W R GRACE & CO
Form 10-K
February 27, 2014
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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K
ý ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2013
or
o TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from _____ to _____
Commission file number 1-13953
W. R. GRACE & CO.

Delaware	65-0773649
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)

7500 Grace Drive, Columbia, Maryland 21044-4098
(Address of principal executive offices) (Zip code)
(410) 531-4000
(Registrant's telephone number, including area code)
Securities registered pursuant to Section 12(b) of the Exchange Act:

Title of each class	Name of each exchange on which registered
Common Stock, $.01 par value	New York Stock Exchange, Inc.
Preferred Stock Purchase Rights	

Securities registered pursuant to Section 12(g) of the Act:
None
Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ý No o
Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. Yes o No ý
Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days. Yes ý No o
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 ý No o
Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulations S-K is not contained herein and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ý
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.

Large accelerated filer ý Accelerated filer o

Non-accelerated filer o (Do not check if a smaller reporting company) Smaller reporting company o

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

The aggregate market value of W. R. Grace & Co. voting and non-voting common equity held by non-affiliates as of June 30, 2013 (the last business day of the registrant's most recently completed second fiscal quarter) based on the closing sale price of $84.04 as reported on the New York Stock Exchange was $6,435,601,758.

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Section 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court. Yes ý No o

At January 31, 2014, 77,063,385 shares of W. R. Grace & Co. Common Stock, $.01 par value, were outstanding.

DOCUMENTS INCORPORATED BYREFERENCE

None.

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Grace®, Grace® logo and, except as otherwise indicated, the other trademarks, service marks or trade names used in the text of this report are trademarks, service marks or trade names of operating units of W. R. Grace & Co. or its affiliates and/or subsidiaries. RESPONSIBLE CARE® is a trademark, registered in the United States and/or other countries, of the American Chemistry Council. UNIPOL® is a trademark, registered in the United States and/or other countries, of The Dow Chemical Company or an affiliated company of Dow. W. R. Grace & Co.-Conn. and/or its affiliates are licensed to use the UNIPOL® and UNIPOL UNIPPAC® trademarks in the area of polypropylene.
Unless the context otherwise indicates, in this document the terms "Grace," "we," "us," "our" or "the Company" mean W. R. Grace & Co. and/or its consolidated subsidiaries and affiliates. Unless otherwise indicated, the contents of websites mentioned in this report are not incorporated by reference or otherwise made a part of this Report.

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PART I

Item 1. BUSINESS

BUSINESS OVERVIEW

W. R. Grace & Co. is engaged in the production and sale of specialty chemicals and specialty materials on a global basis through three operating segments: Grace Catalysts Technologies, which includes catalysts and related products and technologies used in refining, petrochemical and other chemical manufacturing applications; Grace Materials Technologies, which includes packaging technologies and engineered materials used in consumer, industrial, and pharmaceutical applications; and Grace Construction Products, which includes specialty construction chemicals and specialty building materials used in commercial, infrastructure and residential construction. We entered the specialty chemicals industry in 1954, when we acquired both the Dewey and Almy Chemical Company and the Davison Chemical Company. Grace is the successor to a company that began in 1854 and originally became a public company in 1953.

In 2001, Grace and 61 of its United States subsidiaries and affiliates filed voluntary petitions for reorganization under Chapter 11 of the United States Bankruptcy Code in the United States Bankruptcy Court for the District of Delaware. On February 3, 2014, the joint plan of reorganization filed by Grace and certain other parties became effective, concluding Grace's status as a debtor under Chapter 11.

On December 2, 2013, we completed the acquisition of the assets of the polypropylene licensing and catalysts business of The Dow Chemical Company for a cash purchase price of $500 million, subject to customary working capital and post-closing adjustments.

Our principal executive offices are located at 7500 Grace Drive, Columbia, Maryland 21044, telephone (410) 531-4000. As of December 31, 2013, we had approximately 6,700 global employees.

Grace Catalysts Technologies produces and sells catalysts and related products and technologies used in refining, petrochemical and other chemical manufacturing applications including:

- Fluid catalytic cracking catalysts, also called FCC catalysts, that help to "crack" the hydrocarbon chain in distilled crude oil to produce transportation fuels, such as gasoline and diesel fuels, and other petroleum-based products; and FCC additives used to reduce sulfur in gasoline, maximize propylene production from refinery FCC units, and reduce emissions of sulfur oxides, nitrogen oxides and carbon monoxide from refinery FCC units;
- Hydroprocessing catalysts, most of which are marketed through our Advanced Refining Technologies LLC, or ART, joint venture with Chevron Products Company in which we hold a 50% economic interest, that are used in process reactors to upgrade heavy oils into lighter, more useful products by removing impurities such as nitrogen, sulfur and heavy metals, allowing less expensive feedstocks to be used in the petroleum refining process (ART is not consolidated in our financial statements, so ART's sales are excluded from our sales);
- Polyolefin catalysts and catalyst supports, for the production of polypropylene and polyethylene thermoplastic resins, which can be customized to enhance the performance of a wide range of industrial and consumer end-use applications including high pressure pipe, geomembranes, food packaging, automotive parts, medical devices, and textiles; and chemical catalysts used in a variety of industrial, environmental and consumer applications; and
- Gas-phase polypropylene process technology which provides our licensees with a reliable capability to manufacture polypropylene products for a broad array of end-use applications.

Grace Materials Technologies produces and sells specialty materials, coatings and sealants and related products used in coatings, consumer, industrial, pharmaceutical, and packaging applications including:

- Silica-based engineered materials, including silica-based and silica-alumina-based materials, used in:
- Coatings and print media applications, including functional additives that provide matting effects and corrosion protection for industrial and consumer coatings and media and paper products to enhance quality in ink jet coatings;

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- Consumer applications, as a free-flow agent, carrier or processing aid in food and personal care products; as a toothpaste abrasive and thickener; and for the processing and stabilization of edible oils and beverages;
- Industrial applications, such as tires and rubber, precision investment casting, refractory, insulating glass windows, biofuels, and drying applications, fulfilling various functions such as reinforcement, high temperature binding and moisture scavenging;
- Pharmaceutical, life science and related applications including silica-based separation media, excipients and pharmaceutical intermediates; complementary purification products, chromatography consumables, and instruments; and CO_2 adsorbents used in anesthesiology and mine safety applications; and
- Packaging materials, including can and closure sealants used to seal and enhance the shelf life of can and bottle contents; coatings for cans and closures that prevent metal corrosion, protect package contents from the influence of metal and ensure proper adhesion of sealing compounds; and scavenging technologies designed to reduce off-taste and extend the shelf-life of packaged products.

Grace Construction Products produces and sells specialty construction chemicals and specialty building materials, including:

- Construction chemicals including concrete admixtures and fibers used to modify the rheology, improve the durability and enhance various other properties of concrete, mortar, masonry and other cementitious construction materials; and additives used in cement processing to improve energy efficiency in manufacturing, enhance the characteristics of finished cement and improve ease of use; and
- Building materials used in both new construction and renovation/repair projects. The products protect buildings and civil engineering structures from water, vapor and air penetration. The portfolio includes waterproofing membranes for commercial and residential buildings, specialty grouts for use in waterproofing and soil stabilization applications, air and vapor barriers, and other products to solve the specialized needs of preventative and repair applications.

Global Scope

We operate our business on a global scale with approximately 71% of our 2013 sales outside the United States. We conduct business in over 40 countries and in more than 50 currencies. We manage our operating segments on a global basis, to serve global markets. Currency fluctuations affect our reported results of operations, cash flows, and financial position.

Strategy Overview

Our strategy is to increase enterprise value by profitably growing our specialty chemicals and specialty materials businesses in the global marketplace and achieving high levels of efficiency and cash flow. To meet these objectives, we plan to:

- invest in research and development activities, with the goal of introducing new high-performance, technically differentiated products and services and enhancing manufacturing processes and operations;
- expand sales and manufacturing into emerging regions, including China, India, other economies in Asia, Eastern Europe, the Middle East and Latin America;
- pursue selected acquisitions and alliances that complement our current product offerings or provide opportunities for faster penetration of desirable market or geographic segments; and
- continue our commitment to process and productivity improvements and cost-management, such as rigorous controls on working capital and capital spending, integration of functional support services worldwide, and programs for improving operations and supply chain management.

CHAPTER 11 CASES

On April 2, 2001, Grace, along with 61 of our United States subsidiaries and affiliates, filed voluntary petitions for reorganization under Chapter 11 of the United States Bankruptcy Code (the "Bankruptcy Code") in the United States Bankruptcy Court for the District of Delaware (the “Bankruptcy Court”). The cases were jointly administered

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under case number 01-01139. Our non-U.S. subsidiaries and certain of our U.S. subsidiaries were not included in the bankruptcy filing.

On February 3, 2014 (the "Effective Date"), the joint plan of reorganization (the "Joint Plan") filed by Grace and certain other parties became effective, concluding Grace's status as a debtor under Chapter 11.

Under the Joint Plan, two asbestos trusts have been established and funded under Section 524(g) of the Bankruptcy Code. The order of the Bankruptcy Court confirming the Joint Plan contains a channeling injunction which provides that all pending and future asbestos-related personal injury claims and demands are to be channeled for resolution to an asbestos personal injury trust, the PI Trust, and all pending and future asbestos-related property damage claims and demands (PD Claims), including property damage claims related to Grace's former attic insulation product, ZAI, are to be channeled to a separate asbestos property damage trust, the PD Trust. The PD Trust has two accounts (the two accounts have separate trustees and their assets may not be commingled), the PD Account, in respect of non-ZAI PD Claims, and the ZAI PD Account, in respect of ZAI PD Claims.

The trusts are the sole recourse for holders of asbestos-related claims; the channeling injunctions prohibit them from asserting such claims directly against Grace.

Under the Joint Plan, Grace is obligated to make future payments to the PI Trust, the PD Trust in respect of PD Claims, and the PD Trust in respect of ZAI PD Claims.

The amounts that Grace is obligated to pay to the PI Trust are fixed, and include only deferred payments of $110 million per year for 5 years beginning in 2019, and $100 million per year for 10 years beginning in 2024. Grace has recorded a liability for these deferred payments.

The amounts that Grace is obligated to pay to the PD Trust in respect of non-ZAI PD Claims are not fixed. Grace is obligated to make payments to the PD Trust every six months in the amount of any non-ZAI PD Claims allowed by the Bankruptcy Court during the preceding six months plus interest (if applicable) and the amount of PD Trust expenses. Grace has accrued for those unresolved non-ZAI PD Claims that it believes are probable and estimable. Grace has not accrued for other unresolved or unasserted non-ZAI PD Claims as it does not believe that payment on any such claims is probable.

The amounts that Grace is obligated to pay to the PD Trust in respect of ZAI PD Claims include a fixed amount and a capped contingent amount. Grace is obligated to make a fixed payment of $30 million to the ZAI PD Account on the third anniversary of the Effective Date, i.e., February 3, 2017. Grace is also obligated to make up to 10 contingent payments of $8 million per year to the ZAI PD Account during the 20-year period beginning on the fifth anniversary of the Effective Date, with each such payment due only if the assets of the ZAI PD Account fall below $10 million during the preceding year. Grace has recorded a liability for the fixed deferred payment but has not recorded a liability for the contingent payments as it does not currently believe these payments are probable.

These obligations to the asbestos trusts are secured by Grace's obligation to issue 77,372,257 shares of Grace common stock to the asbestos trusts in the event of default.

See disclosure in this Report in Item 8 (Financial Statements and Supplementary Data) in the Financial Supplement under Note 2 (Chapter 11 and Joint Plan of Reorganization) to the Consolidated Financial Statements for a detailed description of the Chapter 11 cases and the Joint Plan.

PRODUCTS AND MARKETS

Specialty Chemicals and Materials Industry Overview

Specialty chemicals and specialty materials are high value-added products used as catalysts, intermediates, components, protectants or additives in a wide variety of products and applications. They are generally produced in relatively small volumes (compared with commodity chemicals) and must satisfy well-defined performance requirements and specifications. Specialty chemicals and specialty materials are often critical components of end products, catalysts for the production of end products and components used in end products. Consequently, they are tailored to meet customer needs, which generally results in a close relationship between the producer and the customer.

We focus our business on the following, which we believe are important competitive factors in the specialty chemicals and specialty materials industry:

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- value-added products, technologies and services, sold at competitive prices;
- customer service, including rapid response to changing customer needs;
- technological leadership (resulting from investment in research and development and technical customer service); and
- reliability of product and supply.

We believe that our focus on these competitive factors enables us to deliver increased value to customers and competitive operating margins notwithstanding the increased customer service and research and development costs that this focus entails.

Grace Catalysts Technologies Operating Segment

Catalysts Technologies principally applies alumina, zeolite and inorganic support technologies in the design and manufacture of products to create significant value for our diverse customer base. Our customers include major oil refiners and plastics and chemicals manufacturers. We believe that our technological expertise provides a competitive advantage, allowing us to quickly design products that help our customers create value in their markets.

The following table sets forth Catalysts Technologies sales of similar products as a percentage of Grace total revenue.

	2013			2012			2011		
(In millions)	Sales	% of Grace Revenue		Sales	% of Grace Revenue		Sales	% of Grace Revenue	
Refining Catalysts	$832.4	27.2	%	$986.8	31.3	%	$1,077.5	33.5	%
Polyolefin and Chemical Catalysts	291.6	9.5	%	281.3	8.9	%	269.8	8.4	%
Total Catalysts Technologies Revenue	$1,124.0	36.7	%	$1,268.1	40.2	%	$1,347.3	41.9	%

The following table sets forth Catalysts Technologies sales by region as a percentage of Catalysts Technologies total revenue.

	2013			2012			2011		
(In millions)	Sales	% of Catalysts Technologies Revenue		Sales	% of Catalysts Technologies Revenue		Sales	% of Catalysts Technologies Revenue	
North America	$359.8	32.0	%	$382.1	30.1	%	$462.4	34.3	%
Europe Middle East Africa	459.2	40.9	%	543.5	42.8	%	600.2	44.5	%
Asia Pacific	223.0	19.8	%	256.9	20.3	%	216.4	16.1	%
Latin America	82.0	7.3	%	85.6	6.8	%	68.3	5.1	%
Total Catalysts Technologies Revenue	$1,124.0	100.0	%	$1,268.1	100.0	%	$1,347.3	100.0	%

Grace Catalysts Technologies—Refining Catalysts

FCC Catalysts

We are a global leader in developing and manufacturing fluid catalytic cracking, or FCC, catalysts and additives that enable petroleum refiners to increase profits by improving product yields, value and quality. Our FCC products also enable refiners to reduce emissions from their FCC units and reduce sulfur content in the gasoline that they produce. Oil refining is a highly specialized discipline, and FCC catalysts must be tailored to meet local variations in crude oil and a refinery's product mix. We work regularly with our customers to identify the most appropriate catalyst formulations for their changing needs. We are dependent on the economics of the petroleum industry, specifically, the impacts of demand for transportation fuels and petrochemical products and crude oil supply, which affect the extent to which our customers utilize the available capacity of their refinery FCC units. In general, as a refinery utilizes more of its capacity, it needs a greater amount of FCC catalyst. In recent years global economic growth,

especially in emerging regions, has increased the demand for transportation fuels, and our FCC catalysts and additives. Other factors may reduce the demand for petroleum-based transportation fuels such as weak economic conditions and high retail gasoline and diesel fuel prices. In addition, government policy that encourages the use of non-petroleum-based fuels, discourages the use of diesel fuel or encourages greater vehicular fuel economy may negatively affect demand for our FCC catalysts and additives.

