed in 2003. While management believes that the vast majority of the approximately 114,000 claims against PPG alleging personal injury from exposure to asbestos relate to products manufactured, distributed or sold by PC, the potential liability for any non-PC Relationship Claims will be retained by PPG. Because a determination of whether an asbestos claim is a non-PC Relationship Claim would typically not be known until shortly before trial and because the filing and prosecution of asbestos claims (other than certain premises claims) against PPG has been enjoined since April 2000, the actual number of non-PC Relationship Claims that may be pending at the expiration of the stay or the number of additional claims that may be filed against PPG in the future cannot be determined at this time. PPG intends to defend against all such claims vigorously and their ultimate resolution in the court system is expected to occur over a period of years.

In addition, similar to what was contemplated by the second amended PC plan of reorganization, the channeling injunction will not extend to claims against PPG alleging personal injury caused by asbestos on premises owned, leased or occupied by PPG (so called "premises claims"), which generally have been subject to the stay imposed by the Bankruptcy Court, although motions to lift the stay as to individual premises claims have been granted from time to time. Historically, a small proportion of the claims against PPG and its subsidiaries have been premises claims, and based upon review and analysis, PPG believes that the number of premises claims currently comprises less than 2 percent of the total asbestos related claims against PPG. Beginning in late 2006, the Bankruptcy Court lifted the stay with respect to certain premises claims against PPG. As a result, PPG and its primary insurers have settled approximately 500 premises claims. PPG's insurers agreed to provide insurance coverage for a major portion of the payments made in connection with the settled claims, and PPG accrued the portion of the settlement amounts not covered by insurance. PPG, in conjunction with its primary insurers as appropriate, evaluates the factual, medical, and other relevant information pertaining to additional claims as they are being considered for potential settlement or litigated in the tort system. The number of such claims under consideration for potential settlement or subject to litigation, currently approximately 350, varies from time to time. PPG believes that any financial exposure resulting from such premises claims, taking into account available insurance coverage, will not have a material adverse effect on PPG's consolidated financial position, liquidity or results of operations.

**PPG's Funding Obligations**

PPG has no obligation to pay any amounts under the third amended PC plan of reorganization, as amended, until the Funding Effective Date. On the Funding Effective Date, PPG will relinquish any claim to its equity interest in PC, convey the stock it owns in Pittsburgh Corning Europe and transfer 1,388,889 shares of PPG's common stock or cash equal to the fair value of such shares as defined in the 2009 PPG Settlement Arrangement. PPG will make aggregate cash payments to the Trust of approximately \$825 million, payable according to a fixed payment schedule over a period ending in 2023. The first payment is due on the Funding Effective Date. PPG would have the right, in its sole discretion, to prepay these cash payments to the Trust at any time at a discount rate of 5.5% per annum as of the prepayment date. PPG's historical insurance carriers participating in the third amended PC plan of reorganization will also make cash payments to the Trust of approximately \$1.7 billion between the Funding Effective Date and 2027. These payments could also be prepaid to the Trust at any time at a discount rate of 5.5% per annum as of the prepayment date. PPG will grant asbestos releases and indemnifications to all participating insurers, subject to

amended coverage-in-place arrangements with certain insurers for remaining coverage of premises claims. PPG will grant certain participating insurers full policy releases on primary policies and full product liability releases on excess coverage policies. PPG will also grant certain other participating excess insurers credit against their product liability coverage limits.

PPG's obligation under the 2009 PPG Settlement Arrangement at December 31, 2008 was \$162 million less than the amount that would have been due under the 2002 PPG Settlement Arrangement. This reduction is attributable to a

Table of Contents

number of negotiated provisions in the 2009 PPG Settlement Arrangement, including the provisions relating to the channeling injunction under which PPG retains liability for any non-PC Relationship Claims. PPG will retain such amount as a reserve for asbestos-related claims that will not be channeled to the Trust, as this amount represents PPG's best estimate of its liability for these claims. PPG does not have sufficient current claim information or settlement history on which to base a better estimate of this liability, in light of the fact that the Bankruptcy Court's stay has been in effect since 2000. As a result, PPG's reserve at June 30, 2013 and December 31, 2012 for asbestos-related claims that will not be channeled to the Trust is \$162 million. This amount is included within "Other liabilities" on the accompanying consolidated balance sheets. In addition, under the 2009 PPG Settlement Arrangement, PPG will retain for its own account rights to recover proceeds from certain historical insurance assets, including policies issued by non-participating insurers. Rights to recover these proceeds would have been assigned to the Trust by PPG under the 2002 PPG Settlement Arrangement.

Following the effective date of the third amended PC plan of reorganization, as amended, and the lifting of the Bankruptcy Court stay, PPG will monitor the activity associated with asbestos claims which are not channeled to the Trust pursuant to the third amended PC plan of reorganization, and evaluate its estimated liability for such claims and related insurance assets then available to the Company as well as underlying assumptions on a periodic basis to determine whether any adjustment to its reserve for these claims is required.

Of the total obligation of \$942 million under the 2009 PPG Settlement Arrangement at June 30, 2013, \$703 million is reported as a current liability and the present value of the payments due in the years 2014 to 2023 totaling \$239 million is reported as a non-current liability in the accompanying condensed consolidated balance sheet. The future accretion of the noncurrent portion of the liability will total \$102 million and be reported as expense in the condensed consolidated statement of income over the period through 2023, as follows (in millions):

Remainder of 2013	\$7
2014	14
2015 – 2023	81
Total	\$102

The following table summarizes the impact on PPG's financial statements for the three and six months ended June 30, 2013 and 2012 resulting from the 2009 PPG Settlement Arrangement including the change in fair value of the stock to be transferred to the Trust and the equity forward instrument (see Note 17, "Derivative Financial Instruments and Hedge Activities") and the increase in the net present value of the future payments to be made to the Trust.

	Three Months Ended June 30		Six Months Ended June 30	
Increase (decrease) in expense	2013	2012	2013	2012
	(Millions)			
Change in fair value:				
PPG stock	\$16	\$14	\$15	\$31
Equity forward instrument	(17)	(15)	(16)	(33)
Accretion of asbestos liability	4	4	7	8
Asbestos settlement – net expense	\$3	\$3	\$6	\$6

The fair value of the equity forward instrument is included as an "Other current asset" as of June 30, 2013 and December 31, 2012 in the accompanying condensed consolidated balance sheet. Payments under the fixed payment schedule require annual payments that are due each June. The current portion of the asbestos settlement liability included in the accompanying condensed consolidated balance sheet as of June 30, 2013 consists of all such payments required through June 2013, the fair value of PPG's common stock and the value of PPG's investment in Pittsburgh Corning Europe. The net present value of the remaining payments due is included in the long-term asbestos settlement liability in the accompanying condensed consolidated balance sheet as of June 30, 2013.

Enjoined Claims

If the 2009 PPG Settlement Arrangement is not implemented, for any reason, and the Bankruptcy Court stay expires, PPG intends to defend vigorously the pending and any future asbestos claims, including PC Relationship Claims,



asserted against it and its subsidiaries. PPG continues to assert that it is not responsible for any injuries caused by PC products, which it believes account for the vast majority of the pending claims against PPG. Prior to 2000, PPG

Table of Contents

had never been found liable for any PC-related claims. In numerous cases, PPG was dismissed on motions prior to trial, and in others PPG was released as part of settlements by PC. PPG was found not responsible for PC-related claims at trial in two cases. In January 2000, one jury found PPG, for the first time, partly responsible for injuries to five plaintiffs alleged to be caused by PC products. The plaintiffs holding the judgment on that verdict moved to lift the injunction as applied to their claims. Before the hearing on that motion, PPG entered into a settlement with those claimants in the second quarter of 2010 to avoid the costs and risks associated with the possible lifting of the stay and appeal of the adverse 2000 verdict. The settlement resolved both the motion to lift the injunction and the judgment against PPG. The cost of this settlement was not significant to PPG's results of operations for the second quarter of 2010 and was fully offset by prior insurance recoveries. Although PPG has successfully defended asbestos claims brought against it in the past, in view of the number of claims, and the significant verdicts that other companies have experienced in asbestos litigation, the result of any future litigation of such claims is inherently unpredictable.

**Environmental Matters**

It is PPG's policy to accrue expenses for environmental contingencies when it is probable that a liability has been incurred and the amount of loss can be reasonably estimated. Reserves for environmental contingencies are exclusive of claims against third parties and are generally not discounted. In management's opinion, the Company operates in an environmentally sound manner and the outcome of the Company's environmental contingencies will not have a material effect on PPG's financial position or liquidity; however, any such outcome may be material to the results of operations of any particular period in which costs, if any, are recognized. Management anticipates that the resolution of the Company's environmental contingencies will occur over an extended period of time.