Refinery feedstocks vary in quality from light to heavy, sweet to sour crude oil. Sweet crude feedstocks are typically more expensive than heavy crude and yield a greater proportion of high-value petroleum products. They also yield a lower proportion of residual oil, or "resid," which is generally the lowest-value feedstock contained in crude oil. Although heavy crude feedstocks with high resid content are typically less expensive than higher quality feedstocks, the processing of high-resid feedstocks is more difficult because of their relatively high metals, nitrogen and sulfur contamination and higher boiling points. We have designed our MIDAS® catalyst, IMPACT® catalyst, NEKTOR™ catalyst, and GENESIS® catalyst product portfolios to enable our customers to increase the efficiency and yield of high-resid feedstock refining.

During 2010, the People's Republic of China reduced its quotas on exports of the rare earths that we use in the manufacture of FCC catalysts, causing significant increases in global prices of rare earths in 2010 and early 2011. In response to these price increases, we developed our RESIDULTRA™ low-rare earth FCC catalyst and our REPLACER® product line of no-rare earth FCC catalysts to mitigate the higher cost of rare earths without sacrificing performance. Starting in the third quarter of 2011, global prices of rare earths declined rapidly and significantly. Since then, we have added rare earth to some of our FCC catalyst formulations because it improves the performance and value of the catalyst.

Many U.S. petroleum refiners have entered into consent decrees with the U.S. Environmental Protection Agency (EPA) under which the refiners have agreed to reduce emissions of nitrogen oxides and sulfur oxides. The European Union has also imposed requirements on refineries with respect to nitrogen oxides and sulfur oxides emissions. FCC units are generally the largest emitters of these pollutants in a refinery. Our additives are designed to assist refineries in meeting their obligations to reduce these pollutants. Our Super DESOX® additive reduces sulfur oxides emissions from commercial FCC units. During 2011, we also launched our two low rare earth versions of Super DESOX® additive. Our DENOX® additives are designed to achieve reductions in nitrogen oxides emissions comparable to those obtained from capital intensive alternatives available to a refinery, while our non-platinum-based combustion promoters XNOX® and CP®P enable refiners to control carbon monoxide emissions without increasing NOx.

Global economic growth, especially in emerging regions, has increased the demand for plastics. As a result, our refinery customers have sought increased profits from petrochemicals by increasing the yield of propylene from their FCC units. Our ZSM-5-based technology, including our OLEFINSMAX® and OLEFINSULTRA® additive products, is designed to maximize the propylene output of FCC units.

In recent years, many countries and regions, including the U.S., European Union, Russia, India and China have imposed or increased the regulatory limitations on the sulfur content of gasoline and diesel fuel. We have developed a portfolio of products designed to assist refiners in meeting their gasoline sulfur reduction targets including our D-PRISM® and GSR® additives and our SURCA® catalyst family.

Competition in FCC catalysts and additives is based on technology, product performance, customer service and price. Our principal global FCC catalyst competitors are Albemarle Corp. and BASF which, with Johnson Matthey, are also principal global competitors in FCC additives. We also have multiple regional competitors for FCC catalysts and additives.

Hydroprocessing Catalysts

We market hydroprocessing catalysts, primarily through ART, our joint venture with Chevron. We established ART to combine our technology with that of Chevron and to develop, market and sell hydroprocessing catalysts to customers in the petroleum refining industry worldwide.

As discussed above, our business is dependent on the economics of the petroleum industry. Refineries increasingly use feedstocks that have high resid content. We are a leading supplier of hydroprocessing catalysts designed for processing these feedstocks. We offer products for fixed-bed resid hydrotreating, on-stream catalyst replacement and ebullating-bed resid hydrocracking processes.

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We also offer a full line of catalysts, customized for individual refiners, used in distillate hydrotreating to produce ultra-low sulfur content gasoline and diesel fuel, including our SMART CATALYST SYSTEM® and APART® catalyst system. As discussed above, regulatory limitations on the sulfur content of gasoline and diesel fuel are becoming more common. These products are designed to help refiners to reduce the sulfur content of their products. In early 2013, ART announced that it had obtained rights to sell hydrocracking and lubes hydroprocessing catalysts to licensees of Chevron Lummus Global and other petroleum refiners for unit refills. This arrangement is intended to streamline hydroprocessing catalyst supply and improve technical service for refining customers by establishing ART as the single point of contact for all their hydroprocessing catalyst needs.

Competition in the hydroprocessing catalyst industry is based on technology, product performance, customer service and price. Criterion, Albemarle, Haldor Topsoe, UOP and Axens are our leading global competitors in hydroprocessing catalysts. We also have multiple regional competitors.

Grace Catalysts Technologies—Polyolefin Catalysts, Catalyst Supports and Polypropylene Process Technology

We are a leading provider of catalyst systems and catalyst supports to the polyolefins industry for a variety of polyethylene and polypropylene process technologies. These types of catalysts are used for the manufacture of polyethylene and polypropylene thermoplastic resins used in products such as plastic film, high-performance plastic pipe, automobile parts, household appliances and household containers. We use a combination of proprietary catalyst and support technology, as well as technology licensed from third parties, to provide unique catalyst-based solutions to industry, and to provide a broad technology portfolio for enhancing collaboration opportunities with technology leaders.

Our MAGNAPORE® polymerization catalyst is used to produce high performance polyethylene in the slurry loop process for pipe and film applications. Our POLYTRAK® polymerization catalyst is designed to achieve improved polypropylene performance, particularly for impact resistant applications such as automobile bumpers and household appliances.

Our DAVICAT® standard and customized catalysts offer a wide range of chemical and physical properties based on our material science technology for supported catalysts, polystyrene, herbicide, neutriceuticals and on purpose olefins.

Our RANEY® nickel, cobalt and copper hydrogenation and dehydrogenation catalysts are used for the synthesis of organic compounds for the fibers, polyurethanes, engineered plastics, pharmaceuticals, sweeteners and petroleum industries.

Our non-phthalate CONSISTA® and traditional SHAC® catalysts along with CONSISTA® and ADT donors have been designed for the UNIPOL® gas-phase polypropylene process technology but are also adaptable to a variety of other polypropylene gas-phase and slurry-phase polymerization processes.

The polyolefin catalyst and supports industry is technology-intensive and suppliers must provide products formulated to meet customer specifications. There are many manufacturers of polyolefin catalysts and supports including PQ/INEOS, Albemarle, LyondellBasell, Univation and BASF, and most sell their products worldwide.

We are also a leading licensor of gas-phase polypropylene process technology to polypropylene manufacturers. Our UNIPOL® technology, acquired in 2013, is designed to have fewer moving parts and require less equipment than other competing technologies in order to reduce operating costs. This technology provides our licensees with a reliable capability to manufacture products for a broad array of end-use applications. The polypropylene process licensing industry is technology-intensive and licensors must adapt the technology and the related licenses to meet individual customer needs. The major competing polypropylene process licensor is LyondellBasell.

Grace Catalysts Technologies—Manufacturing, Marketing and Raw Materials

Our Catalysts Technologies products are manufactured by a network of globally coordinated plants. Our integrated planning organization is responsible for the effective utilization of our manufacturing capabilities.

We use a global organization of technical professionals with extensive experience in refining processes, catalyst development, and catalyst applications to market our refining catalysts and additives. These professionals work to tailor our technology to the needs of each specific customer. We generally negotiate prices for our refining catalysts because our formulations are specific to the needs of each customer and each customer receives individual attention and technical service. We sell a significant portion of our hydroprocessing catalysts through multiple-year supply agreements with our geographically diverse customer base.

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We use a global direct sales force for our polyolefin catalysts, supports and technologies and chemical catalysts that seeks to maintain close working relationships with our customers. These relationships enable us to cooperate with major polymer and chemical producers to develop catalyst technologies that complement their process or application developments. We have geographically distributed our sales and technical service professionals to make them responsive to the needs of our geographically diverse customers. We typically operate under long-term contracts with our customers.

Seasonality does not have a significant overall effect on our Catalysts Technologies operating segment. However, sales of FCC catalysts tend to be lower in the first calendar quarter prior to the shift in production by refineries from home heating oil for the winter season to gasoline production for the summer season. FCC catalysts and ebullating-bed hydroprocessing catalysts are consumed at a relatively steady rate and are replaced regularly. Fixed-bed hydroprocessing catalysts are consumed over a period of years and are replaced in bulk in an irregular pattern. Since our customers periodically shut down their refining processes to replace fixed-bed hydroprocessing catalysts in bulk, our hydroprocessing catalyst sales to any customer can vary substantially over the course of a year and between years based on that customer's catalyst replacement schedule.

The principal raw materials for Catalysts Technologies products include rare earths, molybdenum, caustic soda, aluminum, sodium aluminate, nickel, alumina, kaolin and cobalt. Multiple suppliers are generally available for each of these materials; however, some of our raw materials may be provided by single sources of supply. We seek to mitigate the risk of using single source suppliers by identifying and qualifying alternative suppliers or, for unique materials, by using alternative formulations from other suppliers or by passing price increases on to customers. In some instances, we produce our own raw materials and intermediates.

Prices for many of our raw materials, including metals and petroleum-based specialty and commodity materials such as resins and solvents, have been volatile in recent years. In response to increases in raw material costs, we generally take actions to mitigate the effect of higher costs including increasing prices, developing alternative formulations for our products and increasing productivity. In particular, during 2010, the People's Republic of China reduced its quotas on exports of the rare earths that we use in the manufacture of FCC catalysts, which significantly increased global prices. In response, in late 2010, we implemented rare earth surcharges on certain FCC catalysts that subsequently were removed in mid-2013 when the prices of these materials returned to stable levels. Rare earth surcharges increased sales by approximately $15 million, $110 million and $280 million in years 2013, 2012 and 2011, respectively. We also have taken other actions to reduce the impact of higher raw material costs on us and our customers.

As in many chemical businesses, we consume significant quantities of natural gas in the production of Catalysts Technologies products. World events and other economic factors have caused volatility in the price of natural gas. Increases or decreases in the cost of natural gas and raw materials can have a significant impact on our operating margins.

Grace Materials Technologies Operating Segment

Materials Technologies principally applies specialty silica, zeolite and resin technologies in the design and manufacture of products to create significant value for our diverse customer base. Our customers include coatings manufacturers, consumer product manufacturers, plastics manufacturers, producers of rigid food and beverage packaging, and pharmaceutical companies. We believe that our technological expertise provides a competitive advantage, allowing us to quickly design products that help our customers create value in their markets.

The following table sets forth Materials Technologies sales of similar products as a percentage of Grace total revenue.

	2013		2012		2011	
(In millions)	Sales	% of Grace Revenue	Sales	% of Grace Revenue	Sales	% of Grace Revenue
Engineered Materials	$494.4	16.2 %	$478.3	15.1 %	$500.5	15.6 %
Packaging Products	384.1	12.5 %	384.3	12.2 %	372.1	11.6 %
Total Materials Technologies Revenue	$878.5	28.7 %	$862.6	27.3 %	$872.6	27.2 %

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The following table sets forth Materials Technologies sales by region as a percentage of Materials Technologies total revenue.

	2013			2012			2011		
(In millions)	Sales	% of Materials Technologies Revenue		Sales	% of Materials Technologies Revenue		Sales	% of Materials Technologies Revenue	
North America	$176.7	20.1	%	$174.0	20.2	%	$173.1	19.8	%
Europe Middle East Africa	367.8	41.9	%	362.4	41.9	%	378.6	43.4	%
Asia Pacific	197.4	22.5	%	185.9	21.6	%	184.1	21.1	%
Latin America	136.6	15.5	%	140.3	16.3	%	136.8	15.7	%
Total Materials Technologies Revenue	$878.5	100.0	%	$862.6	100.0	%	$872.6	100.0	%

Grace Materials Technologies—Silica-based Materials

We provide enabling technologies that are silica- and silica-alumina-based functional additives and process aids, such as silica gel, colloidal silica, zeolitic adsorbents, precipitated silica and silica-aluminas, for a wide variety of applications. Our product portfolio includes:

Application	Use	Key Brands
Coatings and Print Media	Matting agents, anticorrosion pigments, TiO_2 extenders and moisture scavengers for paints and lacquers	SYLOID®, SHIELDEX®, SYLOSIV®, SYLOWHITE™
	Additives and formulations for matte, semi-glossy and glossy ink receptive coatings on high performance ink jet papers, photo paper, and commercial wide-format print media	SYLOJET®, DURAFILL®, LUDOX®
	Paper retention aids, functional fillers, paper frictionizers	DURAFILL®, LUDOX®
Consumer	Toothpaste abrasives and thickening agents, free-flow agents, anticaking agents, tabletting aids, cosmetic additives and flavor carriers	SYLOID® FP, SYLODENT®, SYLOID®, SYLOBLANC®, ELFADENT®, SYLOSIV®
	Edible oil refining agents, beer stabilizers and clarification aids for beer, juices and other beverages	DARACLAR®, TRISYL®
Industrial	Reinforcing agents for rubber and tires	PERKASIL®
	Inorganic binders and surface smoothening aids for precision investment casting and refractory applications	LUDOX®
	Adsorbents for dual pane windows and industrial applications, desiccant granules, beads, powders and bags and polyurethane moisture scavengers	PHONOSORB®, SYLOBEAD®, SYLOSIV®, CRYOSIV®, SAFETYSORB®
	Chemical metal polishing aids and formulations for chemical mechanical planarization/electronics applications	LUDOX®, POLIEDGE®
	Polymer additives for producers and processors of plastic products that prevent layers of polymer film from sticking together, improve dispersal of pigments and ease removal from molds	SYLOBLOC®
	Process adsorbents used in petrochemical and natural gas processes for such applications as ethylene-cracked-gas-drying, natural gas drying and sulfur removal	SYLOBEAD®
Discovery Sciences	Flash chromatography systems and consumables	REVELERIS®, REVEALX™, GRACERESOLV™
	Preparative scale purification products including media, column hardware, and equipment	DAVISIL®, VYDAC®, MODCOL®, SPRING®,

	MULTIPACKER®
Pharmaceutical excipients and intermediates	SYLOID® FP
Analytical scale high performance liquid chromatography (HPLC) columns and detectors	VISIONHT®, VYDAC®, ALLTECH®, ALLTIMA®
CO_2 adsorbents for anesthesiology and re-breathing applications	SODASORB®
Fine chemical intermediates	SYNTHETECH®

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Our silica-based engineered materials are integrated into our customers' manufacturing processes and, when combined with our technical support, increase the efficiency and performance of their products. By working closely with our customers, we help them to respond quickly to the changing needs of brand owners and consumers. We focus on high-growth segments and seek to develop and introduce new products that add additional value to the current and future needs of our customers. For example, our customers have incorporated our products into higher resolution print media, less abrasive high cleaning toothpastes and technologies that are friendly to the environment such as water-based and VOC-compliant coatings, green tires with lower roll resistance and non-toxic anticorrosion protection. Our discovery sciences products are used in a wide range of applications, including drug discovery and purification for the healthcare, pharmaceutical and biotechnology industries, environmental analysis, forensics, petrochemical analysis and the manufacture of food, cosmetics, vitamins and biofuels. We also market chromatography consumables and analytical and preparative columns packed with our specialty media. We can modify the base silica and surface chemistry for analytical, preparative and process-scale customers in order to enhance our product performance for their unique applications.