As of June 30, 2013 and December 31, 2012, PPG had reserves for environmental contingencies totaling \$281 million and \$332 million, respectively, of which \$103 million and \$101 million, respectively, were classified as current liabilities. The reserve at June 30, 2013 included \$175 million for environmental contingencies associated with PPG's former chromium manufacturing plant in Jersey City, N.J. and associated sites ("New Jersey Chrome") and \$106 million for other environmental contingencies, including National Priority List sites and legacy glass and chemical manufacturing sites. The reserve at December 31, 2012 included \$221 million for environmental contingencies associated with New Jersey Chrome, \$80 million for other environmental contingencies, including National Priority List sites and legacy glass and chemical manufacturing sites, and \$31 million for environmental contingencies associated with the Calcasieu River estuary located near the Lake Charles, La. chlor-alkali plant and two operating plant sites in PPG's former commodity chemicals business. Pretax charges against income from continuing operations for environmental remediation costs totaled \$2 million and \$15 million, respectively, for the three and six months ended June 30, 2013 and \$3 million and \$163 million, respectively, for the three and six months ended June 30, 2012, and are included in "Other charges" in the accompanying condensed consolidated statement of income. Included in the six month 2013 environmental remediation expense is a charge of \$12 million for remediation costs at a legacy chemical manufacturing site in Barberton, Ohio based on an updated estimate of costs for remediation activities at this site. Income from discontinued operations includes \$1 million of environmental remediation expense in the six months ended June 30, 2012. Cash outlays related to all environmental remediation aggregated \$32 million and \$55 million, respectively, for the three and six months ended June 30, 2013 and \$12 million and \$25 million, respectively, for the three and six months ended June 30, 2012. The three and six months ended 2012 spending included \$3 million associated with environmental remediation liabilities of the former commodity chemicals business. Management expects pretax charges for environmental remediation costs during the remainder of 2013 to be within the range of \$10 million to \$15 million.

Management expects cash outlays for environmental remediation costs to be approximately \$50 million in the remainder of 2013, approximately \$100 million annually in 2014 and 2015 and to range from \$10 million to \$30 million annually from 2016 through 2018. It is possible that technological, regulatory and enforcement developments, the results of environmental studies and other factors could alter the Company's expectations with respect to future charges against income and future cash outlays. Specifically, the level of expected future remediation costs and cash outlays is highly dependent upon activity related to New Jersey Chrome, as discussed below.



## Table of Contents

### Separation and Merger of the Commodity Chemicals Business

All known environmental liabilities associated with the commodity chemicals business, including remediation of the Calcasieu River estuary in Lake Charles, La., and the existing reserve totaling \$31 million were transferred with the separation of this business from PPG and subsequent merger of the subsidiary holding the PPG commodity chemicals business with a subsidiary of Georgia Gulf (see Note 5). The newly merged company, Axiall, assumed responsibility for these liabilities. As a result of this transaction, PPG retained responsibility for potential environmental liabilities that may result from future Natural Resource Damage claims and any potential tort claims at the Calcasieu River Estuary associated with activities and historical operations of the Lake Charles, La. facility. PPG will additionally retain responsibility for all liabilities relating to, arising out of or resulting from sediment contamination in the Ohio River resulting from historical activities and operations at the Natrium, W.Va. facility.

### Remediation: New Jersey Chrome

Since 1990, PPG has remediated 47 of 61 residential and nonresidential sites under the 1990 Administrative Consent Order (“ACO”) with the New Jersey Department of Environmental Protection (“NJDEP”). The most significant of the 14 remaining sites is the former chromium manufacturing location in Jersey City, New Jersey. The principal contaminant of concern is hexavalent chromium. The Company submitted a feasibility study work plan to the NJDEP in October 2006 that included a review of the available remediation technology alternatives for the former chromium manufacturing location. As a result of the extensive analysis undertaken in connection with the preparation and submission of that feasibility study work plan, the Company recorded a pretax charge of \$165 million in the third quarter of 2006. This charge included estimated costs for remediation at the 14 remaining ACO sites, including the former manufacturing site, and for the resolution of litigation filed by NJDEP in May 2005 as discussed below. The principal estimated cost elements of the third quarter 2006 charge were based on competitively derived or readily available remediation industry cost data. The major cost components of this charge were (i) transportation and disposal of excavated soil and in place soil treatment and (ii) construction services (related to soil excavation, groundwater management and site security).

In May 2005, the NJDEP filed a complaint against PPG and two other former chromium producers seeking to hold the parties responsible for a further 53 sites where the source of chromium contamination is not known and to recover costs incurred by the agency in connection with its response activities at certain of those sites. During the third quarter of 2008, the parties reached an agreement in principle on all claims relating to these 53 sites (the “Orphan Sites Settlement”). Under the terms of this Orphan Sites Settlement, PPG accepted responsibility for remediation of 6 of the 53 sites, one half of the cost for remediating ten sites where chrome ore processing residue was used as fill in connection with the installation or repair of sewer lines owned by Jersey City, reimburse the NJDEP for a portion of past costs in the amount of \$5 million and be responsible for the NJDEP’s oversight costs associated with the sites for which PPG is wholly or partially responsible. This settlement was finalized and issued for public comment in June 2011. After the close of the public comment period, NJDEP determined that no changes to the settlement were necessary and a motion was filed with the court to enter the settlement as a final order. In September 2011, the court entered the Orphan Sites Settlement as a final order. PPG paid its share of past costs in October 2011. This Orphan Sites Settlement did not affect PPG’s responsibilities for the 14 remaining unremediated sites covered by PPG’s ACO. The investigation and remediation of the soils and sources of contamination of the ten sewer sites will occur over an extended period of time to allow for investigation and determination of impacts associated with these sites, and coordination of remediation with the maintenance and repair of the sewers by Jersey City.

A settlement agreement among PPG, NJDEP and Jersey City (which had asserted claims against PPG for lost tax revenue) has been reached and memorialized in the form of a Judicial Consent Order (the “JCO”) that was entered by the court on June 26, 2009. PPG’s remedial obligations under the ACO with NJDEP have been incorporated into the JCO. Pursuant to the JCO, a new process has been established for the review of the technical reports PPG must submit for the investigation and remedy selection for the 14 ACO sites and the six sites for which PPG has accepted sole responsibility under the terms of the Orphan Sites Settlement (“20 PPG sites”). The JCO also provided for the appointment of a court-approved Site Administrator who is responsible for establishing a master schedule for the remediation of the 20 PPG sites. On July 6, 2009, former United States Environmental Protection Agency Deputy Administrator, Michael McCabe, was appointed as Site Administrator under the JCO. The JCO established a goal,

based on currently applicable remedial provisions, to remediate soils and sources of contamination at the 20 PPG sites as expeditiously as possible for completion at the end of 2014 in accordance with the master schedule developed by the Site Administrator. During the second quarter of 2013, the parties to the JCO determined that it was not feasible to complete the soil remediation by the original December 2014 cleanup goal due to the complexities associated with the remediation of the sites. Based upon current knowledge of the conditions at the sites and the experience gained over the last several years, the JCO parties established a new master schedule, which was approved by the court, which extends the goal for the cleanup of soils and sources of contamination to December 1, 2015. Under the JCO,

Table of Contents

NJDEP could seek to impose stipulated civil penalties if PPG fails to meet the time line or perform certain tasks under the master schedule. The JCO also resolved the claims for reparations for lost tax revenues by Jersey City with the payment of \$1.5 million over a five year time period. The JCO did not otherwise affect PPG's responsibility for the remediation of the 14 ACO sites. PPG's estimated costs under the JCO, including amounts related to site administration, are included in the June 30, 2013 reserve for New Jersey Chrome environmental remediation matters. In the first quarter of 2012, an additional site was identified for which PPG has assumed responsibility for hexavalent chromium contamination. PPG learned that chromate waste from its former plant site was transported and used as construction fill at this location. PPG has reached a settlement with this property owner and PPG's remedial obligation has been satisfied.

Since October 2006, activities contained in the feasibility study work plan have been undertaken and remedial alternatives were assessed which included, but were not limited to, soil excavation and offsite disposal in a licensed disposal facility, in situ chemical stabilization of soil and groundwater, and in situ solidification of soils. The feasibility study work plan for the former chromium manufacturing site previously submitted in 2006 was incorporated into a remedial action work plan. PPG submitted a preliminary draft soil remedial action work plan for the former chromium manufacturing and adjacent sites to NJDEP in June 2011. PPG received commentary from the NJDEP in connection with their review. The work plans for interim remedial measures at the chromium manufacturing site, which consisted of the removal and off-site disposal of approximately 70,000 tons of chromium impacted soil and concrete foundations, was approved by NJDEP and the associated work was completed in the third quarter 2011. The submission of a final draft soil remedial action work plan for the former chromium manufacturing and adjacent sites was initially required to be submitted to NJDEP in May 2012. However, this submission has been delayed while PPG works with NJDEP and Jersey City to address issues related to PPG's proposed approach to obtaining use limitations for the properties that will be remediated. Property owners must accept use limitations before NJDEP may approve a remedial action work plan. In the meantime, NJDEP has completed a review of the technical aspects of PPG's proposed soil remedial action work plan and has expressed their support of the remediation activities identified therein which PPG continues to perform while the issues related to use limitations for these properties are being addressed. PPG has submitted a final draft remedial action work plan for one other remaining site under the ACO which has been conditionally approved by the NJDEP. Remedial activities began at this site in 2013. In addition, during 2012 PPG completed remedial activities at three sites PPG has accepted sole responsibility under the terms of the Orphan Sites Settlement and have received "No Further Action" determination from the NJDEP for the sites. Soil investigation activities for all remaining sites covered by the ACO are also expected to be completed in 2013, and PPG believes the results of the work performed in connection with the preparation of the plan, as described above provides the Company with relevant information concerning remediation alternatives and estimated costs at these sites.

As work continued at all of the New Jersey Chrome sites and the final draft soil remedial action work plan for the former chromium manufacturing and adjacent sites was being developed, the estimated remediation costs were refined for all New Jersey Chrome sites and the updated information was used to compile a new estimate of the remediation costs, which resulted in a charge of \$145 million in the first quarter of 2012. The liability for remediation of the New Jersey Chrome sites totals \$175 million at June 30, 2013. The major cost components of this liability continue to be related to transportation and disposal of impacted soil as well as construction services. These components account for approximately 60% and 30% of the accrued amount, respectively, as of June 30, 2013. The accrued liability also includes estimated costs for water treatment, engineering and project management. The final draft soil remedial action work plan is based upon plans for PPG to obtain use limitations for the properties that will be remediated by various means including the purchase of certain sites. Based on our recently completed and on going investigations, approximately one million tons of soil may be potentially impacted for all New Jersey Chrome sites. The most significant assumptions underlying the current cost estimate are those related to the extent and concentration of chromium impacts in the soil, as these determine the quantity of soil that must be treated in place, the quantity that will have to be excavated and transported for offsite disposal, and the nature of disposal required. The charges taken for the estimated cost to remediate the New Jersey Chrome sites are exclusive of any third party indemnification, as the recovery of any such amounts is uncertain. Information will continue to be generated from the ongoing

groundwater remedial investigation activities related to New Jersey Chrome and will be incorporated into a final draft remedial action work plan for groundwater expected to be submitted to NJDEP in the second quarter of 2014.

As described above, there are multiple future events yet to occur, including further remedy selection and design, remedy implementation and execution, the obtaining of required approvals from applicable governmental agencies or community organizations and the final draft remedial action work plan for groundwater to be submitted to NJDEP in 2014. Considerable uncertainty exists regarding the timing of these future events for the New Jersey Chrome sites. Final resolution of these events is expected to occur over the next two to three years. As these events occur and to

## Table of Contents

the extent that the cost estimates of the environmental remediation remedies change, the existing reserve for this environmental remediation will be adjusted.

### Remediation: Reasonably Possible Matters

In addition to the amounts currently reserved for environmental remediation, the Company may be subject to loss contingencies related to environmental matters estimated to be as much as \$100 million to \$235 million. Such unreserved losses are reasonably possible but are not currently considered to be probable of occurrence. This range of reasonably possible unreserved loss relates to environmental matters at a number of sites including; i) additional costs at New Jersey Chrome, which represents about half of this potential range and ii) a number of other sites, including legacy glass and chemical manufacturing sites. The loss contingencies related to these sites include significant unresolved issues such as the nature and extent of contamination at these sites and the methods that may have to be employed to remediate them.

The status of the remediation activity at New Jersey Chrome and the factors that could result in the need for additional environmental remediation reserves at those sites are described above. Certain remedial actions are occurring at a legacy chemical manufacturing site in Barberton, Ohio, where PPG has completed a Facility Investigation and Corrective Measure Study (“CMS”) under USEPA’s Resource Conservation and Recycling Act (“RCRA”) Corrective Action Program. PPG has been implementing the remediation alternatives recommended in the CMS using a performance-based approach with USEPA Region V oversight. However, USEPA Region V transferred its oversight authority to the Ohio Environmental Protection Agency (“OEPA”) in 2010. The Barberton Corrective Action Permit was issued by OEPA on September 24, 2010. As part of this permit, PPG is responsible for filing engineering remedies for various issues at this site. Several of these remedies have not yet been filed with the OEPA. PPG has been addressing impacts from a legacy plate glass manufacturing site in Kokomo, Indiana under the Voluntary Remediation Program of the Indiana Department of Environmental Management. PPG is currently performing additional investigation activities.

With respect to certain waste sites, the financial condition of any other potentially responsible parties also contributes to the uncertainty of estimating PPG’s final costs. Although contributors of waste to sites involving other potentially responsible parties may face governmental agency assertions of joint and several liability, in general, final allocations of costs are made based on the relative contributions of wastes to such sites. PPG is generally not a major contributor to such sites.

The impact of evolving programs, such as natural resource damage claims, industrial site reuse initiatives and state remediation programs, also adds to the present uncertainties with regard to the ultimate resolution of this unreserved exposure to future loss. The Company’s assessment of the potential impact of these environmental contingencies is subject to considerable uncertainty due to the complex, ongoing and evolving process of investigation and remediation, if necessary, of such environmental contingencies, and the potential for technological and regulatory developments.

### Other Matters

The Company accrues for product warranties at the time the products are sold based on historical claims experience. As of June 30, 2013 and December 31, 2012, the reserve for product warranties were \$10 million and \$14 million, respectively. Pretax charges against income for product warranties and the related cash outlays were not material for the three and six months ended June 30, 2013 and 2012.

The Company had outstanding letters of credit and surety bonds of \$133 million and guarantees of \$82 million as of June 30, 2013. The Company does not believe any loss related to such guarantees is likely.

### 21. Reportable Segment Information

PPG is a multinational manufacturer with 12 operating segments that are organized based on the Company’s major product lines. These operating segments are also the Company’s reporting units for purposes of testing goodwill for impairment. The operating segments have been aggregated based on economic similarities, the nature of their products, production processes, end-use markets and methods of distribution into five reportable business segments. The Performance Coatings reportable segment is comprised of the refinish, aerospace, architectural coatings – Americas and Asia Pacific and protective and marine coatings operating segments. This reportable segment primarily



supplies a variety of protective and decorative coatings, sealants and finishes along with paint strippers, stains and related chemicals, as well as transparencies and transparent armor.

Table of Contents

The Industrial Coatings reportable segment is comprised of the automotive original equipment manufacturer (“OEM”), industrial and packaging coatings operating segments. This reportable segment primarily supplies a variety of protective and decorative coatings and finishes along with adhesives, sealants, inks and metal pretreatment products. The Architectural Coatings – EMEA (Europe, Middle East, and Africa) reportable segment is comprised of the architectural coatings – EMEA operating segment. This reportable segment primarily supplies a variety of coatings under a number of brands and purchased sundries to painting contractors and consumers in Europe, the Middle East and Africa.

The Optical and Specialty Materials reportable segment is comprised of the optical products and silicas businesses. The primary Optical and Specialty Materials products are Transitions® lenses, optical lens materials and high performance sunlenses; amorphous precipitated silicas for tire, battery separator and other end-use markets; and Teslin® substrate used in such applications as radio frequency identification (RFID) tags and labels, e-passports, drivers’ licenses and identification cards. Transition® lenses are processed and distributed by PPG’s 51 percent-owned joint venture with Essilor International.

The Glass reportable segment is comprised of the flat glass and fiber glass operating segments. This reportable segment primarily supplies flat glass and continuous-strand fiber glass products.

On January 28, 2013, PPG completed the separation of its commodity chemicals business and the merger of the subsidiary holding PPG’s former commodity chemicals business with a subsidiary of Georgia Gulf. As a result of the completion of this transaction, the sales and results of operations of the commodity chemicals business were reclassified to discontinued operations for all periods presented and there no longer is a Commodity Chemicals operating or reportable segment (see Note 5).

Reportable segment net sales and segment income for the three and six months ended June 30, 2013 and 2012 were as follows:

	Three Months Ended June 30		Six Months Ended June 30	
	2013	2012	2013	2012
	(Millions)			
Net sales:				
Performance Coatings	\$1,688	\$1,241	\$2,812	\$2,391
Industrial Coatings	1,241	1,099	2,424	2,175
Architectural Coatings - EMEA	571	601	1,025	1,118
Optical and Specialty Materials	326	314	640	648
Glass	269	273	525	529
Total (a)	\$4,095	\$3,528	\$7,426	\$6,861
Segment income:				
Performance Coatings	\$255	\$204	\$427	\$364
Industrial Coatings	191	143	369	293
Architectural Coatings - EMEA	69	64	89	80
Optical and Specialty Materials	96	95	195	204
Glass	8	23	13	31
Total	619	529	1,093	972
Legacy items (b)	(11)	(15)	(57)	(190)
Business restructuring (See Note 8)	—	—	—	(208)
Acquisition-related costs (c)	(21)	—	(28)	(6)
Interest expense, net of interest income	(38)	(40)	(81)	(81)
Other unallocated corporate expense – net	(60)	(48)	(120)	(108)
Income from continuing operations before income taxes	\$489	\$426	\$807	\$379

(a) Intersegment net sales for the three and six months ended June 30, 2013 and 2012 were not material.