Our silica-based engineered materials sales are global. There are many manufacturers of engineered materials that market their products on a global basis including Evonik, PQ/INEOS, and UOP. Competition is generally based on product performance, technical service and reliability, price, and additional value-added features to address the needs of our customers, end-users and brand owners. Our discovery sciences products compete on the basis of product quality, distinct technology and customer support. Competition for these products is highly fragmented with a large number of companies that sell their products on a global and regional basis, although a number of companies, such as Waters Corporation, Agilent Technologies and Thermo-Fisher, have a substantial global position and a relatively large installed customer base.

Grace Materials Technologies—Packaging Products

We are a global leader in can and closure sealants that, along with our specialized can and closure coatings, we supply to the packaging industry. Our product portfolio includes:

Products	Key Brands
Can sealants for rigid containers that ensure a hermetic seal between the lid and the body of beverage, food, aerosol and other cans	DAREX®
Sealants for metal and plastic bottle closures that are used on pry-off and twist-off metal crowns, as well as roll-on pilfer-proof and plastic closures to seal and enhance the shelf life of food and beverages in glass and plastic bottles and jars	DAREX®, DARAFORM®, DARASEAL®, DARABLEND®, SINCERA®, CELOX®
Coatings for metal packaging that are used in the manufacture of cans and closures to protect the metal against corrosion, protect the contents against the influences of metal, ensure proper adhesion of sealing compounds to metal surfaces, and provide base coats for inks and for decorative purposes	DAREX®, APPERTA®, SISTIAGA®

Our packaging products are designed to address major industry trends such as lighter weight packaging, lower energy consumption, personal convenience, and highly individualized packaging. Our growth is driven by innovation of higher performing products, continuous development of new applications, increasing demand for sustainability and rising disposable income in emerging regions. We seek to capitalize upon our technical customer service, global infrastructure and expertise in global regulatory compliance (including food law compliance) to enhance our growth, especially in emerging regions. We also seek to develop and introduce new products that add additional value to the current and future needs of our customers, such as our introduction of products with oxygen scavenging functionality.

Our packaging products sales are global. There are many manufacturers of packaging products that market their products on a global basis including Altana, Akzo Nobel, PPG and Valspar. Competition is generally based on product performance, technical service and reliability, price and additional value-added features to address the needs of our customers, end-users and brand owners.

Grace Materials Technologies—Manufacturing, Marketing and Raw Materials

Our Materials Technologies products are manufactured by a network of globally integrated plants that are positioned to service our customers regionally. Our packaging products are manufactured in both large facilities to permit

economies of scale and a network of smaller operations that enable customization to local market conditions. Our integrated planning organization is responsible for the effective utilization of our manufacturing capabilities.

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We use country-based direct sales forces that are dedicated to each product line and backed by application-specific technical customer service teams to market our Materials Technologies products. Our sales force seeks to develop long-term relationships with our customers and focuses on consultative sales, technical support and key account growth programs. To ensure full geographic coverage, our direct sales organization is further supplemented by a network of agents and distributors.

Seasonality does not have a significant overall effect on our Materials Technologies operating segment; however, our packaging products and some of our construction-related products such as insulated glass desiccants are affected by seasonal and weather-related factors including the consumption of beverages, the size and quality of food crops and the level of construction activity. These impacts are mitigated by the global scope of our business.

The principal raw materials for Materials Technologies products include sodium silicate, solvents, resins, latexes (including certain food-grade raw materials) and rubber. Multiple suppliers are generally available for each of these materials; however, some of our raw materials may be provided by single sources of supply. We seek to mitigate the risk of using single source suppliers by identifying and qualifying alternative suppliers or, for unique materials, by using alternative formulations from other suppliers or by passing price increases on to customers. In some instances, we produce our own raw materials and intermediates.

Prices for many of our raw materials, including specialty and commodity materials such as latex, rubbers, pigments, resins and solvents, have been volatile in recent years. In response to increases in raw material costs, we generally take actions to mitigate the effect of higher costs including increasing prices, developing alternative formulations for our products and increasing productivity.

As in many chemical businesses, we consume significant quantities of natural gas in the production of Materials Technologies products. World events and other economic factors have caused volatility in the price of natural gas. Increases or decreases in the cost of natural gas and raw materials can have a significant impact on our operating margins.

Since we manufacture a substantial portion of our packaging products in emerging regions using raw materials from suppliers in the U.S., Europe and other advanced economies, changes in the values of the currencies of these emerging regions versus the U.S. dollar and the euro may adversely affect our raw material costs and the prices we may charge for our products.

Grace Construction Products Operating Segment

Construction Products produces and sells specialty construction chemicals and specialty building materials. We are a supplier to the nonresidential (commercial and infrastructure) construction industry, and to a lesser extent, the residential construction and repair and restoration industries.

The following table sets forth Construction Products sales of similar products as a percentage of Grace total revenue.

	2013			2012			2011		
(In millions)	Sales	% of Grace Revenue		Sales	% of Grace Revenue		Sales	% of Grace Revenue	
Specialty Construction Chemicals	$688.0	22.5	%	$680.7	21.6	%	$656.6	20.5	%
Specialty Building Materials	370.2	12.1	%	344.1	10.9	%	335.4	10.4	%
Total Construction Products Revenue	$1,058.2	34.6	%	$1,024.8	32.5	%	$992.0	30.9	%

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The following table sets forth Construction Products sales by region as a percentage of Construction Products total revenue.

(In millions)	2013 Sales	2013 % of Construction Products Revenue	2012 Sales	2012 % of Construction Products Revenue	2011 Sales	2011 % of Construction Products Revenue
North America	$423.2	39.9 %	$411.5	40.2 %	$406.3	41.0 %
Europe Middle East Africa	260.9	24.7 %	269.7	26.3 %	281.6	28.4 %
Asia Pacific	233.7	22.1 %	217.5	21.2 %	198.8	20.0 %
Latin America	140.4	13.3 %	126.1	12.3 %	105.3	10.6 %
Total Construction Products Revenue	$1,058.2	100.0 %	$1,024.8	100.0 %	$992.0	100.0 %

Grace Construction Products—Specialty Construction Chemicals

We supply concrete admixtures and fibers used to modify the rheology, improve the durability and enhance various other properties of concrete, mortar, masonry and other cementitious construction materials; and additives used in cement processing to improve energy efficiency in manufacturing, enhance the characteristics of finished cement and improve ease of use, including the following products:

Products	Uses	Customers	Key Brands
Concrete admixtures	Concrete admixtures and polymeric fibers used to reduce the production and in-place costs of concrete, increase the performance of concrete and improve the life cycle cost of the structure	Ready-mix and precast concrete producers, engineers and specifiers	ADVA®, STRUX®, MIRA®, POLARSET®, ECLIPSE®
Additives for cement processing	Cement additives added to the grinding stage of the cement manufacturing process to improve the energy efficiency of the plant and enhance the performance of the finished cement. Chromium reducing additives help cement manufacturers in Europe meet environmental regulations	Cement manufacturers	CBA®, SYNCHRO®, HEA2®, TDA®
Products for architectural concrete	Products for architectural concrete include surface retarders, coatings, pigments and release agents used by concrete producers and contractors to enhance the surface appearance and aesthetics of concrete	Precast concrete producers and architects	PIERI®
Admixtures for masonry concrete	Products for masonry concrete used by block and paver producers for process efficiency and to improve the appearance, durability and water resistance of finished concrete masonry units	Masonry block manufacturers	DRY-BLOCK®, OPTEC®, QUANTEC®
Process control solutions for ready mix concrete	Electro-mechanical devices, sensors and other technologies that assist concrete producers in controlling product quality and production costs	Ready mix concrete manufacturers	VERIFI®

Grace Construction Products—Specialty Building Materials

We supply building materials used in both new construction and renovation/repair projects. The products protect buildings and civil engineering structures from water, vapor and air penetration. The portfolio includes waterproofing membranes for commercial and residential buildings, specialty grouts for use in waterproofing and soil stabilization applications, air and vapor barriers, and other products to solve the specialized needs of preventative and repair

applications including the following:

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Products	Uses	Customers	Key Brands
Structural waterproofing, vapor and air barrier systems	Structural waterproofing and air barrier systems to prevent water, vapor and/or air infiltration in commercial structures, including self-adhered sheet and liquid membranes, joint sealing materials, drainage composites and waterstops.	Architects and structural engineers; specialty waterproofing and general contractors; specialty waterproofing distributors	BITUTHENE®, PROCOR®, PREPRUFE®, ADPRUFE®, HYDRODUCT®, PERM-A-BARRIER®, ADCOR®ES, SILCOR®
Residential building materials	Specialty roofing membranes and flexible flashings for windows, doors, decks and detail areas, including fully adhered roofing underlayments, synthetic underlayments and self-adhered flashing.	Roofing contractors, home builders and remodelers; specialty roofing distributors, lumberyards and home centers; homeowners; architects and specifiers	ICE & WATER SHIELD®, TRI-FLEX®, VYCOR®
Remedial waterproofing	Products for repair and remediation in waterproofing applications and soil stabilization	Contractors, municipalities and other owners of large infrastructure facilities	DENEEF® HYDRO ACTIVE® Cut, DENEEF® AC-400, DENEEF® SWELLSEAL® WA, DENEEF® MC-500™
Fire protection	Fire protection products spray-applied to the structural steel frame, encasing and insulating the steel and protecting the building in the event of fire.	Local contractors and specialty subcontractors and applicators; building materials distributors; industrial manufacturers; architects and structural engineers	MONOKOTE®

Grace Construction Products—Manufacturing, Marketing and Raw Materials

In view of our diversity of customers and customer requirements, and because specialty construction chemicals and specialty building materials require intensive sales and customer service efforts, we maintain a direct sales and technical support team with sales personnel based in approximately 40 countries worldwide. This sales and support team sells products under global contracts, under U.S. or regional contracts, and on a job-by-job basis. We also use distributors in both U.S. and non-U.S. markets. We compete globally with several large construction materials suppliers, and regionally and locally with numerous smaller competitors. Competition for our construction products is based on product performance, technical support and service, brand name recognition in the construction industry and price. Our major global specialty construction chemicals competitors are BASF and Sika.

In recent years, the cement and concrete industry has experienced some consolidation, thereby increasing the importance of serving well our global customers. For some customer groups, such as producers and contractors, operational efficiency and total applied cost are key factors in making purchasing decisions, while for others, such as architects and engineers, product performance and design versatility are more important.

We seek to improve our products, adapt them for new applications and add new products through our growth and innovation processes that focus on understanding the needs of our customers, key performance indicators and research and development.

In addition to new product introductions and product enhancements, we look for growth opportunities in emerging regions where increasing construction activity, improvement in building codes, and sophistication of construction practices can accelerate demand for our construction products. We continue to expand our commercial and manufacturing capabilities in these geographic areas.

The key raw materials used in our specialty construction products are obtained from a variety of suppliers, including basic chemical and petrochemical producers. The majority of our raw materials are organic chemicals derived from olefins. We also make significant purchases of inorganic materials such as gypsum, as well as specialty materials including specialty films, papers and fibers. In most instances, these materials are available from multiple sources. Global supply and demand factors, changes in currency exchange rates, and petroleum prices have significantly impacted the price and availability of key raw materials in recent years.

Since we manufacture a substantial portion of our construction products in emerging regions using raw materials from suppliers in the U.S., Europe and other advanced economies, changes in the values of the currencies of these emerging regions versus the U.S. dollar and the euro may adversely affect our raw material costs and the prices we may charge for our products.

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The construction business is cyclical in response to economic conditions and construction demand. The construction business is also seasonal and dependent on favorable weather conditions, with a decrease in construction activity during the winter months. Demand for our specialty construction products is primarily driven by global non-residential construction activity and U.S. residential construction activity. We seek to increase profitability and minimize the impact of cyclical downturns in regional economies by introducing technically advanced high-performance products and expanding geographically. Although these strategies have been successful in reducing the impact of cyclicality, the decline in U.S. and European construction activity since 2007 has had a negative impact on our sales.

FINANCIAL INFORMATION ABOUT INDUSTRY SEGMENTS AND GEOGRAPHIC AREAS

Disclosure of financial information about industry segments and geographic areas for 2013, 2012 and 2011 is provided in this Report in Item 8 (Financial Statements and Supplementary Data) in the Financial Supplement under Note 20 (Operating Segment Information) to the Consolidated Financial Statements, which disclosure is incorporated herein by reference. Disclosure of risks attendant to our foreign operations is provided in this Report in Item 1A (Risk Factors).

BACKLOG OF ORDERS

While at any given time there may be some backlog of orders, this backlog is not material in respect to our total annual sales, nor are the changes, from time to time, significant.

INTELLECTUAL PROPERTY; RESEARCH ACTIVITIES

Competition in the specialty chemicals and specialty materials industry is often based on technological superiority and innovation. Our ability to maintain our margins and effectively compete with other suppliers depends on our ability to introduce new products based on innovative technology, as well as our ability to obtain patent or other intellectual property protection. Our research and development programs emphasize development of new products and processes, improvement of existing products and processes and application of existing products and processes to new industries and uses. We conduct research in all regions, with North America and Europe accounting for the most activity.

We routinely file and obtain patents in a number of countries around the world that are significant to our businesses in order to protect our investments in innovation, research, and product development. Numerous patents and patent applications protect our products, formulations, manufacturing processes, equipment, and improvements. We also benefit from the use of trade secret information, including know-how and other proprietary information relating to many of our products and processing technologies. There can be no assurance, however, that our patents, patent applications and precautions to protect trade secrets and know-how will provide sufficient protection for our intellectual property. In addition, other companies may independently develop technology that could replicate, and thus diminish the advantage provided by, our trade secrets. Other companies may also develop alternative technology or design-arounds that could circumvent our patents or may acquire patent rights applicable to our business which might interpose some limitation on expansion of the business in the future.

Research and development expenses were approximately $65 million in 2013 and 2012 and $69 million in 2011. These amounts include depreciation and amortization expenses related to research and development and expenses incurred in funding external research projects. The amount of research and development expenses relating to government- and customer-sponsored projects (rather than projects that we sponsor) was not material during these periods. Grace also conducts research and development activities with our ART joint venture, which is not included in the amounts above.

ENVIRONMENT, HEALTH AND SAFETY MATTERS

We are subject, along with other manufacturers of specialty chemicals, to stringent regulations under numerous U.S. federal, state and local and foreign environment, health and safety laws and regulations relating to the generation, storage, handling, discharge, disposition and stewardship of hazardous wastes and other materials. Environmental laws require that certain responsible parties, as defined in the relevant statute, fund remediation actions regardless of legality of original disposal or ownership of a disposal site. We are involved in remediation actions to address hazardous wastes or other materials as required by U.S. federal, state and local and foreign laws.