(b)

Legacy items include current costs related to former operations of the Company, including pension and other postretirement benefit costs, certain charges for legal matters and environmental remediation costs, and certain charges which are considered to be unusual or non-recurring, including the earnings impact of the proposed asbestos settlement. Legacy items

Table of Contents

also include equity earnings from PPG's approximate 40 percent investment in the former automotive glass and services business. The expense for the six months ended June 30, 2013 and 2012 includes nonrecurring environmental remediation pretax charges of \$12 million and \$159 million, respectively. The 2012 charge relates to continued environmental remediation activities at legacy chemicals sites, primarily at PPG's former Jersey City, N.J. chromium manufacturing plant and associated sites. The expense for the six months ended June 30, 2013 includes a pretax charge of \$18 million for the settlement losses related to certain legacy Canadian glass pension plans.

For the three and six months ended June 30, 2013, the expense includes the flow-through cost of sales of the step up to fair value of inventory acquired primarily from the North American architectural coatings business of AkzoNobel and advisory, legal, accounting, valuation and other professional or consulting fees incurred in (c)connection with acquisition activity. For the six months ended June 30, 2012, the expense represents the flow-through cost of sales of the step up to fair value of inventory acquired from Dyrup and Colpisa. These costs are considered to be unusual and non-recurring and do not reduce the segment earnings used to evaluate the performance of the operating segments.

22. Subsequent Event

On July 28, 2013, PPG reached an agreement to divest its 51 percent interest in Transitions Optical to Essilor International, which currently holds a 49 percent interest in the venture. Transitions Optical is a global supplier of photochromic lenses and a consolidated subsidiary of PPG. The transaction reflects an enterprise value of approximately \$3.4 billion, with PPG receiving cash at closing of \$1.73 billion pretax or approximately \$1.5 billion after-tax, subject to certain post-closing working capital and net debt adjustments. In 2012, Transitions Optical had net sales of approximately \$800 million. Essilor will also enter into multi-year agreements with PPG for continuing supply of optical dyes and research and development services and will acquire PPG's optical sunlens business. The transaction is expected to close in the first half of 2014, subject to satisfaction of customary closing conditions, including receipt of regulatory approvals.

Currently, all Transitions Optical sales are consolidated in PPG's financial statements. Essilor's minority share of the joint venture's net earnings is reflected as a reduction to PPG's net income and presented in the financial statements as "Net income attributable to non-controlling interests". Upon receipt of regulatory approvals, PPG expects to account for Transitions Optical as discontinued operations.

Table of Contents

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

Separation and Merger of PPG's Commodity Chemical Business

On January 28, 2013, PPG completed the separation of its commodity chemicals business and the merger of the subsidiary holding the PPG commodity chemicals business with a subsidiary of the Georgia Gulf Corporation ("Georgia Gulf"). The combined company formed by uniting Georgia Gulf with PPG's former commodity chemicals business is named Axiall Corporation ("Axiall"). PPG holds no ownership interest in Axiall. The results of operations and cash flows of the commodity chemicals business for the month of January 2013 are presented in the accompanying financial statements as the results from discontinued operations. The results of operations and cash flows of the commodity chemicals business for the three and six month periods ended June 30, 2012 have been reclassified in these condensed consolidated financial statements to conform to the presentation of discontinued operations. See Note 5, "Separation and Merger Transaction" in Item 1 - Financial Statements, for additional information relating to this transaction.

Performance in Second Quarter of 2013 Compared to Second Quarter of 2012

Performance Overview

Sales in the second quarter of 2013 were \$4,095 million, up 16 percent versus the prior year sales of \$3,528 million for the second quarter of 2012. The impact of sales from businesses acquired within the last twelve months increased sales about 15 percent and higher selling prices increased sales about 1 percent. Overall sales volumes, excluding acquired businesses, were down 1 percent. Foreign currency translation was slightly favorable in the quarter. The acquisition of the North American architectural coatings business of AkzoNobel in April 2013 contributed approximately \$475 million of the higher sales from acquisitions. The acquisition sales total also includes sales from Deft, an aerospace coatings business acquired in May 2013, the Spraylat coatings business acquired in December 2012 and the impact of consolidating the results of an Indian joint venture over which PPG now has management control. Pricing improved modestly as certain businesses continue to counter modest inflation from changes in raw material and energy pricing, along with transportation and labor costs. Volumes grew in the Industrial Coatings and Optical and Specialty Materials segments, but fell in the remaining segments. The second quarter is traditionally the strongest seasonally in many of our businesses, and the Company generally experienced normal seasonal sales trends during the quarter. As with several recent quarters, demand remained mixed by region. We experienced consistent, modest growth in most end-use markets in the United States and Canada. Solid growth also continued in many end-use markets in Asia Pacific, with the exception of the marine new-build market. European demand remained weak, with several businesses experiencing lower demand, partly offset by volume growth in a few businesses. Although European demand remained weak, the overall pace of business was fairly steady with the first quarter, adjusted for seasonal factors.

Cost of sales, exclusive of depreciation and amortization, was \$2,343 million for the second quarter of 2013 compared to \$2,066 million for the second quarter of 2012. Cost of sales increased year-over-year due to the cost of sales of acquired businesses and the impact of inflation, modestly offset by lower manufacturing costs and the impact of lower sales volumes. Cost of sales decreased as a percentage of sales for the second quarter of 2013 to 57.2 percent from 58.6 percent in the second quarter of 2012 due to shifts in sales margin mix.

Selling, general and administrative expenses increased by \$189 million in the second quarter of 2013 compared to the second quarter of 2012. These costs increased principally due to the inclusion of acquired businesses. In addition, the continued focus on cost management, including savings from restructuring actions approved in March 2012, lowered selling, general and administrative expenses, partially offset by overhead inflation. Selling, general and administrative expenses also included professional service costs for acquisition related activities. The impact of foreign currency translation was minimal. Selling, general and administrative expenses increased as a percent of sales to 24.0 percent in the second quarter of 2013 from 22.4 percent in the second quarter of 2012. The increase is due to the acquisition of the AkzoNobel North American architectural coatings business acquired during the quarter, which operates with higher relative selling and advertising costs consistent with the distribution-oriented nature of the business.

Other charges increased to \$23 million in the second quarter of 2013 from \$16 million in the second quarter of 2012 due largely to losses from foreign currency transactions.

The effective tax rate on pretax earnings from continuing operations for the quarter ended June 30, 2013 was 24 percent compared to 23 percent in the second quarter of 2012. The effective rate on pretax earnings from continuing operations for the quarter ended June 30, 2013 includes tax benefits of \$6 million or approximately 28 percent for acquisition-related costs. The effective tax rate on the remaining pre-tax earnings from continuing operations was 24 percent resulting in tax expense of \$124 million.

Table of Contents

Diluted earnings-per-share for the three months ended June 30, 2013 were \$2.35. Excluding the charges related to acquisition-related costs, adjusted diluted earnings-per-share from continuing operations for the three months ended June 30, 2013 were \$2.45. This compares to diluted earnings-per-share from continuing operations of \$1.92 for the three months ended June 30, 2012. The increase in diluted earnings-per-share resulted from higher earnings and a reduction in the number of shares outstanding as a result of the 10.8 million PPG shares tendered to the Company in the exchange offer in connection with the separation and merger of the Company's former commodity chemicals business as well as the approximately 1 million shares repurchased in the first quarter of 2013. For more information about the separation and merger of the Company's former commodity chemicals business, see Note 5, "Separation and Merger Transaction," under Item 1 of this Form 10-Q.

Looking ahead, the third quarter is traditionally a slower quarter seasonally than the second quarter, however, we anticipate many of the same factors that led to our earnings growth year-to-date will continue. PPG's board of directors approved in July 2013 a \$102 million restructuring program focused on capturing synergies from the acquisition of the AkzoNobel North American architectural coatings business, along with other actions in select businesses that continue to operate in weak economic conditions. Finally, we are working to capitalize on our strong balance sheet as we continue to analyze opportunities to increase earnings through prudent cash deployment.

#### Regulation G Reconciliation – Net Income and Earnings per Diluted Share

PPG believes investors' understanding of the Company's operating performance is enhanced by the disclosure of net income and earnings per diluted share adjusted for nonrecurring charges. PPG's management considers this information useful in providing insight into the Company's ongoing operating performance because it excludes the impact of items that cannot reasonably be expected to recur on an ongoing basis. Net income and earnings per diluted share adjusted for these items are not recognized financial measures determined in accordance with U.S. generally accepted accounting principles (GAAP) and should not be considered a substitute for net income or earnings per diluted share or other financial measures as computed in accordance with U.S. GAAP. In addition, adjusted net income and adjusted earnings per diluted share may not be comparable to similarly titled measures as reported by other companies.

Net income (attributable to PPG) and earnings-per-share – assuming dilution (attributable to PPG) are reconciled to adjusted net income (attributable to PPG) and adjusted earnings-per-share – assuming dilution below:

(Millions, except per share amounts)

Three Months ended June 30, 2013	Net Income	
	Net Income	EPS
Net income (attributable to PPG)	\$341	\$2.35
Net income (attributable to PPG) includes:		
Acquisition-related costs	15	0.10
Adjusted net income	\$356	\$2.45

#### Performance of Reportable Business Segments

Performance Coatings sales increased \$447 million, to \$1,688 million for the second quarter of 2013 compared to \$1,241 million for the second quarter of 2012. The sales increase of 36 percent was due largely to sales from acquired businesses and modest pricing gains, partially offset by 5 percent lower sales volumes. Currency impacts were minor. The acquired AkzoNobel North American architectural coatings business added about \$475 million to segment sales in the quarter. Quarterly net sales results, excluding acquisitions and currency, varied by region with growth in the Americas and overall declines in Europe. The largest sales volume decline was in Asia Pacific driven exclusively by lower marine results. Marine new-build activity declined notably year-over-year as overall industry activity remains subdued. U.S. architectural coatings sales, excluding acquired business sales, declined by low-single-digit percentages. High-single-digit percentage growth in company-owned stores was offset by lower sales due to previously disclosed changes in products sold at a national retail customer. Aerospace and automotive refinish delivered mid- to high-single-digit percentage sales growth aided by solid global end-market trends, except in Europe. Segment income was \$255 million for the second quarter of 2013, an increase of \$51 million compared to the second

quarter of 2012. The most significant factors were strong operating performance, including achievement of lower costs, the



## Table of Contents

additional earnings contributed by acquired businesses and pricing, which combined to more than offset the negative impact of lower volume and inflation.

Looking ahead, the third quarter is traditionally a slower quarter seasonally for the segment and most notably for architectural coatings; however, U.S. architectural coatings market conditions are expected to remain positive. Sales demand patterns in the longer cycle aerospace and marine businesses are less seasonal. Also, the acquired businesses will remain a large influence on segment financial results. Lastly, we anticipate a more modest year-over-year cost benefit as some of the 2012 restructuring program actions were implemented last year and are reaching their anniversary date.

Industrial Coatings sales increased 13 percent, or \$142 million, to \$1,241 million for the second quarter of 2013 compared to \$1,099 million for the second quarter of 2012. The sales increase was driven by 7 percent volume growth and 5 percent sales of acquired businesses. For the quarter, PPG's global automotive OEM (original equipment manufacturer) volumes grew 12 percent, with comparable growth rates in each major region. Sales volumes in this business outpaced global auto industry production growth of 3 percent, reflecting continued adoption of the Company's newest products and technologies and high level focus on customer service. The industrial coatings business' sales volume grew globally, aided by strong emerging region volume growth and low-single-digit percentage volume growth in the U.S. Sales volumes receded in Europe. Overall global demand in general industrial end use markets remained mixed. The packaging coatings business' sales volumes advanced low-single-digit percentages globally and in each major region. Segment income was \$191 million for the second quarter of 2013 compared to \$143 million for the same quarter in 2012. The favorable earnings impact of higher sales was coupled with ongoing cost management initiatives to result in increased segment earnings.

Looking ahead to the third quarter, segment sales are typically lower seasonally in comparison with the second quarter. Global automotive OEM industry production growth is expected to continue year-over-year, but below production levels in the second quarter. Segment earnings are expected to benefit less from restructuring-related savings due to reaching the anniversary of certain prior year actions.

Architectural Coatings – EMEA sales decreased 5 percent, or \$30 million, to \$571 million for the second quarter of 2013 compared to \$601 million for the prior year second quarter, in what is traditionally the strongest seasonal sales quarter for the segment. Sales volumes were down 8 percent as broad weakness continued in most European countries. Additionally, poor weather and flooding occurred in Eastern Europe, contributing modestly to the negative segment volume performance. Currency translation added slightly to sales. Despite the year over year volume decline, segment income was \$69 million for the second quarter of 2013, an increase of \$5 million from the same quarter in 2012. The earnings impact from the lower sales volume was countered by discretionary cost management coupled with the structural cost improvements stemming from the 2012 restructuring program.

Looking ahead, overall market conditions in the third quarter are expected to remain challenging in Europe. We expect normal seasonal patterns, as the third quarter activity is traditionally lower sequentially versus the second quarter. Stringent cost management remains a focus, and some further benefit is expected to be realized from the prior year restructuring program.

Optical and Specialty Materials sales increased 4 percent, or \$12 million, to \$326 million for the second quarter of 2013 compared to \$314 million for the second quarter of 2012. The sales increase was due to a 2 percent increase in volumes, with gains realized in both businesses, and modestly higher sales prices. The new product launch of Generation VII Transitions<sup>(R)</sup> lenses in Europe continued, with new product sales in the quarter exceeding first quarter sales results. In the U.S. and Asian markets, growth continued for optical products sold to end-consumers. However, customer inventory management of the Generation VI Transitions<sup>®</sup> product ahead of the impending Generation VII launch in these regions, tempered growth. Silica demand improved modestly in the U.S. and Europe. Segment income was \$96 million for the second quarter of 2013 compared to \$95 million for the same quarter in 2012.

Looking ahead, segment sales traditionally decline seasonally from the second to the third quarter. In optical products, solid emerging region growth is expected to continue, and optical customers are expected to remain focused on managing their Generation VI product inventory levels ahead of the Generation VII introduction. The positive demand trend for Silicas is expected to continue.

Second quarter Glass sales declined \$4 million or 1% from the prior year period to \$269 million. Sales decreased 3 percent from lower volumes, somewhat offset by higher flat glass pricing. Weak end-use market conditions continued for fiber glass in Europe and fiber glass pricing remained lower than prior year. Flat glass volumes also declined as the non-residential construction market, a key market for the Company, remained subdued, while other markets, including the solar panel market, declined. Segment income was \$8 million for the second quarter of 2013 compared

## Table of Contents

to segment income of \$23 million for the same quarter in 2012. In addition to lower sales, the segment experienced input cost inflation, including higher transportation and natural gas unit costs. Equity and licensing earnings were lower for the segment, including the impact of weaker consumer electronics activity on the Asian fiber glass joint venture results. Higher maintenance and repair costs and lower manufacturing utilization offset the benefit of other positive cost actions.

Looking ahead to the third quarter, the segment typically experiences modestly positive seasonal gains versus the second quarter. However, overall sales demand patterns in both businesses are expected to continue, resulting in low utilization rates. Inflation is expected to remain a factor, but moderate somewhat based on current natural gas unit pricing. Equity earnings are expected to remain at lower levels based on weak personal computer demand. Both businesses have a heavy emphasis on improving cost performance.

### Performance in First Six Months of 2013 Compared to First Six Months of 2012

#### Performance Overview

Sales in the first six months of 2013 were \$7,426 million, up \$565 million or 8% compared with sales of \$6,861 million for the first six months of 2012. The impact of acquisitions increased sales about 9 percent and higher selling prices increased sales about 1 percent. Overall sales volumes, excluding acquisitions, were down 2 percent and the foreign currency translation impact was negligible. Sales from acquisitions were driven by the North American architectural coatings business of AkzoNobel acquired in April 2013. The remaining sales increase from acquisitions include Deft, an aerospace coatings business acquired in May 2013, the Spraylat coatings business acquired in December 2012 and the impact of consolidating the results of an Indian joint venture over which PPG now has management control. Higher selling prices impacted most businesses due, in part, to the carryover impact of 2012 price increases and increases to offset low-single-digit inflation in the first six months of 2013, which includes increases in transportation and labor costs. Volumes grew in the Industrial Coatings segment, but fell in the remaining segments. Sales volume was inconsistent by region. Sales volumes in the United States and Canada were level year over year and growth occurred in many end-use markets in Asia Pacific. However, Europe experienced further broad demand weakening. Overall sales trends were also varied by end-use market.

Cost of sales, exclusive of depreciation and amortization, was \$4,290 million for the first six months of 2013, up \$278 million from \$4,012 million for the first six months of 2012. Cost of sales increased year-over-year due to the cost of sales of acquired businesses. Costs of sales decreased due to the impacts of lower sales volumes and lower manufacturing costs. Cost of sales as a percentage of sales for the first six months of 2013 was 57.8 percent compared to 58.5 percent for the first six months of 2012. The decrease is largely due to shifts in sales margin mix.

Selling, general and administrative expenses increased by \$163 million in the first six months of 2013 compared to the first six months of 2012. These costs increased principally from the inclusion of acquired businesses and overhead cost inflation. This increase was partly offset by the impact of our continued focus on cost management, including savings from restructuring actions approved in March 2012. The impact of foreign currency translation was minimal. Selling, general and administrative expenses increased slightly as a percent of sales to 23.9 percent in the first six months of 2013 from 23.5 percent in the first six months of 2012.