We have expended substantial funds to comply with environmental laws and regulations and expect to continue to do so in the future. The following table sets forth our expenditures in the past three years, and our

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estimated expenditures in 2014 and 2015, for (i) the operation and maintenance of manufacturing facilities and the disposal of wastes; (ii) capital expenditures for environmental control facilities; and (iii) site remediation:

Year (In millions)	Operation of Facilities and Waste Disposal	Capital Expenditures	Site Remediation	
2011	$58	$6	$12	
2012	61	9	13	
2013	59	17	14	
2014	59	19	18	*
2015	60	10	7	*

* Amounts are based on site remediation matters for which sufficient information is available to estimate remediation costs. We do not have sufficient information to estimate all of Grace's possible future remediation costs. As we receive new information, our estimate of remediation costs may change materially.

Additional information about our environmental remediation activities is provided in this Report in Item 8 (Financial Statements and Supplementary Data) in the Financial Supplement under Note 13 (Commitments and Contingent Liabilities) to the Consolidated Financial Statements.

We continuously seek to improve our environmental, health and safety performance. To the extent applicable, we extend the basic elements of the American Chemistry Council's RESPONSIBLE CARE® program to all our locations worldwide, embracing specific performance objectives in the key areas of management systems, product stewardship, employee health and safety, community awareness and emergency response, distribution, process safety and pollution prevention. We have implemented key elements of the RESPONSIBLE CARE® Security Code for our operations and systems. We have completed a review of our existing security (including cyber-security) vulnerability and have taken actions to enhance our security systems and protect our assets. We have undertaken certain activities to comply with the Department of Homeland Security (DHS) Chemical Facility Anti-Terrorism Standards, including identifying facilities subject to the standards, conducting security vulnerability assessments and developing site security plans, as necessary.

EMPLOYEE RELATIONS

As of December 31, 2013, we employed approximately 6,700 persons, of whom approximately 2,700 were employed in the United States. Of our total employees, approximately 4,700 were salaried and 2,000 were hourly.

Approximately 750 of our manufacturing employees in the United States are represented for collective bargaining purposes by nine different local collective bargaining groups. We have operated without a labor work stoppage for more than 10 years.

We have works councils representing the majority of our European sites serving approximately 1,400 employees.

AVAILABILITY OF REPORTS AND OTHER DOCUMENTS

We maintain an Internet website at www.grace.com. Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports, filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, are available, free of charge, on our website as soon as reasonably practicable after such reports are electronically filed with, or furnished to, the Securities and Exchange Commission, or SEC. These reports may be accessed through our website's investor information page.

In addition, the charters for the Audit, Compensation, Nominating and Governance, and Corporate Responsibility Committees of our Board of Directors, our corporate governance guidelines and code of ethics are available, free of charge, on our website at www.grace.com/About/Leadership/Governance/. Printed copies of the charters, governance guidelines and code of ethics may be obtained free of charge by contacting Grace Shareholder Services at 410-531-4167.

The information on our website is not, and shall not be deemed to be, a part of this report or incorporated into any other filings we make with the SEC.

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Our Chief Executive Officer and Chief Financial Officer have submitted certifications to the SEC pursuant to the Sarbanes Oxley Act of 2002 as exhibits to this Report.

EXECUTIVE OFFICERS

See Part III, Item 10 of this Report for information about our Executive Officers.

Item 1A. RISK FACTORS

This Report, including the Financial Supplement, contains, and our other public communications may contain, forward-looking statements; that is, information related to future, not past, events. Such statements generally include the words "believes," "plans," "intends," "targets," "will," "expects," "suggests," "anticipates," "outlook," "continues" or similar expressions. Forward-looking statements include, without limitation, all statements regarding: our Chapter 11 case; expected financial positions; results of operations; cash flows; financing plans; business strategy; budgets; capital and other expenditures; competitive positions; growth opportunities for existing products; benefits from new technology and cost reduction initiatives; plans and objectives; and markets for securities. For these statements, we claim the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995. Like other businesses, we are subject to risks and uncertainties that could cause our actual results to differ materially from our projections or that could cause other forward-looking statements to prove incorrect. Factors that could cause actual events to materially differ from those contained in the forward-looking statements include those factors set forth below and elsewhere in this Annual Report on Form 10-K. Our reported results should not be considered as an indication of our future performance. Readers are cautioned not to place undue reliance on our projections and forward-looking statements, which speak only as of the date thereof. We undertake no obligation to publicly release any revisions to the projections and forward-looking statements contained in this document, or to update them to reflect events or circumstances occurring after the date of this document. In addition to general economic, business and market conditions, we are subject to other risks and uncertainties, including, without limitation, the following:

The length and depth of product and industry business cycles in our segments may result in periods of reduced sales, earnings and cash flows, and portions of our business are subject to seasonality and weather-related effects.

Our operating segments are sensitive to the cyclical nature of the industries they serve. Our construction business is cyclical in response to economic conditions and construction demand and is also seasonal and dependent on favorable weather conditions, with a decrease in construction activity during the winter months. Sales of our FCC catalysts tend to be lower in the first calendar quarter prior to the shift in production by refineries from home heating oil for the winter season to gasoline production for the summer season. Our packaging products are affected by seasonal and weather-related factors including the consumption of beverages and the size and quality of food crops.

The global scope of our operations subjects us to the risks of doing business in foreign countries, which could adversely affect our business, financial condition and results of operations.

We operate our business on a global scale with approximately 71% of our 2013 sales outside the United States. We conduct business in over 40 countries and in more than 50 currencies. We currently have many production facilities, research and development facilities and administrative and sales offices located outside North America, including facilities and offices located in Europe, the Middle East, Africa, Asia and Latin America. We expect non-U.S. sales to continue to represent a substantial majority of our revenue. Accordingly, our business is subject to risks related to the differing legal, political, social and regulatory requirements and economic conditions of many jurisdictions. Risks inherent in non-U.S. operations include the following:

- commercial agreements may be more difficult to enforce and receivables more difficult to collect;
- intellectual property rights may be more difficult to enforce;
- increased shipping costs, disruptions in shipping or reduced availability of freight transportation;
- we may have difficulty transferring our profits or capital from foreign operations to other countries where such funds could be more profitably deployed;
- we may experience unexpected adverse changes in export duties, quotas and tariffs and difficulties in obtaining export licenses;
- some foreign countries have adopted, and others may impose, additional withholding taxes or adopt other restrictions on foreign trade or investment, including currency exchange and capital controls;

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- foreign governments may nationalize private enterprises;
- our business and profitability in a particular country could be affected by political or economic repercussions on a domestic, country specific or global level from terrorist activities and the response to such activities;
- we may be affected by unexpected adverse changes in foreign laws or regulatory requirements; and
- unanticipated events, such as geopolitical changes, could adversely affect these operations.

Our success as a global business will depend, in part, upon our ability to succeed in differing legal, regulatory, economic, social and political conditions by developing, implementing and maintaining policies and strategies that are effective in each location where we do business.

We are exposed to currency exchange rate changes that impact our profitability.

We are exposed to currency exchange rate risk through our U.S. and non-U.S. operations. Changes in currency exchange rates may materially affect our operating results. For example, changes in currency exchange rates may affect the relative prices at which we and our competitors sell products in the same region and the cost of materials used in our operations. A substantial portion of our net sales and assets are denominated in currencies other than the U.S. dollar. When the U.S. dollar strengthens against other currencies, at a constant level of business, our reported sales, earnings, assets and liabilities are reduced because the non-U.S. currencies translate into fewer U.S. dollars. We incur a currency transaction risk whenever one of our operating subsidiaries enters into either a purchase or a sales transaction using a currency different from the operating subsidiary's functional currency. Given the volatility of exchange rates, we may not be able to manage our currency transaction risks effectively, or volatility in currency exchange rates may expose our financial condition or results of operations to a significant additional risk.

Prices for certain raw materials and energy are volatile; we may not be able to pass through increases in costs for raw materials and energy or maintain our current pricing levels, which may hurt our profitability.

We use petroleum-based materials, metals, natural gas and other materials in the manufacture of our products. Prices for these materials are volatile and can have a significant effect on our pricing, sales, manufacturing and supply chain strategies as we seek to maximize our profitability. In 2012 and 2011, our Grace Catalysts Technologies sales were affected by significant increases in the prices of the rare earths used in the manufacture of our FCC catalysts. In response, we implemented surcharges on our FCC catalysts. In the 2011 third quarter, rare earth prices reached a peak and have since declined significantly. As a result, the amount of our surcharges has decreased with a corresponding decrease in sales. In 2013 and 2012, respectively, the negative effect of lower rare earth surcharges on sales was approximately $97 million and $170 million compared with the respective prior year. Our ability to successfully adjust strategies in response to volatile raw material and energy prices is a significant factor in maintaining or improving our profitability. If we are unable to successfully adjust our strategies in response to volatile prices, such volatility could have a negative effect on our sales and earnings in future periods.

A substantial portion of our raw materials are commodities whose prices fluctuate as market supply and demand fundamentals change.

We attempt to manage exposure to price volatility of major commodities through:

- long-term supply contracts;
- contracts with customers that permit adjustments for changes in prices of commodity-based materials and energy;
- forward buying programs that layer in our expected requirements systematically over time; and
- limited use of financial instruments.

Although we regularly assess our exposure to raw material price volatility, we cannot always predict the prospects of volatility and we cannot always cover the risk in a cost effective manner.

We have a policy of maintaining, when available, multiple sources of supply for raw materials. However, certain of our raw materials may be provided by single sources of supply. We may not be able to obtain sufficient raw materials due to unforeseen developments that would cause an interruption in supply. Even if we have multiple sources of supply for raw materials, these sources may not make up for the loss of a major supplier.

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If we are not able to continue our technological innovation and successful introduction of new products, our customers may turn to other suppliers to meet their requirements.
The specialty chemicals industry and the end-use markets into which we sell our products experience ongoing technological change and product improvements. A key element of our business strategy is to invest in research and development activities with the goal of introducing new high-performance, technically differentiated products. We may not be successful in developing new technology and products that successfully compete with products introduced by our competitors, and our customers may not accept, or may have lower demand for, our new products. If we fail to keep pace with evolving technological innovations or fail to improve our products in response to our customers' needs, then our business, financial condition and results of operations could be adversely affected as a result of reduced sales of our products.
We spend large amounts of money for environmental compliance in connection with our current and former operations.
As a manufacturer of specialty chemicals and specialty materials, we are subject to stringent regulations under numerous U.S. federal, state, local and foreign environmental, health and safety laws and regulations relating to the generation, storage, handling, discharge, disposition and stewardship of hazardous wastes and other materials. We have expended substantial funds to comply with such laws and regulations and have established a policy to minimize our emissions to the environment. Nevertheless, legislative, regulatory and economic uncertainties (including existing and potential laws and regulations pertaining to climate change) make it difficult for us to project future spending for these purposes and if there is an acceleration in new regulatory requirements, we may be required to expend substantial additional funds to remain in compliance.
We are subject to environmental clean-up costs, fines, penalties and damage claims that have been and continue to be costly.
Grace is subject to lawsuits and regulatory actions, in connection with current and former operations (including divested businesses), for breaches of environmental laws that seek clean-up or other remedies. Grace is also subject to lawsuits and investigations by public and private parties under various environmental laws in connection with our current and former operations in various states, including with respect to off-site disposal at facilities where Grace has been identified as a potentially responsible party under the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, commonly referred to as CERCLA. We are also subject to similar risks outside of the U.S.
Grace operated a vermiculite mine in Libby, Montana, until 1990. Some of the vermiculite ore that was mined at the Libby mine contained natural occurrences of asbestos. Grace is cooperating with EPA to investigate the Libby vermiculite mine and the surrounding bodies of water and forest lands and determine a final remedy. During 2010, EPA began reinvestigating up to 105 facilities where vermiculite concentrate from the Libby mine was processed. We are cooperating with EPA on this reinvestigation. EPA has requested that we conduct additional remediation at eight of these facilities. It is probable that EPA will request additional remediation at other facilities. We do not have sufficient information to identify either the sites that might require additional remediation or estimate the cost of any additional remediation. We will evaluate our estimated remediation liability for other sites as we receive additional information from EPA.
We have established accounting accruals for all environmental matters for which a loss is considered to be probable and sufficient information is available to reasonably estimate the loss. We do not have sufficient information to accrue for all of Grace's environmental risks. These accruals do not include the cost to remediate the Libby vermiculite mine or costs related to any additional EPA claims, whether resulting from EPA's reinvestigation of vermiculite facilities or otherwise, which may be material but are not currently estimable. Due to these vermiculite-related matters, it is probable that Grace's ultimate liability for environmental matters will exceed Grace's current estimates by material amounts.
We require liquidity to service our debt and to fund operations, capital expenditures, research and development efforts, acquisitions and other corporate expenses.
Our ability to fund operations, capital expenditures, research and development efforts, acquisitions and other corporate expenses, including repayment of our debt, depends on our ability to generate cash through future operating

performance, which is subject to economic, financial, competitive, legislative, regulatory and other factors. Many of these factors are beyond our control. We cannot be certain that our businesses will generate sufficient cash or that future borrowings will be available to us in amounts sufficient to fund all of our requirements. If we are unable

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to generate sufficient cash to fund all of our requirements, we may need to pursue one or more alternatives, such as to:

- reduce or delay planned capital expenditures, research and development spending or acquisitions;
- obtain additional financing or restructure or refinance all or a portion of our debt on or before maturity;
- sell assets or businesses; and
- sell additional equity.

Any reduction or delay in planned capital expenditures, research and development spending or acquisitions or sale of assets or businesses may materially and adversely affect our future revenue prospects. In addition, we cannot be certain that we will be able to raise additional equity capital, restructure or refinance any of our debt or obtain additional financing on commercially reasonable terms or at all.

Our indebtedness may adversely affect our business, financial condition and operating results.

Our indebtedness may have material adverse effects on our business, including to:

- require us to dedicate a substantial portion of our cash to payments on our debt, thereby reducing the availability of cash to fund working capital, capital expenditures and other general operating requirements;
- restrict us from making strategic acquisitions or taking advantage of favorable business opportunities;
- limit our flexibility to plan for, or react to, changes in our business and the industries in which we operate, which may adversely affect our operating results and ability to meet our debt service obligations with respect to our outstanding debt; and
- increase our vulnerability to adverse general economic and industry conditions, including recessions.

If we incur additional debt, the risks related to our indebtedness may intensify.

We have unfunded and underfunded pension plan liabilities. We will require future operating cash flow to fund these liabilities. We have no assurance that we will generate sufficient cash to satisfy these obligations.

We maintain U.S. and non-U.S. defined benefit pension plans covering current and former employees who meet or met age and service requirements. Our net pension liability and cost is materially affected by the discount rate used to measure pension obligations, the longevity and actuarial profile of our workforce, the level of plan assets available to fund those obligations and the actual and expected long-term rate of return on plan assets. Significant changes in investment performance or a change in the portfolio mix of invested assets can result in corresponding increases and decreases in the valuation of plan assets or in a change in the expected rate of return on plan assets. Assets available to fund the pension benefit obligation of the U.S. advance-funded pension plans at December 31, 2013, were approximately $1,145 million, or approximately $52 million less than the measured pension benefit obligation on a U.S. GAAP basis. In addition, any changes in the discount rate could result in a significant increase or decrease in the valuation of pension obligations, affecting the reported funded status of our pension plans as well as the net periodic pension cost in the following years. Similarly, changes in the expected return on plan assets can result in significant changes in the net periodic pension cost in the following years.

Our obligation to make payments to the PD Trust in respect of asbestos PD Claims (other than ZAI PD Claims) is not capped and we may be obligated to make additional payments.