Other charges decreased to \$48 million in the first six months of 2013 from \$186 million in the first six months of 2012. The decrease is due to lower legacy environmental remediation charges in 2013. The six months-ended June 30, 2013 includes a pretax charge of \$12 million related to environmental remediation at a legacy chemical manufacturing site. The six months-ended June 30, 2012 included a pretax charge of \$159 million, related primarily to the environmental remediation at a former chromium manufacturing plant and associated sites in New Jersey.

Other earnings decreased to \$54 million in the first six months of 2013 as compared to \$60 million for the first six months of 2012. The decrease reflects lower equity earnings, primarily from our Asian fiber glass joint ventures, due to a decline in the personal computer market and lower licensing earnings in the Glass segment.

The effective tax rate on pretax earnings from continuing operations was 23 percent and 18 percent in the six months ended June 30, 2013 and 2012, respectively. The effective rate on pretax earnings from continuing operations for the six months ended June 30, 2013 includes tax benefits of \$5 million or 26.7 percent for the settlement of legacy pension plans, \$4 million or 37.4 percent for a legacy environmental remediation charge, and \$8 million or approximately 28.5 percent for acquisition-related costs. The first six months of 2013 also include an after-tax benefit

of \$10 million for the retroactive impact of U.S. tax law changes enacted in early 2013 and that were not included in previously reported 2012 earnings. The effective tax rate on the remaining pre-tax earnings from continuing operations was 24 percent resulting in tax expense of \$209 million.

Table of Contents

The effective tax rate on pretax earnings from continuing operations for the six months-ended June 30, 2012 includes tax benefits of \$60 million or 37.7 percent for estimated environmental remediation costs primarily at a former chromium manufacturing plant and associated sites in New Jersey, \$45 million or 21.4 percent for business restructuring charges and \$2 million or 28.6 percent for acquisition-related expenses. The effective tax rate on the remaining pretax earnings from continuing operations was approximately 23 percent resulting in tax expense of \$174 million.

Diluted earnings-per-share for the first six months of 2013 were \$18.76 per-share, comprised of net income from continuing operations of \$3.82 per-share and discontinued operations, net of tax of \$14.94 per-share. Excluding the charges related to legacy pension and environmental costs, as well as acquisition-related costs and the non-recurring retroactive tax benefit, adjusted diluted earnings-per-share from continuing operations for the six months ended June 30, 2013 were \$4.02. This compares to adjusted diluted earnings-per-share from continuing operations of \$3.33 for the six months ended June 30, 2012, excluding the charges in the six month period related to business restructuring and environmental remediation and acquisition-related costs. The increase in diluted earnings-per-share resulted from higher earnings and a reduction in the number of shares outstanding as a result of the 10.8 million PPG shares tendered to the Company in the exchange offer in connection with the separation and merger of the Company's former commodity chemicals business as well as the approximately 1 million shares repurchased in the first quarter of 2013. For more information about the separation and merger of the Company's former commodity chemicals business, see Note 5, "Separation and Merger Transaction," under Item 1 of this Form 10-Q.

#### Regulation G Reconciliation – Net Income and Earnings per Diluted Share

PPG believes investors' understanding of the Company's operating performance is enhanced by the disclosure of net income and earnings per diluted share adjusted for nonrecurring charges. PPG's management considers this information useful in providing insight into the Company's ongoing operating performance because it excludes the impact of items that cannot reasonably be expected to recur on an ongoing basis. Net income and earnings per diluted share adjusted for these items are not recognized financial measures determined in accordance with U.S. generally accepted accounting principles (GAAP) and should not be considered a substitute for net income or earnings per diluted share or other financial measures as computed in accordance with U.S. GAAP. In addition, adjusted net income and adjusted earnings per diluted share may not be comparable to similarly titled measures as reported by other companies.

Net income (attributable to PPG) and earnings-per-share – assuming dilution (attributable to PPG) are reconciled to adjusted net income (attributable to PPG) and adjusted earnings-per-share – assuming dilution below:

(Millions, except per share amounts)

Six Months ended June 30, 2013	Continuing Operations		Discontinued Operations		Net Income	
	Net Income	EPS	Net Income	EPS	Net Income	EPS
Net income (attributable to PPG)	\$560	\$3.82	\$2,191	\$14.94	\$2,751	\$18.76
Net income (attributable to PPG) includes:						
Acquisition-related costs	20	0.13			20	0.13
Charges related to legacy pension settlements	13	0.09			13	0.09
Charges related to legacy environmental remediation	8	0.05			8	0.05
Impact of one time retroactive U.S. tax law change	(10)	(0.07)			(10)	(0.07)
Adjusted net income	\$591	\$4.02	\$2,191	\$14.94	\$2,782	\$18.96

Table of Contents

(Millions, except per share amounts)

Six Months ended June 30, 2012	Continuing Operations		Discontinued Operations		Net Income	
	Net Income	EPS	Net Income	EPS	Net Income	EPS
Net income (attributable to PPG)	\$247	\$1.60	\$128	\$0.82	\$375	\$2.42
Net income (attributable to PPG) includes:						
Charges related to business restructuring	163	1.06			163	1.06
Charges related to environmental remediation	99	0.64			99	0.64
Charges related to business acquisitions	4	0.03			4	0.03
Costs related to the separation and merger transaction			3	0.02	3	0.02
Adjusted net income	\$513	\$3.33	\$131	\$0.84	\$644	\$4.17

## Performance of Reportable Business Segments

Performance Coatings sales increased \$421 million or 18%, to \$2,812 million for the first six months of 2013 compared to \$2,391 million for the first six months of 2012. Sales were 21 percent higher due to sales from acquired businesses and 2 percent higher pricing, partially offset by 5 percent lower volumes. Sales volumes remained varied by region and business. Volume growth continued in the aerospace coatings business where industry demand remains strong. Offsetting the segment sales gains was a decline in volume in the protective and marine coatings business due to further, notable weakness in the Asian marine new-build market as global demand remains very subdued. U.S. architectural coatings sales volume declined by low-single-digit percentages with mid-to-high single digit percentage same store growth in company-owned stores, lower sales in national retail accounts and lower sales in the independent dealer channel. The lower sales volume in the national account channel was due to the previously disclosed change in products sold at a national retail customer. Segment income was \$427 million for the six months ended June 30, 2013, an increase of \$63 million compared to the six months ended June 30, 2012, despite the unfavorable earnings impact of lower sales. Segment income grew because of lower overhead and manufacturing costs stemming from our prior restructuring actions and ongoing cost management as well as the additional earnings stemming from acquired businesses.

Industrial Coatings sales increased 11 percent, or \$249 million, to \$2,424 million for the first six months of 2013 compared to \$2,175 million for the first six months of 2012. The sales increase was driven by 5 percent volume growth, 5 percent from acquisitions and 1 percent from price and foreign currency translation. For the six months 2013, PPG's global automotive OEM (original equipment manufacturer) coatings volumes grew 10 percent while global auto production grew by 1 percent year-over-year. The industrial coatings business experienced inconsistent volume results by region with broad weakness in Europe and strong improvements across emerging regions, while North America was modestly higher compared with prior year. Packaging coatings volume also grew modestly in all regions. Segment income was \$369 million for the first six months of 2013 compared to \$293 million for the same period in 2012. The favorable earnings impact of higher sales was coupled with ongoing cost management initiatives and 2012 restructuring program benefits to result in increased segment earnings.

Architectural Coatings – EMEA sales decreased 8 percent, or \$93 million, to \$1,025 million for the first six months of 2013 compared to \$1,118 million for the first six months of 2012. Volumes were down 10 percent as demand worsened in most European countries. Poor weather conditions in the first half of 2013 contributed to the volume decline versus the prior year. The impact of pricing was slightly positive. Despite the year over year volume decline, segment income was \$89 million for the first six months of 2013, an increase of \$9 million in comparison to the prior year's first six months. The negative earnings impact from the lower sales was countered by lower costs, including discretionary cost management coupled with the structural cost improvements stemming from the 2012 restructuring program.

Optical and Specialty Materials sales decreased 1 percent, or \$8 million, to \$640 million for the first six months of 2013 compared to \$648 million for the first six months of 2012. The sales decrease was due to a 2 percent decline in volumes, versus a strong first half of 2012 that was aided by the optical industry recovery from fourth quarter 2011 Thailand flooding and related inventory restocking. The lower year-over-year volumes reflect a return to a normal

optical seasonal sales pattern coupled with somewhat lower overall optical consumer activity in the United States. A February 2013 new product launch of Generation VII Transitions<sup>(R)</sup> lenses in Europe resulted in higher volumes in Europe despite a weak regional economy. Silica demand improved in the U.S. and Europe. Segment income was \$195 million for the

## Table of Contents

first six months of 2013 compared to \$204 million for last year's comparable period. The \$9 million decrease in segment income was due to the earnings impact of lower sales volumes, partially offset by lower selling and marketing expenses.