Under the Joint Plan, an asbestos property damage trust has been established and funded under Section 524(g) of the Bankruptcy Code. The order of the Bankruptcy Court confirming the Joint Plan contains a channeling injunction which provides that all pending and future asbestos-related property damage claims and demands, PD Claims, can only be brought against the PD Trust. The PD Trust contains two accounts. One of these accounts, the PD Account, is funded solely in respect of PD Claims other than those PD Claims related to our former ZAI attic insulation product. Unresolved and future non-ZAI PD Claims are to be litigated pursuant to procedures to be approved by the Bankruptcy Court and, to the extent such PD claims are determined to be allowed claims, are to be paid in cash by the PD Trust. We are obligated to make a payment to the PD Trust every six months in the amount of any non-ZAI PD Claims allowed during the preceding six months plus interest (if any) and, except for the first six months, the amount of PD Trust expenses for the preceding six months (the "PD Obligation"). The aggregate amount we are required to pay under the PD Obligation is not capped so we may have to make additional payments to the PD Account in respect of the PD Obligation. We are also obligated to make up to 10 contingent deferred payments to the PD Trust of $8 million during the 20-year period beginning on the fifth anniversary of the effective date, i.e. February 3, 2019, in respect of ZAI PD Claims in the event the ZAI PD Account's assets fall below $10 million in the preceding year. We

have accrued liabilities for probable PD Claims expected to be resolved after

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emergence from bankruptcy, but have not accrued any liability for the contingent ZAI PD payments as we do not believe they are probable.

Our ability to use tax deductions to reduce future tax payments may be limited if there is a change in ownership of Grace or if Grace does not generate sufficient U.S. taxable income.

Our ability to use future tax deductions, including net operating losses and deductions for the payments required by the Joint Plan (including the deferred payments), may be limited by Section 382 of the Internal Revenue Code of 1986, as amended, if we undergo an ownership change as a result of future changes in the ownership of outstanding Grace common stock. In addition, our ability to use future tax deductions is dependent on our ability to generate sufficient future taxable income in the U.S. Our certificate of incorporation provides that under certain circumstances, our Board of Directors would have the authority to impose restrictions on the transfer of Grace common stock with respect to certain 5% shareholders in order to preserve these future tax deductions.

We intend to pursue acquisitions, joint ventures and other transactions that complement or expand our businesses. We may not be able to complete proposed transactions and even if completed, the transactions may involve a number of risks that may materially and adversely affect our business, financial condition and results of operations.

We have recently completed a number of acquisitions that we believe will contribute to our future success. We intend to continue to pursue opportunities to buy other businesses or technologies that could complement, enhance or expand our current businesses or product lines or that might otherwise offer us growth opportunities. We may have difficulty identifying appropriate opportunities or, if we do identify opportunities, we may not be successful in completing transactions for a number of reasons. Any transactions that we are able to identify and complete may involve a number of risks, including:

- the diversion of management's attention from our existing businesses to integrate the operations and personnel of the acquired or combined business or joint venture;
- possible adverse effects on our operating results during the integration process;
- failure of the acquired business to achieve expected operational objectives; and
- our possible inability to achieve the intended objectives of the transaction.

In addition, we may not be able to successfully or profitably integrate, operate, maintain and manage our newly acquired operations or their employees. We may not be able to maintain uniform standards, controls, procedures and policies, which may lead to operational inefficiencies.

We work with dangerous materials that can injure our employees, damage our facilities and disrupt our operations.

Some of our operations involve the handling of hazardous materials that may pose the risk of fire, explosion, or the release of hazardous substances. Such events could result from terrorist attacks, natural disasters, or operational failures, and might cause injury or loss of life to our employees and others, environmental contamination, and property damage. These events might cause a temporary shutdown of an affected plant, or portion thereof, and we could be subject to penalties or claims as a result. A disruption of our operations caused by these or other events could have a material adverse effect on our results of operations.

Some of our employees are unionized, represented by workers' councils or employed subject to local laws that are less favorable to employers than the laws in the United States.

As of December 31, 2013, we had approximately 6,700 global employees. Approximately 750 of our approximately 2,700 U.S. employees are unionized. In addition, a large number of our employees are employed in countries in which employment laws provide greater bargaining or other rights to employees than the laws in the United States. Such employment rights require us to work collaboratively with the legal representatives of the employees to effect any changes to labor arrangements. For example, most of our employees in Europe are represented by workers' councils that have co-determination rights on any changes in conditions of employment, including salaries and benefits and staff changes, and may impede efforts to restructure our workforce. A strike, work stoppage or slowdown by our employees or significant dispute with our employees, whether or not related to these negotiations, could result in a significant disruption of our operations or higher ongoing labor costs.

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We may be subject to claims of infringement of the intellectual property rights of others, which could hurt our business.

From time to time, we face infringement claims from our competitors or others alleging that our processes or products infringe on their proprietary technologies. Any claims that our products or processes infringe the intellectual property rights of others, regardless of the merit or resolution of the claims, could cause us to incur significant costs in responding to, defending and resolving the claims, and may divert the efforts and attention of our management and technical personnel from our business. If we are found to be infringing on the proprietary technology of others, we may be liable for damages, and we may be required to change our processes, redesign our products, pay others to use the technology or stop using the technology or producing the infringing product. Even if we ultimately prevail, the existence of the lawsuit could prompt our customers to switch to products that are not the subject of infringement suits.

We do not pay cash dividends on our common stock.

We have not paid a dividend on our common stock since 1997. Our Board of Directors has made no determination as to whether or when we will begin paying cash dividends. Until we begin paying dividends on our common stock, investors will have to rely on stock appreciation for a return on their investment.

Item 1B. UNRESOLVED STAFF COMMENTS

None.

Item 2. PROPERTIES

We operate manufacturing plants and other facilities (including office, warehouse, labs and other service facilities) throughout the world. Some of these plants and facilities are shared by our operating segments. We consider our major operating properties to be in good operating condition and suitable for their current use. We believe that, after taking planned expansion into account, the productive capacity of our plants and other facilities is generally adequate for current operations. The table below summarizes our facilities by operating segment and region:

	Number of Facilities*				
	North America	Europe Middle East Africa	Asia Pacific	Latin America	Total
Catalysts Technologies	9	3	1	—	13
Materials Technologies	7	10	8	4	29
Construction Products	17	14	24	10	65

* Shared facilities are counted in all applicable operating segments. The total number of facilities included in the above table, without regard to sharing amongst operating segments, is 94.

Our largest Catalysts Technologies facilities are located in Baltimore, Maryland; Lake Charles, Louisiana; and Worms, Germany.

Our largest Materials Technologies facilities are located in Baltimore, Maryland, and Worms, Germany.

Our largest Construction Products facilities are located in Cambridge, Massachusetts, and Mount Pleasant, Tennessee. Because this operating segment's products generally have short shelf lives and must be delivered to numerous job sites, Construction Products requires a greater number of facilities to service our customers than Catalysts Technologies and Materials Technologies. Also, these facilities are generally smaller and less capital intensive than our Catalysts Technologies and Materials Technologies facilities. For information on our net properties and equipment by region and country, see disclosure set forth in Item 8 (Financial Statements and Supplementary Data) in the Financial Supplement under Note 20 (Operating Segment Information) to our Consolidated Financial Statements, which disclosure is incorporated herein by reference.

Our corporate headquarters is in Columbia, Maryland, and we also lease and operate a shared services facility in Manila, Philippines.

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We own all of our major manufacturing plants. As for the remainder of our facilities, we either own, lease or hold them under a land lease arrangement. By number of facilities on a regional basis: in North America, we primarily own our facilities; in Europe, Middle East and Africa, we have a relatively even distribution between owned and leased facilities; and in Asia Pacific and Latin America, we lease the majority of our facilities.

In connection with our credit agreement, we have agreed to execute security agreements with respect to certain of our larger United States facilities in the following locations: Chicago, Illinois; Lake Charles, Louisiana; Baltimore and Columbia, Maryland; Albany, Oregon; and Mount Pleasant, Tennessee. For a description of our credit agreement see Item 8 (Financial Statements and Supplementary Data) in the Financial Supplement under Note 8 (Debt) to the Consolidated Financial Statements.

Item 3. LEGAL PROCEEDINGS

CHAPTER 11 PROCEEDINGS

Disclosure provided in this Report in Item 1 (Business) under the caption "Chapter 11 Cases" and in Item 8 (Financial Statements and Supplementary Data) in the Financial Supplement under Note 1 (Basis of Presentation and Summary of Significant Accounting and Financial Reporting Policies under the caption "Chapter 11 Proceedings") and Note 2 (Chapter 11 and Joint Plan of Reorganization) to the Consolidated Financial Statements is incorporated herein by reference.

ASBESTOS LITIGATION

Disclosure provided in this Report in Item 8 (Financial Statements and Supplementary Data) in the Financial Supplement under Note 2 (Chapter 11 and Joint Plan of Reorganization) to the Consolidated Financial Statements is incorporated herein by reference.

ENVIRONMENTAL INVESTIGATIONS AND CLAIMS

Disclosure provided in this Report in Item 1 (Business) under the caption "Environment, Health and Safety Matters" and Item 8 (Financial Statements and Supplementary Data) in the Financial Supplement under Note 13 (Commitments and Contingent Liabilities under the caption "Environmental Remediation") to the Consolidated Financial Statements is incorporated herein by reference.

SETTLEMENT RELATED TO FORMER PACKAGING AND MEDICAL CARE BUSINESSES

In September 2000, Grace was named in a purported class action suit filed in California Superior Court for the County of San Francisco alleging that the 1996 reorganization involving a predecessor of Grace and Fresenius Medical Care Holdings, Inc. and the 1998 reorganization involving a predecessor of Grace and Sealed Air Corporation were fraudulent transfers (Abner, et al., v. W. R. Grace & Co., et al.). The suit is alleged to have been brought on behalf of all individuals who then had lawsuits on file asserting personal injury or wrongful death claims against any of the defendants. After Abner, and prior to the Chapter 11 filing, two other similar class actions were filed. These lawsuits had been stayed as a result of Grace's Chapter 11 filing. The Bankruptcy Court authorized the Official Committee of Asbestos Personal Injury Claimants and the Official Committee of Asbestos Property Damage Claimants to proceed with claims against Sealed Air and Fresenius on behalf of Grace's bankruptcy estate. In November 2002, Sealed Air and Fresenius each announced that they had reached agreements in principle with these committees to settle asbestos, successor liability and fraudulent transfer claims related to such transactions. On the Effective Date, under the terms of the Joint Plan and the Fresenius settlement and the Sealed Air settlement, Fresenius and Cryovac, Inc., a wholly-owned subsidiary of Sealed Air, made payments to the asbestos trusts as described in this Report in Item 8 (Financial Statements and Supplementary Data) in the Financial Supplement under Note 2 (Chapter 11 and Joint Plan of Reorganization) to the Consolidated Financial Statements which description is incorporated herein by reference. Under the terms of the Joint Plan and the settlement agreements, the class action lawsuits have been dismissed with prejudice.

TAX CLAIMS

Disclosure provided in this Report in Item 8 (Financial Statements and Supplementary Data) in the Financial Supplement under Note 10 (Income Taxes) to the Consolidated Financial Statements is incorporated herein by reference.

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OTHER CLAIMS RECEIVED PRIOR TO THE CHAPTER 11 CLAIMS BAR DATE

Disclosure provided in this Report in Item 8 (Financial Statements and Supplementary Data) in the Financial Supplement under Note 2 (Chapter 11 and Joint Plan of Reorganization) to the Consolidated Financial Statements is incorporated herein by reference.

Item 4. MINE SAFETY DISCLOSURES

Information concerning mine safety violations or other regulatory matters required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 104 of Regulation S-K (17 CFR 229.104) is included in Exhibit 95 to this Report.

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PART II

Item 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED SHAREHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Except as provided below, the disclosure required by this Item appears in this Report in: Item 6 (Selected Financial Data); under the heading "Selected Financial Data" opposite the caption "Other Statistics—Common shareholders of record" in the Financial Supplement; Item 8 (Financial Statements and Supplementary Data) in the Financial Supplement in Note 17 (Shareholders' Equity) and Note 23 (Quarterly Summary and Statistical Information (Unaudited) opposite the caption "Market price of common stock") to the Consolidated Financial Statements; and Item 12 (Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters) under the caption "Equity Compensation Plan Information", and such disclosure is incorporated herein by reference.

SHAREHOLDER RIGHTS AGREEMENT

On March 31, 1998, we paid a dividend of one Preferred Stock Purchase Right on each share of Grace common stock. Subject to our prior redemption for $.01 per right, rights will become exercisable on the earlier of:

- 10 days after an acquiring person, comprised of an individual or group, has acquired beneficial ownership of 20% or more of the outstanding Grace common stock or
- 10 business days (or a later date fixed by the Board of Directors) after an acquiring person commences (or announces the intention to commence) a tender offer or exchange offer for beneficial ownership of 20% or more of the outstanding Grace common stock.

Until these events occur, the rights will automatically trade with the Grace common stock, and separate certificates for the rights will not be distributed. The rights do not have voting or dividend rights.

Generally, each right not owned by an acquiring person:

- will initially entitle the holder to buy from Grace one hundredth of a share of the Grace Junior Participating Preferred Stock, at an exercise price of $100, subject to adjustment;
- will entitle such holder to receive upon exercise, in lieu of shares of Grace junior preferred stock, that number of shares of Grace common stock having a market value of two times the exercise price of the right; and
- may be exchanged by Grace for one share of Grace common stock or one hundredth of a share of Grace junior preferred stock, subject to adjustment.

Generally, if there is an acquiring person and we are acquired, each right not owned by an acquiring person will entitle the holder to buy a number of shares of common stock of the acquiring company having a market value equal to twice the exercise price of the right.

Each share of Grace junior preferred stock will be entitled to a minimum preferential quarterly dividend payment of $1.00 per share but will be entitled to an aggregate dividend equal to 100 times the dividend declared per share of Grace common stock whenever such dividend is declared. In the event of liquidation, holders of Grace junior preferred stock will be entitled to a minimum preferential liquidation payment of $100 per share but will be entitled to an aggregate payment equal to 100 times the payment made per share of Grace common stock. Each share of Grace junior preferred stock will have 100 votes, voting together with the Grace common stock. Finally, in the event of any business combination, each share of Grace junior preferred stock will be entitled to receive an amount equal to 100 times the amount received per share of Grace common stock. These rights are protected by customary antidilution provisions.

The terms of the rights may be amended by the Board of Directors without the consent of the holders of the rights. The rights expire on March 30, 2018.

This summary of the rights does not purport to be complete and is qualified in its entirety by reference to the Rights Agreement, which has been filed with the SEC.

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DIVIDENDS ON GRACE COMMON STOCK

We have not paid a dividend on our common stock since 1997. Our Board of Directors has made no determination as to whether or when we will begin paying cash dividends. Although our Credit Agreement (as described in Item 8 (Financial Statements and Supplementary Data) in the Financial Supplement under Note 8 (Debt) to the Consolidated Financial Statements and filed as an exhibit to this Report), our deferred payment agreements with the asbestos trusts (as described in Item 8 (Financial Statements and Supplementary Data) in the Financial Supplement under Note 2 (Chapter 11 and Joint Plan of Reorganization) to the Consolidated Financial Statements and filed as exhibits to this Report) and our guarantee agreements with the asbestos trusts (filed as exhibits to this Report) contain certain restrictions on the payment of dividends on, and redemptions of, equity interests and other restricted payments, we believe that such restrictions do not currently materially limit our ability to pay dividends and we do not believe that such restrictions are likely to limit materially our future payment of dividends.