First six month 2013 Glass sales declined \$4 million from the prior year period to \$525 million. Sales decreased 1 percent due to lower sales volumes. Volume in both glass businesses declined reflecting moderating demand in various end-use markets. Segment income was \$13 million for the first six months of 2013 compared to segment income of \$31 million for the first six months of 2012. In addition to lower sales volumes, the segment experienced input cost inflation, including higher natural gas costs, lower licensing earnings and lower fiber glass equity earnings from weaker personal computer production activity in Asia. These negative factors more than offset reductions in manufacturing costs.

### Liquidity and Capital Resources

PPG ended the quarter with cash and short-term investments totaling approximately \$1.8 billion, down from \$2.4 billion at December 31, 2012. In January 2013, PPG received \$940 million in cash proceeds, including a preliminary working capital adjustment, net of cash transferred, in connection with the closing of the separation of its commodity chemicals business and subsequent merger of the subsidiary holding the PPG commodity chemicals business with a subsidiary of Georgia Gulf. For more information about the separation and merger of the Company's former commodity chemicals business, see Note 5, "Separation and Merger Transaction," under Item 1 of this Form 10-Q. On April 1, 2013, PPG finalized the acquisition of the North American architectural coatings business of Akzo Nobel N.V., Amsterdam, for \$957 million, net of cash acquired.

Cash from operating activities - continuing operations for the six months ended June 30, 2013 was \$490 million and was \$322 million for the comparable period of 2012. Cash from operating activities - continuing operations, the Company's debt capacity and cash and short term investments on hand are expected to continue to be sufficient to fund operating activities, capital spending, including acquisitions, dividend payments, debt service, amounts due under the proposed asbestos settlement, share repurchases and contributions to pension plans.

Other sources and uses of cash during the six months ended June 30, 2013 included:

- Capital expenditures, excluding acquisitions, were \$155 million, or about 2 percent of sales. Anticipated 2013 capital spending is expected to be in the range of 2 percent to 3 percent of sales.

- Proceeds from the sale of short-term investments, net of the cost of short-term investment purchases was \$610 million.

- \$600 million of debt was repaid upon maturity in March 2013.

PPG expects to make mandatory contributions to its non-U.S. plans in 2013 of approximately \$77 million, of which \$28 million was made as of June 30, 2013. PPG does not have a mandatory contribution to make to its U.S. defined benefit pension plans in 2013 and does not expect to make a voluntary contribution in 2013.

- Cash dividends paid totaled \$171 million.

- Cash spent on share repurchases totaled \$140 million.

The ratio of total debt, including capital leases, to total debt and PPG shareholders' equity was 40 percent at June 30, 2013 and 50 percent at December 31, 2012, respectively.

Operating Working Capital is a subset of total working capital and represents (1) trade receivables – net of the allowance for doubtful accounts plus (2) inventories on a first-in, first-out ("FIFO") basis less (3) trade creditors' liabilities. We believe Operating Working Capital represents the key components of working capital under the operating control of our businesses. A key metric we use to measure improvement in our working capital management is Operating Working Capital as a percentage of sales (current quarter sales annualized).



Table of Contents

(Millions, except percentages)	June 30, 2013		Dec. 31 2012		June 30, 2012	
Trade Receivables, Net	\$2,988		\$2,568		\$2,973	
Inventories, FIFO	2,059		1,931		2,022	
Trade Creditors' Liabilities	1,898		1,620		1,749	
Operating Working Capital	\$3,149		\$2,879	(a)	\$3,246	(a)
Operating Working Capital as a % of Sales	19.2	%	19.7	%	20.5	%

(a) Inclusive of amounts related to PPG's Commodity Chemicals business that was separated in January 2013.

Excluding the Commodity Chemicals business, operating working capital was \$3,001 or 21.3 percent at June 30, 2012 and \$2,634 or 20.3 percent at December 31, 2012.

The change in operating working capital elements, excluding the impact of currency, acquisitions and the operating working capital of the commodity chemicals business at December 31, 2012, was an increase of \$239 million during the six months ended June 30, 2013. This increase is the result of trade receivables increasing in line with the increase in the second quarter of 2013 sales compared with sales in the fourth quarter 2012. Days sales outstanding at June 30, 2013 were 62 days, which was consistent with December 31, 2012 (excluding sales and receivables of the commodity chemicals business) and a three day decrease over June 30, 2012 (excluding sales and receivables of the commodity chemicals business).

#### Currency

From December 31, 2012 to June 30, 2013, the U.S. dollar strengthened against the currencies of most of the countries in which PPG operates. As a result, consolidated net assets at June 30, 2013 decreased by \$179 million, compared to December 31, 2012. Comparing exchange rates during the first six months of 2013 to those of the first six months of 2012, the U.S. dollar was slightly weaker in certain countries in which PPG operates, which had a favorable impact on June 30, 2013 pretax earnings of \$1 million from the translation of these foreign earnings into U.S. dollars.

#### New Accounting Standards

See Note 2, "New Accounting Standards," to the accompanying condensed consolidated financial statements for further details on recently issued accounting guidance.

#### Commitments and Contingent Liabilities, including Environmental Matters

PPG is involved in a number of lawsuits and claims, both actual and potential, including some that it has asserted against others, in which substantial monetary damages are sought. See Part II, Item 1, "Legal Proceedings" of this Form 10-Q and Note 20, "Commitments and Contingent Liabilities," to the accompanying condensed consolidated financial statements for a description of certain of these lawsuits, including a description of the proposed asbestos settlement.

As discussed in Part II, Item 1 and Note 20, although the result of any future litigation of such lawsuits and claims is inherently unpredictable, management believes that, in the aggregate, the outcome of all lawsuits and claims involving PPG, including asbestos-related claims in the event the proposed asbestos settlement described in Note 20 does not become effective, will not have a material effect on PPG's consolidated financial position or liquidity; however, any such outcome may be material to the results of operations of any particular period in which costs, if any, are recognized.

It is PPG's policy to accrue expenses for environmental contingencies when it is probable that a liability has been incurred and the amount of loss can be reasonably estimated. Reserves for environmental contingencies are exclusive of claims against third parties and are generally not discounted. In management's opinion, the Company operates in an environmentally sound manner and the outcome of the Company's environmental contingencies will not have a material effect on PPG's financial position or liquidity; however, any such outcome may be material to the results of operations of any particular period in which costs, if any, are recognized. Management anticipates that the resolution of the Company's environmental contingencies will occur over an extended period of time.

As of June 30, 2013 and December 31, 2012, PPG had reserves for environmental contingencies totaling \$281 million and \$332 million, respectively, of which \$103 million and \$101 million, respectively, were classified as current

liabilities. Pretax charges against income from continuing operations for environmental remediation costs totaled \$2 million and \$15 million, respectively, for the three and six months ended June 30, 2013 and \$3 million and \$163 million, respectively,

## Table of Contents

for the three and six months ended June 30, 2012, and are included in "Other charges" in the accompanying condensed consolidated statement of income. Included in the 2013 environmental remediation expense is a charge of \$12 million for remediation costs at a legacy chemical manufacturing site in Barberton, Ohio based on an updated estimate of costs for remediation activities at this site. Income from discontinued operations includes \$1 million of environmental remediation expense in the six months ended June 30, 2012. Cash outlays related to all environmental remediation aggregated \$32 million and \$55 million, respectively, for the three and six months ended June 30, 2013 and \$12 million and \$25 million, respectively, for the three and six months ended June 30, 2012. The first quarter of 2012 spending included \$3 million associated with environmental remediation liabilities of the former commodity chemicals business.

We continue to analyze, assess and remediate the environmental issues associated with a former chromium manufacturing plant and related sites located in Jersey City, NJ. In connection with the preparation of a final draft soil remedial action work plan and cost estimate that will be submitted to the NJDEP, we compiled updated information about the sites that was used to develop a new estimate of the cost to remediate these sites which resulted in a charge against earnings of \$145 million in the six months ended June 30, 2012.

In addition to the amounts currently reserved for environmental remediation, the Company may be subject to loss contingencies related to environmental matters estimated to be as much as \$100 million to \$235 million. Such unreserved losses are reasonably possible but are not currently considered to be probable of occurrence. This range of reasonably possible unreserved loss relates to environmental matters at a number of sites including; i) additional costs at New Jersey Chrome, which represents about half of this potential range and ii) a number of other sites, including legacy glass and chemical manufacturing sites. The loss contingencies related to these sites include significant unresolved issues such as the nature and extent of contamination at these sites and the methods that may have to be employed to remediate them.

Management expects pretax charges for environmental remediation costs during the remainder of 2013 to be within the range of \$10 million to \$15 million.

Management expects cash outlays for environmental remediation costs to be approximately \$50 million during the remainder of 2013, approximately \$100 million annually in 2014 and 2015 and to range from \$10 million to \$30 million annually from 2016 through 2018. It is possible that technological, regulatory and enforcement developments, the results of environmental studies and other factors could alter our expectations with respect to charges against income and future cash outlays. Specifically, the level of expected cash outlays and charges for environmental remediation costs are highly dependent upon activity related to the former chromium manufacturing plant and associated sites in New Jersey, as PPG awaits approval of the final draft soil remedial work plan that will be submitted to the NJDEP in 2014.

### Forward-Looking Statements

The Private Securities Litigation Reform Act of 1995 provides a safe harbor for forward-looking statements made by or on behalf of the Company. Management's Discussion and Analysis and other sections of this Quarterly Report contain forward-looking statements that reflect the Company's current views with respect to future events and financial performance.

You can identify forward-looking statements by the fact that they do not relate strictly to current or historic facts. Forward-looking statements are identified by the use of the words "aim," "believe," "expect," "anticipate," "intend," "estimate," "project," "outlook," "forecast" and other expressions that indicate future events and trends. Any forward-looking statement speaks only as of the date on which such statement is made, and the Company undertakes no obligation to update any forward looking statement, whether as a result of new information, future events or otherwise. You are advised, however, to consult any further disclosures we make on related subjects in our reports to the Securities and Exchange Commission. Also, note the following cautionary statements.

Many factors could cause actual results to differ materially from the Company's forward-looking statements. Such factors include global economic conditions, increasing price and product competition by foreign and domestic competitors, fluctuations in cost and availability of raw materials, the ability to maintain favorable supplier relationships and arrangements, the realization of anticipated cost savings from restructuring initiatives, difficulties in integrating acquired businesses and achieving expected synergies therefrom, economic and political conditions in international markets, the ability to penetrate existing, developing and emerging foreign and domestic markets, foreign exchange rates and fluctuations in such rates, fluctuations in tax rates, the impact of future legislation, the impact of environmental regulations, unexpected business disruptions and the unpredictability of existing and possible future litigation, including

Table of Contents

litigation that could result if the proposed asbestos settlement does not become effective. However, it is not possible to predict or identify all such factors.

While the list of factors presented here and in the Company's Form 10-K for the year ended December 31, 2012 under the caption "Item 1A Risk Factors" are considered representative, no such list should be considered to be a complete statement of all potential risks and uncertainties. Unlisted factors may present significant additional obstacles to the realization of forward-looking statements.

Consequences of material differences in the results compared with those anticipated in the forward-looking statements could include, among other things, business disruption, operational problems, financial loss, legal liability to third parties, other factors set forth in "Item 1A Risk Factors" of the Company's Form 10-K for the year ended December 31, 2012 and similar risks, any of which could have a material adverse effect on the Company's consolidated financial condition, results of operations or liquidity.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

There were no material changes in the Company's exposure to market risk from December 31, 2012 to June 30, 2013. See Note 15, "Derivative Instruments and Hedge Activities" for a description of our instruments subject to market risk.

Item 4. Controls and Procedures

a. Evaluation of disclosure controls and procedures. Based on their evaluation as of the end of the period covered by this Form 10-Q, the Company's principal executive officer and principal financial officer have concluded that the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934 (the "Exchange Act")) are effective to ensure that information required to be disclosed by the Company in reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms and to ensure that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the Company's management, including its principal executive and principal financial officers, as appropriate, to allow timely decisions regarding required disclosure.

b. Changes in internal control. There were no changes in the Company's internal control over financial reporting that occurred during the Company's most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Table of Contents

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

PPG is involved in a number of lawsuits and claims, both actual and potential, including some that it has asserted against others, in which substantial monetary damages are sought. These lawsuits and claims relate to contract, patent, environmental, product liability, antitrust and other matters arising out of the conduct of PPG's current and past business activities. To the extent that these lawsuits and claims involve personal injury and property damage, PPG believes it has adequate insurance; however, certain of PPG's insurers are contesting coverage with respect to some of these claims, and other insurers, as they had prior to the asbestos settlement described below, may contest coverage with respect to some of the asbestos claims if the settlement is not implemented. PPG's lawsuits and claims against others include claims against insurers and other third parties with respect to actual and contingent losses related to environmental, asbestos and other matters.

The results of any future litigation and claims are inherently unpredictable. However, management believes that, in the aggregate, the outcome of all lawsuits and claims involving PPG, including asbestos-related claims in the event the settlement described below does not become effective, will not have a material effect on PPG's consolidated financial position or liquidity; however, such outcome may be material to the results of operations of any particular period in which costs, if any, are recognized.

For over 30 years, PPG has been a defendant in lawsuits involving claims alleging personal injury from exposure to asbestos. For a description of asbestos litigation affecting the Company and the terms and status of the proposed asbestos settlement arrangement, see Note 20, "Commitments and Contingent Liabilities" to the accompanying condensed consolidated financial statements under Part I, Item 1 of this Form 10-Q.

In the past, the Company and others have been named as defendants in several cases in various jurisdictions claiming damages related to exposure to lead and remediation of lead-based coatings applications. PPG has been dismissed as a defendant from most of these lawsuits and has never been found liable in any of these cases.

In September 2012, U.S. EPA issued a Finding of Violation to PPG for alleged violations of operating requirements for the Delaware, OH facility's thermal oxidizer air emission control unit and the alleged failure to report the alleged deviations. U.S. EPA has offered to resolve this matter with a consent order that would include a fine of \$203,908. PPG intends to respond in writing to U.S. EPA's initial penalty demand. We cannot predict the amount of the final penalty demand.

Item 1A. Risk Factors

There were no material changes in the Company's risk factors from the risks disclosed in the Company's Form 10-K for the year ended December 31, 2012.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Directors who are not also officers of the Company receive common stock equivalents pursuant to the PPG Industries, Inc. Deferred Compensation Plan for Directors ("PPG Deferred Compensation Plan for Directors"). Common stock equivalents are hypothetical shares of common stock having a value on any given date equal to the value of a share of common stock. Common stock equivalents earn dividend equivalents that are converted into additional common stock equivalents but carry no voting rights or other rights afforded to a holder of common stock. The common stock equivalents credited to directors under both plans are exempt from registration under Section 4(2) of the Securities Act of 1933 as private offerings made only to directors of the Company in accordance with the provisions of the plans. Under the PPG Deferred Compensation Plan for Directors, each director may elect to defer the receipt of all or any portion of the compensation paid to such director for serving as a PPG director. All deferred payments are held in the form of common stock equivalents. Payments out of the deferred accounts are made in the form of common stock of the Company (and cash as to any fractional common stock equivalent). In the second quarter of 2013, the directors, as a group, were credited with 2,602 common stock equivalents under this plan. The value of each common stock equivalent, when credited, ranged from \$140.65 to \$150.95.



Table of Contents

Issuer Purchases of Equity Securities

No shares were repurchased in the quarter ended June 30, 2013 under the current 10 million share repurchase program approved in October 2011. The maximum number of shares that may yet be purchased under this program is 6,968,425 shares. This repurchase program has no expiration date.

Item 6. Exhibits

See the Index to Exhibits on Page 49.



Table of Contents

SIGNATURE

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.

PPG INDUSTRIES, INC.  
(Registrant)

Date: July 29, 2013

By /s/ David B. Navikas  
David B. Navikas  
Senior Vice President, Finance and Chief  
Financial Officer  
(Principal Financial and  
Accounting Officer and  
Duly Authorized Officer)

Table of Contents

PPG Industries, Inc. and Consolidated Subsidiaries

Index to Exhibits

The following exhibits are filed as part of, or incorporated by reference into, this Form 10-Q.

2.1	Sale and Purchase Agreement, dated December 13, 2012, between Akzo Nobel N.V. and PPG Industries, Inc., was filed as Exhibit 2.3 to the Registrant's Annual Report on Form 10-K for the period ended December 31, 2012.
†12	Computation of Ratio of Earnings to Fixed Charges for the Six Months Ended June 30, 2013 and for the Five Years Ended December 31, 2012.
†31.1	Certification of Principal Executive Officer Pursuant to Rule 13a-14(a) or 15d-14(a) of the Exchange Act, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
†31.2	Certification of Principal Financial Officer Pursuant to Rule 13a-14(a) or 15d-14(a) of the Exchange Act, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
†32.1	Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
†32.2	Certification of Chief 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 Document
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document

† Filed herewith.

\* Attached as Exhibit 101 to this report are the following documents formatted in XBRL (Extensible Business Reporting Language): (i) the Condensed Consolidated Statement of Income for the three and six months ended June 30, 2013 and 2012, (ii) the Condensed Consolidated Balance Sheet at June 30, 2013 and December 31, 2012, (iii) the Condensed Consolidated Statement of Cash Flows for the three and six months ended June 30, 2013 and 2012, and (iv) Notes to Condensed Consolidated Financial Statements for the three and six months ended June 30, 2013.