Share Repurchase Program

On February 4, 2014, we announced that the Board of Directors has authorized a share repurchase program of up to $500 million expected to be completed over the next 12 to 24 months at the discretion of management. Repurchases under the program may be made through one or more open market transactions at prevailing market prices; unsolicited or solicited privately negotiated transactions; accelerated share repurchase programs; or through any combination of the foregoing, or in such other manner as determined by management. The timing of the repurchases and the actual amount repurchased will depend on a variety of factors, including the market price of Grace’s shares and general market and economic conditions. Repurchased shares will be held in treasury. There is no guarantee as to the number of shares that will be repurchased and the share repurchase program may be extended, suspended or discontinued at any time without notice.

STOCK TRANSFER RESTRICTIONS

Under the terms of our Certificate of Incorporation, as approved by the Bankruptcy Court as part of the confirmation of the Joint Plan, in order to preserve significant tax benefits which are subject to elimination or limitation, the Board of Directors has the authority to impose restrictions on the transfer of Grace common stock with respect to certain 5% shareholders. Imposing such restrictions requires at least a 25% ownership shift to occur (as determined under Internal Revenue Code regulations) and at least a two-thirds vote of all of the directors. These restrictions would generally not limit the ability of a person that holds less than 5% of Grace common stock after emergence to either buy or sell stock on the open market.

This summary does not purport to be complete and is qualified in its entirety by reference to the Certificate of Incorporation, which has been filed with the SEC as Exhibit 3.1 to this Report.

Item 6. SELECTED FINANCIAL DATA

The disclosure required by this Item appears in the Financial Supplement under the heading "Selected Financial Data" which disclosure is incorporated herein by reference.

Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The disclosure required by this Item appears in the Financial Supplement under the heading "Management's Discussion and Analysis of Financial Condition and Results of Operations" which disclosure is incorporated herein by reference.

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market Risk

Our global operations, raw materials and energy requirements, and debt obligations expose us to various market risks. We use derivative financial instruments to mitigate certain of these risks. The following is a discussion of our primary market risk exposures, how those exposures are managed, and certain quantitative data pertaining to our market risk-sensitive instruments.

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Currency Exchange Rate Risk

Because we do business in over 40 countries, our results of operations are exposed to changes in currency exchange rates. We seek to minimize exposure to these changes by matching revenue streams in volatile currencies with expenditures in the same currencies, but it is not always possible to do so. From time to time, we use financial instruments such as currency forward contracts, options, or combinations of the two to reduce the risk of certain specific transactions. However, we do not have a policy of hedging all exposures, because management does not believe that such a level of hedging would be cost-effective. We do not hedge translation exposures that are not expected to affect cash flows in the near-term. Significant uses of derivatives to mitigate the effects of changes in currency exchange rates are as follows:

In November 2007, we executed intercompany loans in the aggregate amount of €250 million between our principal U.S. operating subsidiary and a newly established German subsidiary as part of a legal restructuring. In conjunction with the loans, our U.S. subsidiary entered into a series of currency forward contracts in order to fix the dollar/euro exchange rate that will apply to convert the euro principal payments to dollars. The total amount outstanding under the intercompany loans was €194.5 million as of December 31, 2013 (approximately $268.2 million). Currency fluctuations on these loans and the related forward contracts are recorded as components of operating results. The intercompany loans were repaid, and the related forward contracts were settled, when we emerged from bankruptcy.

The following tables provide information about our significant currency forward exchange agreements as of December 31, 2013 and 2012, specifically, the notional, or contract, amounts (in millions of U.S. dollars), and weighted average exchange rates (U.S. dollars to euros) by expected (contractual) maturity dates. These notional amounts generally are used to calculate the contractual payments to be exchanged under the contract. The fair values represent the fair value of the derivative contracts, and are presented as other assets or other liabilities and allocated between current and non-current, as appropriate, in the Consolidated Balance Sheets.

	Euro Forward Contracts—December 31, 2013 Expected Maturity Date	
Currency Forward Exchange Agreements	2014	Fair Value
Contract amount	$261.3	$(6.9)
Average contractual exchange rate	1.34	N/A

	Euro Forward Contracts—December 31, 2012 Expected Maturity Date	
Currency Forward Exchange Agreements	2013	Fair Value
Contract amount	$252.5	$(4.9)
Average contractual exchange rate	1.30	N/A

Commodity Price Risk

We operate in markets where the prices of raw materials and energy are commonly affected by cyclical movements of the economy and other economic factors. The principal raw materials used in our products include rare earths, molybdenum, sodium silicate, olefins, resins, caustic, aluminum, sodium aluminate, rubber, alumina, nickel, cobalt carbonate, kaolin, gypsum and latices. Natural gas is the largest single energy source that we purchase. These commodities are generally available to be purchased from more than one supplier. In order to minimize the risk of increasing prices on certain raw materials and energy, we use a centralized supply chain organization for procurement in order to improve purchasing activities. We have a risk management committee to review proposals to hedge purchases of raw materials and energy.

We have implemented a risk management program under which our goal is to hedge natural gas and aluminum supply in a way that provides protection against price volatility of the natural gas and aluminum markets. In order to mitigate volatile natural gas prices, we have entered into both fixed price swaps and options contracts to hedge a portion of our U.S. natural gas requirements. Additionally, in order to mitigate volatile aluminum prices, we have entered into fixed price swaps to hedge a portion of our U.S. aluminum requirements.

The following tables provide information about our commodity derivatives. For natural gas commodity derivatives, contract volumes, or notional amounts, are presented in millions of MMBtu (million British thermal units), weighted

average contract prices are presented in U.S. dollars per million MMBtu, and the total contract amount and fair value are presented in millions of U.S. dollars. For aluminum commodity derivatives, contract

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volumes, or notional amounts, are presented in millions of pounds, weighted average contract prices are presented in U.S. dollars per pound, and the total contract amount and fair value are presented in millions of U.S. dollars. The fair values of the commodity derivative contracts represent the excess of the variable price (market price) over the fixed price (pay price) multiplied by the nominal contract volumes. All commodity derivative instruments mature within 12 months.

	Commodity Derivatives—December 31, 2013			
Type of Contract	Contract Volumes	Weighted Average Price	Total Contract Amount	Fair Value
Natural gas swaps	0.3	$4.44	$1.2	$—
Aluminum swaps	1.4	$0.89	$1.2	$(0.1)

	Commodity Derivatives—December 31, 2012			
Type of Contract	Contract Volumes	Weighted Average Price	Total Contract Amount	Fair Value
Natural gas swaps	2.8	$3.60	$10.2	$(0.3)
Aluminum swaps	3.0	$0.96	$2.8	$0.1

The fair value of commodity derivative contracts is presented as other assets or other liabilities and allocated between current and non-current, as appropriate, in the Consolidated Balance Sheets.

The following tables provide information about our natural gas option contracts. Contract volumes, or notional amounts, are presented in millions of MMBtu (million British thermal units), both strike prices and futures trading prices are presented in U.S. dollars per million MMBtu, and the fair value is presented in millions of U.S. dollars. The fair values of the natural gas option contracts represent the excess of the futures trading price (market price) over the strike price multiplied by the nominal contract volumes. All natural gas option contracts mature within 18 months.

	Natural Gas Option Contracts—December 31, 2013			
Type of Contract	Contract Volumes	Strike Price	Futures Trading Price	Fair Value
Natural gas options	7.1	$5.00	$ 4.01 - 4.41	$—

The fair value of the natural gas option contracts is presented as other assets or other liabilities and allocated between current and non-current, as appropriate, in the Consolidated Balance Sheets. The premium paid for the call options is presented at amortized cost in other assets and allocated between current and non-current, as appropriate, in the Consolidated Balance Sheets. As of December 31, 2013, the unamortized call option premium was $0.8 million.

We have also entered into forward contracts for natural gas and aluminum that qualify for the normal purchases and normal sales exception from Accounting Standards Codification ("ASC") 815 "Derivatives and Hedging" as they do not contain net settlement provisions and result in physical delivery of natural gas and aluminum from suppliers. Therefore, the fair values of these contracts are not recorded in our Consolidated Balance Sheets.

Interest Rate Risk

Interest rate fluctuations directly affect interest expense on our variable-rate debt.

As of December 31, 2013, we did not use derivative instruments to mitigate interest rate risk. However, in connection with our emergence financing, we entered into an interest rate swap beginning on February 3, 2015, and maturing on February 3, 2020, fixing $250 million of term debt at 4.643%.

See Item 8 (Financial Statements and Supplementary Data) in the Financial Supplement under Note 9 to the Consolidated Financial Statements for additional disclosure around market risk, which disclosure is incorporated herein by reference.

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Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The disclosure required by this Item appears in the Financial Supplement which disclosure is incorporated herein by reference.

Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

Item 9A. CONTROLS AND PROCEDURES

Except as provided below, the disclosure required by this Item appears in the Financial Supplement under the heading "Management's Report on Financial Information and Internal Controls" which disclosure is incorporated herein by reference.

There was no change in Grace's internal control over financial reporting during the quarter ended December 31, 2013, that has materially affected, or is reasonably likely to materially affect, Grace's internal control over financial reporting.

Item 9B. OTHER INFORMATION

None.

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PART III

Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Our directors and executive officers as of December 31, 2013, are listed below. Our Certificate of Incorporation provides for the division of the Board of Directors into three classes, each to serve for a three-year term or until their respective successors are elected. Executive officers are elected to serve until the next annual meeting of the Board of Directors or until their respective successors are elected.

Name and Age*	Office	First Elected	Current Term Ends at Annual Meeting in:
H. Furlong Baldwin (82)	Class III Director	01/16/02	2017
Ronald C. Cambre (75)	Class II Director	09/01/98	2016
Alfred E. Festa (54)	Class III Director Chairman of the Board Chief Executive Officer	09/08/04 01/01/08 06/01/05	2017
Marye Anne Fox (66)	Class I Director	05/10/96	2015
Janice K. Henry (62)	Class I Director	01/18/12	2015
Jeffry N. Quinn (55)	Class II Director	11/07/12	2016
Christopher J. Steffen (72)	Class III Director Lead Independent Director	11/01/06 06/28/12	2017
Mark E. Tomkins (58)	Class I Director	09/06/06	2015
Hudson La Force III (49)	Senior Vice President & Chief Financial Officer	04/01/08	—
Gregory E. Poling (58)	President and Chief Operating Officer	11/03/11	—
Mark A. Shelnitz (55)	Vice President, General Counsel & Secretary	04/27/05	—
Pamela K. Wagoner (50)	Vice President & Chief Human Resources Officer	07/13/09	—
Keith N. Cole (55)	Vice President, Government Relations and Environment, Health and Safety	02/10/14	—

* Mr. John F. Akers resigned from the Board of Directors and all committees effective January 17, 2014.

Mr. Baldwin served as a director of Mercantile Bankshares Corporation from 1970 to 2003, as Chairman of the Board from 1984 to 2003 and as President and Chief Executive Officer from 1976 to 2001. Mr. Baldwin served as Chairman of NASDAQ OMX Group, Inc. until 2012 and served as a director of Platinum Underwriters Holdings, Ltd. and Allegheny Energy Inc. until 2011. Mr. Baldwin brings to the Board the management and governance knowledge he developed as a banking chief executive and public company board member and his extensive experience in banking and finance including significant knowledge of the business development, acquisitions, capital raising, operations and financial issues facing large corporations.

Mr. Cambre is retired Chairman of the Board and Chief Executive Officer of Newmont Mining Corporation. He joined Newmont as Vice Chairman and CEO in 1993 and retired as CEO in 2000 and as Chairman in 2001.

Mr. Cambre served as Chairman of the Board of McDermott International, Inc. and as a director of Cliffs Natural Resources Inc. until 2011. Mr. Cambre brings to the Board his extensive background in leadership and management at the most senior level in major corporations, his deep understanding of international business and global energy issues and his governance and oversight experience developed as a director of multiple public companies.

Mr. Festa joined Grace in 2003 and was elected Chief Executive Officer in 2005 and Chairman in 2008. He served as President from 2003 to 2011 and Chief Operating Officer from 2003 to 2005. Prior to joining Grace, Mr. Festa was a partner of Morganthaler Private Equity Partners, a venture capital and buyout firm, from 2002 to 2003. From 2000 to 2002, he was with ICG Commerce, Inc., a private company providing on-line procurement services, where he last served as President and Chief Executive Officer. Prior to that, he served as Vice President and General Manager of AlliedSignal's (now Honeywell) performance fibers business. Mr. Festa is a director of NVR, Inc., a publicly held

home builder. Mr. Festa brings to the Board his substantial leadership, sales and

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marketing, international business and venture capital experience. As CEO, Mr. Festa brings to the Board his intimate knowledge of all aspects of Grace's operations and strategy.

Dr. Fox served as Chancellor of the University of California San Diego (UCSD) and Distinguished Professor of Chemistry at that institution from 2004 until her retirement in 2012. She currently serves as Chancellor Emeritus and Distinguished Professor of Chemistry and Biotechnology at UCSD. She was previously Chancellor of North Carolina State University and Distinguished University Professor of Chemistry. Dr. Fox has served as the Co-Chair of the National Academy of Sciences' Government-University-Industry Research Roundtable and she served on President Bush's Council of Advisors on Science and Technology. She has served as the Vice Chair of the National Science Board. Dr. Fox is a director of Bridgepoint Education, Inc. and Red Hat, Inc. and served as a director of Pharmaceutical Product Development, Inc. until 2008 and Boston Scientific Corporation until 2010. With her chemistry background, strong financial and operational experience leading large and successful educational institutions and service as an outside director to public and private boards, Dr. Fox brings to the Board a full understanding of Grace's products and research and development efforts, substantial experience in overseeing corporate management and finance and high-level knowledge of operations and strategic planning for large institutions.

Ms. Henry served as Senior Vice President and Treasurer until 2006 and Chief Financial Officer until 2005 of Martin Marietta Materials, Inc.; after her retirement in 2006, she provided consulting services to Martin Marietta Materials, Inc. until 2009. Ms. Henry is also a director of Cliffs Natural Resources Inc. Ms. Henry served as a director of North American Galvanizing and Coatings, Inc. until its acquisition in 2010 by AZZ Incorporated and as a director and chair of the audit committee of Inco Limited until its acquisition in 2006 by CVRD. Ms. Henry brings to the Board her substantial experience in financial and accounting leadership, including acquisitions and capital structuring, gained as an officer of a chemicals and materials manufacturer. She also has significant governance and oversight experience from her service on public and private corporate boards.

Mr. Quinn is Chairman and Chief Executive Officer of The Quinn Group LLC, a diversified holding company with investments in the industrial, active lifestyle, and entertainment sectors, and Quinpario Partners LLC, an investment and operating firm in the performance materials and specialty chemical sectors, each of which he formed in July 2012. Since May 2013, Mr. Quinn has served as President, Chief Executive Officer and Chairman of the Board of Quinpario Acquisition Corp., a blank check company formed in 2013. Mr. Quinn served as President and Chief Executive Officer from 2004 and Chairman from 2006 of Solutia Inc., a global leader in specialty chemicals until its sale in July 2012 to Eastman Chemical Company. Mr. Quinn joined Solutia as an executive officer in January 2003, serving as Senior Vice President, General Counsel, Secretary and, from June 2003, Chief Restructuring Officer. Solutia filed for Chapter 11 bankruptcy protection in December 2003 and emerged from bankruptcy protection in February 2008. Prior to that, Mr. Quinn served as Executive Vice President of Premcor, Inc. and Senior Vice President, General Counsel and Secretary of Arch Coal Inc. Mr. Quinn is also a director of Tronox Limited and Ferro Corporation. Mr. Quinn brings to the board his extensive senior level executive leadership experience in diverse industries and his broad experience in a wide range of functional areas, including strategic planning, mergers and acquisitions, human resources, and legal and governmental affairs. He also has extensive experience in board processes and governance.

Mr. Steffen most recently served as Vice Chairman of Citicorp and its principal subsidiary, Citibank N.A., until 1996. He is currently a private investor. Mr. Steffen is a director of Viasystems Group, Inc. and Platinum Underwriters Holdings, Ltd. and until 2012, served as a director of Accelrys, Inc. Mr. Steffen has served as Senior Vice President and Chief Financial Officer of Eastman Kodak and Executive Vice President and Chief Financial and Administrative Officer and director of Honeywell. As Lead Independent Director, Mr. Steffen presides at all executive sessions of the Board. With his background as a financial and operational leader with companies with global operations in various industries, Mr. Steffen brings to the Board his extensive international business expertise and knowledge of financial matters and financial reporting. Mr. Steffen also has substantial governance and oversight experience developed as a director of multiple public companies.

Mr. Tomkins most recently served as Senior Vice President and Chief Financial Officer of Innovene, a petrochemical and oil refining company controlled by BP that is now part of the INEOS Group, from 2005 until 2006. He served as Chief Financial Officer of Vulcan Materials Company from 2001 to 2005 and CFO of Great Lakes Chemical (now

Chemtura) from 1998 to 2001. Prior to joining Great Lakes Chemical, Mr. Tomkins held various mid- and upper-level financial positions with AlliedSignal (now Honeywell) and Monsanto Company. Mr. Tomkins is a certified public accountant. Mr. Tomkins is a director of Elevance Renewable Sciences Inc., a privately held renewable polymer and energy company and, until 2012, he served as a director of CVR Energy, Inc. He is currently a private investor. With his background as a Chief Financial Officer of multiple public companies,

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Mr. Tomkins brings to the Board his intimate knowledge of the global chemicals and petroleum industry and his experience overseeing finance and business development in major corporations. Mr. Tomkins also has substantial governance and oversight experience developed as a director of multiple public companies.

Messrs. Poling, La Force and Shelnitz have been actively engaged in Grace's business for the past five years.

Ms. Wagoner joined Grace in 2009 as Vice President and Chief Human Resources Officer. From 2003 until she joined Grace, she was Senior Vice President, Human Resources at Host Hotels & Resorts, Inc.

Mr. Cole joined Grace in 2014 as Vice President, Government Relations and EHS. From 2002, until he joined Grace, he held leadership positions in government relations and public policy for General Motors Corporation.

Audit Committee

We have a standing Audit Committee established in accordance with the provisions of the Securities Exchange Act of 1934, as amended. The Committee members are H. Furlong Baldwin, Ronald C. Cambre, Marye Anne Fox, Janice K. Henry, Jeffry N. Quinn, Christopher J. Steffen and Mark E. Tomkins, each of whom meets the independence standards of the SEC and New York Stock Exchange. Mr. Tomkins serves as Chair of the Audit Committee. The Board of Directors has determined that all Audit Committee members are audit committee financial experts as defined by SEC regulations. A complete description of the responsibilities of the Audit Committee is set forth in the Grace Audit Committee Charter which is available on the Internet at www.grace.com/About/Leadership/Governance/.

Other Committees

We have standing Nominating and Governance, Compensation and Corporate Responsibility Committees. The members of each of these committees are H. Furlong Baldwin, Ronald C. Cambre, Marye Anne Fox, Janice K. Henry, Jeffry N. Quinn, Christopher J. Steffen and Mark E. Tomkins, each of whom meets the independence standards of the New York Stock Exchange. Mr. Steffen serves as Chair of the Nominating and Governance Committee, Mr. Quinn serves as Chair of the Compensation Committee and Dr. Fox serves as Chair of the Corporate Responsibility Committee. A complete description of the responsibilities of the Board committees is set forth in their respective committee charters which are available on the Internet at www.grace.com/About/Leadership/Governance/.

Section 16(a) Beneficial Ownership Reporting Compliance

Under Section 16 of the Securities Exchange Act of 1934, as amended, our directors, certain of our officers, and beneficial owners of more than 10% of the outstanding Grace common stock are required to file reports with the SEC concerning their ownership of and transactions in Grace common stock or other Grace securities; these persons are also required to furnish us with copies of these reports. Based upon the reports and related information furnished to us, we believe that all such filing requirements were complied with in a timely manner during and with respect to 2013.

Code of Ethics for Principal Officers

The Board of Directors and the Audit Committee have adopted Business Ethics and Conflicts of Interest policies, which apply to all of our directors, officers, and employees, including our principal officers. These policies are accessible through our Internet website, www.grace.com/About/Leadership/Governance/, and are available in hard copy, free of charge, by contacting Grace Shareholder Services at 410-531-4167. We granted no waivers to these policies during 2013. We intend to promptly post on our website any amendments or waivers to these policies affecting any principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions.

Item 11. EXECUTIVE COMPENSATION

Compensation Discussion and Analysis

Executive Summary

The Committee looks to reward strong business performance with pay that will continue to attract, retain and motivate a qualified management team. We believe that this pay for performance link is an attractive component of our compensation and one that we strengthened in 2013.

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Compensation Changes for 2013

- Performance Based Units-We revised our long-term incentive program, which was made up entirely of stock options in 2012, such that 50% of the award value is made up of shares of Grace common stock that are subject to both time-based and performance-based vesting criteria and 50% of the award value is made up of stock options. This change was made to provide a stronger link between Grace performance and executive pay.

- Stock Ownership Guidelines-We implemented guidelines that Grace directors and certain Grace executives maintain an ownership position in Grace common stock that is a multiple of their cash retainer for Grace directors or pay for officers.

- Director Compensation-We revised our director compensation program to better align pay with shareholder interests by eliminating meeting fees and including a recurring annual grant of Grace common stock as a portion of the annual retainer that was previously paid entirely in cash.

The principal components of pay under our executive compensation program are annual base salary, annual cash incentive awards and long-term incentive awards, which consisted of both stock options and performance based units, or PBUs, in 2013. We use this mix of fixed and variable pay components with different payout forms (cash, stock and stock options) to reward annual and sustained performance. These components afford the Committee the necessary flexibility to recognize management.

The measures used by the Grace Compensation Committee to assess our performance for purposes of determining annual cash incentive awards for executive officers are based on our annual operating plan goals and are directly tied to the pay outcomes of our executive officers. For the 2013 Annual Incentive Compensation Plan (AICP), we used the following metrics to quantify performance:

- Adjusted Earnings Before Interest and Taxes (Adjusted EBIT) (weighted 75%) This metric is the primary performance measure for the AICP and has been over the past several years.
- Working Capital Days (weighted 25%) This metric measures the change in the average Working Capital Days for the three months ending December 31, 2013, from the average Working Capital Days for the prior year quarter. Working Capital Days is the sum of the average days that accounts receivable from sales are outstanding before collection and the average days inventory is held before sale less the average days accounts payable are outstanding before payment. This metric is designed to assess operational excellence and improvements in working capital management as Grace continues to integrate its operations on a global basis.

Based on our 2013 business model and operational and growth initiatives, we believe these measures best reflect our ability to grow our businesses profitably and maximize operational efficiency and cash flow. They also allow us to provide meaningful incentives that are competitive in our industry, encouraging our executives to drive sustained results and long-term shareholder value.

CEO Pay At-A-Glance

Mr. Festa's Total Direct Compensation (TDC) for 2013 was $5,049,669, a decrease of (24.2)% compared with the prior year. The chart below shows the components of pay awarded compared with the prior year. For more details about the structure of Mr. Festa's compensation, see "Summary Compensation Table."

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Compensation Element	2013 ($)	2012 ($)	Percentage Increase (Decrease) in Compensation Element (%)
Base Salary	975,000	975,000	—
Annual Cash Incentive	243,750	848,250	(71.3)
Long-term Cash Incentive	—	1,499,985	—
Fair Market Value of Option Grant	1,761,324	2,381,400	(26.0)
Fair Market Value of PBU Grant	1,849,992	—	—
Increase in Pension Value	57,000	798,000	(92.9)
Other Compensation	162,603	162,811	(0.1)
Total	5,049,669	6,665,446	(24.2)

Overview

The Board of Directors has designated the five officers named in the Summary Compensation Table as executive officers. The executive officers include our Chief Executive Officer (CEO), Chief Operating Officer (COO), Chief Financial Officer (CFO) and vice presidents in charge of principal functions or who have policy-making authority.

The Board of Directors has delegated authority for approving and administering the compensation plans for executive officers and other members of senior management to the Compensation Committee. The Board has appointed all of the independent members of the Board to serve as members of the Compensation Committee.

A complete description of the responsibilities of the Compensation Committee, referred to as the committee in this Compensation Discussion and Analysis, is set forth in our Compensation Committee Charter, which is available on the Internet at www.grace.com/About/Leadership/Governance/. The committee and the Board review the charter annually and revise it as necessary.

The committee is responsible for reviewing and approving the compensation of all executive officers, including:

- base salary;
- annual incentive compensation;
- long-term incentive compensation;
- employment agreements;
- severance arrangements;
- change-in-control agreements; and
- any special or supplemental benefits not generally available to salaried employees.

The committee also reviews and approves all corporate goals and objectives used in determining the incentive compensation of each executive officer.

The committee receives advice and legal and administrative assistance from our human resources department, legal services group and the Board's outside counsel in meeting its responsibilities. The committee also has authority to retain other outside advisors. During 2013, the committee retained the services of Towers Watson, a human resources consulting firm, after reviewing its independence from management, and we expect the committee to continue working with Towers Watson during 2014. During 2012, the committee instructed Towers Watson to compile competitive compensation data and, based upon such data, to recommend ranges of annual and long-term compensation that are consistent with the committee's compensation philosophy and objectives as discussed below. In its independence review, the committee noted no conflicts of interest related to the work of Towers Watson. Specific services provided by Towers Watson to the committee during 2013 included:

- participation in selected committee meetings;
- preparation of market compensation data for executives and outside directors;
- input on current market trends and practices; and
- assessment of the competitiveness of our executive compensation.

In addition to services provided to the committee in respect of executive and director compensation, Towers Watson provided additional services to Grace in an amount that was less than $120,000 during 2013. The committee expects Towers Watson and our executive officers, including our CEO, our General Counsel and our

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Chief Human Resources Officer, and their respective subordinates, to meet, exchange information and otherwise cooperate in the performance of their respective duties outside committee meetings.

Compensation Elements

The following table outlines the major elements of compensation in 2013 for the executive officers named in the Summary Compensation Table, referred to generally as the named executive officers:

Compensation Element	Definition	Rationale
Base Salary	Fixed cash compensation paid twice monthly	Payment for completion of day-to-day responsibilities
Annual Incentive Compensation Plan	Variable cash compensation earned by annual personal performance and achievement of pre-established annual corporate financial performance goals	Builds accountability for achieving annual financial and business results and personal performance goals
Long-Term Incentive Compensation Plan (Stock Options)	Equity compensation with staggered vesting that increases in value with increases in share price; value is equivalent to 50% of executive officer's long-term incentive	Aligns long-term interests of executive officers and shareholders Encourages executive retention
Long-Term Incentive Compensation Plan (Performance-Based Units)	Equity compensation subject to both time-based and performance-based vesting criteria; value is equivalent to 50% of executive officer's long-term incentive	Builds accountability for sustained financial results and accurate planning Aligns long-term interests of executive officers and shareholders Encourages executive retention
U. S. Defined Contribution Retirement Plans	Savings and Investment Plan (401(k))—Standard tax-qualified defined contribution retirement benefit subject to limitations on compensation and benefits under the Internal Revenue Code	Provides U.S. employees with opportunity to save for retirement on tax-advantaged basis with matched contributions from Grace
	Savings and Investment Plan Replacement Payment Plan (nonqualified)	Highly-paid U.S. employees made eligible for the same level of Grace match as all other participants in the Savings and Investment Plan notwithstanding Internal Revenue Code limitations
U. S. Defined Benefit Retirement Plans	Pension Plan—Standard tax-qualified pension plan subject to limitations on compensation and benefits under the Internal Revenue Code	Provides U.S. employees with retirement income
	Supplemental Executive Retirement Plan(nonqualified)	Highly-paid U.S. employees made eligible for the same benefit formula as all other participants in the Pension Plan notwithstanding Internal Revenue Code limitations

Executive Compensation Philosophy and Objectives

The key objective of the Grace executive compensation program is to reward our executives for our financial performance and to enable us to compete effectively with other firms in attracting, motivating and retaining executives. The committee intends the incentive compensation portion of the program to align closely the financial interests of our executives with those of our shareholders. Because senior executives have a substantial ability to influence business success, the committee believes that the portion of compensation that is at-risk based on corporate

performance should increase as the level of responsibility of the executive increases. The committee also expects the executive compensation program to be consistent with a culture of ethical conduct, personal integrity and compliance with our policies and applicable law. We require executives to set an example for our employees and our other business associates in emphasizing the Grace Core Values in their daily business conduct. The Grace Core Values consist of a commitment to teamwork, performance, integrity, speed and innovation, which, with our overall commitment to safety, are the foundation of our corporate culture.

Our executive compensation program is designed to reward executives for the achievement of corporate, operating segment and functional goals and objectives, taking into account both individual performance and contributions to our overall success. The individual performance evaluation is based on the input received from, and the recommendation provided by, the CEO. This assessment is based on the officer's leadership, technical skill, management, operational performance and potential to contribute to Grace's overall success. The CEO proposes compensation levels for the other executive officers and, although not a member of the committee, the CEO attends committee meetings and participates in committee deliberations regarding compensation levels for the other executive officers. In addition, since the number of executive officers is small, the committee is able to spend considerable time with each executive officer outside committee meetings and is able to develop a more intimate familiarity. The CEO is excused from deliberations regarding his own compensation and from the "executive

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session" portion of each meeting when the committee meets alone or alone with its outside advisors. The CEO is also excused when the committee meets separately with internal advisors from our human resources group.

Periodically the committee consults with Towers Watson for an assessment of the competitiveness of our executive officer compensation relative to certain benchmark companies in the chemicals, materials and specialty chemicals industry that the committee deems our peer group for compensation purposes, and relative to certain broad industry data. The committee selected the benchmark companies as our compensation peer group based upon their size and global scope, the quality of their executive talent, the likelihood that we compete with them for executive talent and the availability of public information regarding their compensation practices. The committee periodically reviews the composition of our compensation peer group to ensure that it remains relevant. For 2013 compensation, the peer group consisted of:

Albemarle Corp.	Olin Corp.
Axiall Corp.	OM Group Inc.
Cabot Corp.	PolyOne Corp.
Celanese Corp.	Rockwood Holdings Inc.
Cytec Industries Inc.	RPM International Inc.
Eastman Chemical Co.	A. Schulman Inc.
Ferro Corp.	Sigma-Aldrich Corp.
FMC Corp.	Valspar Corp.
International Flavors & Fragrances Inc.	Westlake Chemcial Corp.

The broad industry data that the committee generally reviews is included in studies produced by Towers Watson, Mercer and AonHewitt (all of whom are also nationally recognized compensation and benefits consulting firms) for any given compensation year. The committee used the chemicals and non-durable goods sections of these surveys. These data are used as a secondary reference for executive officer compensation, largely as a check on the peer group compensation levels, as well as to determine if there are any identifiable non-industry trends in compensation.

Once the committee has completed an evaluation of an executive officer's overall performance, the committee reviews the executive officer's existing compensation. This information, presented in the form of a "tally sheet," reflects all compensation payable or potentially payable to the executive officer under our compensation plans. For each executive officer, the committee compares the tally sheet to the peer group information provided by Towers Watson and the broad industry data to provide context to its compensation decisions. The committee then makes the compensation determination based on its individual evaluation of each executive officer.

In setting an executive officer's compensation level the committee does not target a specific percentile at which pay levels should be set, as the members believe the market for executive talent includes a wide range of practices. Instead, the committee reviews the distribution of peer group pay practices and broad industry data and determines the appropriate positioning of each executive officer's pay based on factors including, but not limited to, the roles and responsibilities of the executive officer, the executive officer's performance, experience, the depth of the market data available and internal equity with other Grace salaried employees. In the case of incentive compensation, if performance objectives are exceeded, the committee believes that incentive compensation should be at or above targeted levels and when performance objectives are not achieved, incentive compensation should be below targeted levels. Grace executives are generally eligible for periodic compensation reviews.

In order to ensure that the long-term financial interests of our directors and senior executives are fully aligned with the long-term interests of our shareholders, in 2013 the Board implemented stock ownership guidelines. The guidelines are as follows:

Category of Executive	Ownership Guideline
Directors (other than CEO)	5 times cash portion of annual retainer
Chief Executive Officer	5 times base salary
Members of the Grace Leadership Team	3 times base salary
Presidents of Operating Segments	2 times base salary
Certain Key Vice Presidents	1 times base salary

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Current directors and executives subject to the stock ownership guidelines generally have five years to comply with the relevant guideline.

As a result of the Chapter 11 filing, we have not held an annual meeting of shareholders and, accordingly, have not obtained a say-on-pay advisory vote of the shareholders under Section 14A of the Securities Exchange Act of 1934, as amended. At such time as we hold say-on-pay advisory votes, we expect the committee will consider the results of such votes in making future compensation decisions for the named executive officers.

Chief Executive Officer

The committee's process for determining the compensation of the CEO is similar to the process it applies to other executive officers. The committee reviews and approves corporate goals and objectives used in determining the compensation of the CEO. The committee evaluates the CEO's performance in light of those goals and objectives and has sole authority to determine the CEO's compensation based on this evaluation. The terms of the CEO's employment agreement are discussed below in this Compensation Discussion and Analysis and under the Summary Compensation Table and Potential Payments Upon Termination or Change-In-Control Table. The CEO plays no part in the committee's deliberations or approval of his own compensation.

The committee believes the CEO's compensation should be higher than the compensation of other executive officers because the CEO is uniquely positioned to influence all aspects of our operations and performance and the resulting return to our shareholders. In addition, the committee believes there exists a robust competition for effective CEO talent among companies of our size and, in this environment, a competitive compensation package is essential for retention. The committee's view is consistent with the practices of the compensation peer group companies and the broad industry data that it has reviewed.

Compensation Elements

Base Salary

In 2013, based on its review of competitive compensation information described above, the committee increased base salaries for certain named executive officers as set forth in the following table:

Named Executive Officer	Base Annual Salary Rate as of 12/31/2013 ($)	Base Annual Salary Rate as of 12/31/2012 ($)	Percentage Increase in Base Annual Salary Rate (%)
A. E. Festa	975,000	975,000	—
H. La Force III	470,000	430,000	9.3
G. E. Poling	600,000	550,000	9.1
M. A. Shelnitz	390,000	375,000	4.0
P. K. Wagoner	335,000	325,000	3.1

Annual Incentive Compensation

The Annual Incentive Compensation Plan, or AICP, is a cash-based pay-for-performance incentive plan. Its purpose is to motivate and reward upper- and middle-level employees, including executive officers, for their contributions to our performance. The amount of an individual incentive award payment under the AICP is based upon:

- the individual's AICP target amount;
- the funding of the AICP incentive pool based on our performance; and
- the individual's personal performance.

The Board of Directors established our 2013 AICP targets on February 26, 2013, after considering its objectives for the company and the general economic environment in which we expected to be operating during the year. As in 2012, the Board of Directors focused on the dual objectives of growing earnings commensurate with the business opportunities we have and the investments we have made, and improving our working capital performance.

The committee established objective annual incentive targets based on the performance targets in our 2013 operating plans. The committee evaluated the difficulty of achieving the performance targets in light of uncertainties

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in the general economy and the chemicals industry and ongoing economic weakness in Europe, and concluded that achievement of such targets would constitute good to outstanding Grace financial performance.

While emphasizing both earnings and working capital performance in setting our annual incentive compensation plan goals, the committee gave substantially more weight to earnings performance than working capital performance because the committee believed that for 2013, earnings performance remained the most important indicator of Grace's business performance.

For earnings, the committee continued with the Adjusted EBIT measure for earnings (as such term is described in this Report in Item 7 (Management's Discussion and Analysis of Financial Condition and Results of Operations) in the Financial Supplement) used in 2012.

For working capital, the committee used the "Working Capital Days" metric that it established in 2012. This metric measures the change in the average Working Capital Days for the three months ending December 31, 2013, from the average Working Capital Days for the prior year quarter. Generally, the lower the number of Working Capital Days, the more efficient the business is in its operations, generating cash and freeing up capital for other corporate purposes. These metrics ensure the continuing alignment of the economic interests of our executives with our annual operating plans and the interests of our shareholders. The AICP targets for our named executive officers are as follows:

Named Executive Officer	AICP Target as Percent of Base Salary Paid During 2013		AICP Target as Percent of Base Salary Paid During 2012	
A. E. Festa	100	%	100	%
H. La Force III	80	%	80	%
G. E. Poling	90	%	90	%
M. A. Shelnitz	70	%	70	%
P. K. Wagoner	70	%	70	%

Actual awards for executive officers may range from $0 to an amount equal to 200% of the target amount, based on the factors described above.

The target AICP incentive pool is the sum of the target awards of all participants in the AICP. For 2013, 75% of the available AICP incentive pool was established based on our performance in respect of Adjusted EBIT and 25% on performance in respect of Working Capital Days, which aligns the funded amount of our AICP incentive pool with our actual performance. We refer to the relevant targets as the Adjusted EBIT Target and the Working Capital Days Target, respectively.

2013 AICP Performance Targets

Adjusted EBIT (75% of Available Incentive Pool) (in $ millions)*	Working Capital Days (25% of Available Incentive Pool) (in days)	Portion of Incentive Pool funded in respect of Target
Less than $492	More than 64.2	—%
$492	64.2	25%
$615	53.5	100%
$738 or More	42.8 or Less	200%

* Adjusted to reflect Grace's adoption of mark-to-market pension accounting in the 2013 fourth quarter as described in this Report in Item 8 (Financial Statements and Supplementary Data) in the Financial Supplement under Note 1 (Basis of Presentation and Summary of Significant Accounting and Financial Reporting Policies) to the Consolidated Financial Statements.

In setting the actual amount of the AICP incentive pool, the committee has discretion to adjust the performance objectives, adjust the calculation of each performance measure or adjust the size of the AICP incentive pool irrespective of the achievement of performance objectives. The committee believes that AICP participants generally

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should not benefit from or be penalized by items not considered when the performance targets are set that result in large unexpected variances from annual operating plan assumptions.

For 2013, the committee made no changes in the calculation of Working Capital Days for use in the AICP calculation. Actual 2013 Working Capital Days (representing 25% of Available Incentive Pool) were 53.6 days, the target level.

For 2013, the committee made no changes in the calculation of Adjusted EBIT for use in the AICP calculation. The committee did adjust the Adjusted EBIT performance targets to reflect Grace's adoption of mark-to-market pension accounting in the 2013 fourth quarter as shown in the table above. Actual 2013 Adjusted EBIT (representing 75% of Available Incentive Pool) was $550.8 million. On the recommendation of management, reflecting the fact that 2013 Adjusted EBIT was less than 2012 Adjusted EBIT of $558.2 million, the committee exercised its discretion and did not fund the AICP incentive pool for the named executive officers in respect of the Adjusted EBIT target. The total AICP incentive pool for the named executive officers was established at 25% of the aggregate target amounts for the named executive officers.

Actual 2013 AICP payments to the named executive officers are as set forth below:

Name	Actual AICP Payment ($)
A. E. Festa	243,750
H. La Force III	94,000
G. E. Poling	135,000
M. A. Shelnitz	68,250
P. K. Wagoner	58,625

Long-Term Incentive Compensation

Our Long-Term Incentive Plans, or LTIPs, are designed to motivate and reward our key employees, including our named executive officers, for their contributions to our performance over a multi-year period and align their financial interests with those of our shareholders by making a significant portion of their total compensation variable and dependent upon our sustained financial performance. The target value of the LTIP award for each LTIP participant, with the exception of the CEO, was determined by the committee based on the recommendation of the CEO. The target value of the CEO's LTIP award was determined by the committee. These target award values were determined by reviewing current market compensation data (as discussed earlier in this report), historical long-term incentive target values, the total number of available options and shares to be granted and internal pay equity considerations. Aggregate LTIP awards under the 2013 LTIP were approved by the Bankruptcy Court.

Fifty percent of the target award value of the 2013 LTIP is awarded in options to purchase Grace common stock and 50% is awarded in performance based units, or PBUs. The committee generally grants LTIP awards during the first year of the performance period.

Stock Options

Stock options represent 50% of the value of our LTIP awards. The value of stock options is directly related to the increase in value of our stock, so stock options provide direct alignment between the interests of our executives and shareholders. In determining the value of stock option awards, the committee used an analysis of stock option value based on an adjusted Black-Scholes option pricing model and reviewed this analysis with Towers Watson. The committee approved the stock option grants included in the 2013 LTIP on May 2, 2013, after approval of the 2013 LTIP by the Bankruptcy Court on April 16, 2013. The exercise price of the options was $76.655, which was the average of the high and low trading prices of Grace common stock on the New York Stock Exchange on May 2, 2013. The term of the options is five years and they vest over three years in equal annual installments commencing the year after the date of grant.

Performance Based Units

Performance based units, or PBUs, represent 50% of the value of our LTIP awards. The value of PBUs is directly related to the achievement of specified business performance objectives and the increase in value of our stock, so PBUs also provide direct alignment between the interests of our executives and shareholders. Specifically, the amount of an individual payout under a PBU is based upon:

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- the individual's PBU target share amount;
- the growth in our LTIP Adjusted EBIT over the three-year performance period; and
- the value of Grace common stock on the payout date.

Payouts to executives who are subject to our stock ownership guidelines are payable in shares of Grace common stock. Payouts to other participants are payable in cash.

LTIP Adjusted EBIT

Adjusted EBIT was selected as the performance measure for the PBUs as the committee believed that it was the best measure given our our focus on long-term operational excellence and quality of earnings. In determining cumulative LTIP Adjusted EBIT growth, Adjusted EBIT for the final year of the performance period may be adjusted in the discretion of the committee to eliminate the effect of changes in accounting, like our adoption of mark-to-market pension accounting, or significant changes in our business, like a significant acquisition or divestment. In order to earn the target payout, our cumulative annual LTIP Adjusted EBIT growth from the 2012 baseline performance to 2015 actual performance must be 30%, to earn the maximum of 200% of the target payout, growth must be 45% and no payout is earned if growth is 15% or less as reflected in the following table:

3-Year Cumulative LTIP Adjusted EBIT Growth (%)	2015 LTIP Adjusted EBIT (in millions)	Number of PBU Shares Paid Out (# Shares)
Greater than 45%	Greater than $750.2	200% of PBU Award
45%	$750.2	200% of PBU Award
30%	$672.6	100% of PBU Award
15%	$595.0	50% of PBU Award
Less than 15%	Less than $595.0	—

Pension Plan/Supplemental Executive Retirement Plan

As described below under "Pension Benefits," payments under our tax-qualified pension plan are calculated using annual compensation, including base salary and AICP awards, and years of credited Grace service. For 2013, federal income tax law limits to $255,000 the annual compensation on which benefits under the tax-qualified pension plan may be based. As a result, the committee has implemented a Supplemental Executive Retirement Plan, generally referred to as a SERP, that currently applies to approximately 85 upper level employees, including the executive officers, whose annual compensation exceeds that amount. Under this plan, each such employee will receive the full pension to which that employee would be entitled in the absence of the limitations described above and other limitations imposed under federal income tax law. The SERP is unfunded and is not qualified for tax purposes.

Savings and Investment Plan/Replacement Payment Plan

We generally offer a tax-qualified 401(k)-type Savings and Investment Plan, or S&I Plan, to employees under which they may save a portion of their annual compensation in investment accounts on a pre- or post-tax basis. We currently match 100% of employee savings under the S&I Plan up to 6% of the employee's base salary and annual incentive compensation. The committee believes that a 401(k)-type plan with a meaningful company match is an effective recruiting and retention tool for our employees, including our executive officers. For 2013, federal income tax law limits qualifying annual compensation for 401(k) plan purposes to $255,000. As a result, the committee has implemented an S&I Plan Replacement Payment Plan that currently applies to approximately 60 of our employees, including our executive officers, whose annual compensation exceeds that amount. Under this plan, each such employee will receive the full matching payments to which that employee would be entitled in the absence of the limitations described above and other limitations imposed under federal income tax law.

Executive Personal Benefits

The committee believes that executives generally should not be treated differently than the general employee population when it comes to personal benefits and therefore, the committee has limited executive personal benefits. Executive officers are eligible to participate in an executive physical examination program that offers executives an annual comprehensive physical examination within a compressed time period. Mr. Festa has access to corporate

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aircraft for reasonable personal travel, though he is responsible for paying income taxes on the value of such travel as determined by the Internal Revenue Service.

Change-In-Control Severance Agreements

As described below under "Termination and Change-in-Control Arrangements-Change-In-Control Severance Agreements," we have entered into change-in-control severance agreements with each of the named executive officers. The provisions in these agreements are based on competitive practice and are designed to ensure that the executive officers' interests remain aligned with the interests of our shareholders if a potential change in control occurs. Payments under these agreements are triggered by the involuntary termination of the executive officer's employment without cause (including constructive termination caused by a material reduction in his or her authority or responsibility or by certain other circumstances) following a "change in control." A change in control situation often undermines an executive officer's job security, and it is to our benefit and our shareholders' benefit to encourage our executive officers to seek out beneficial transactions and to remain employed through the closing of any transaction, even though their future employment at Grace may be uncertain. The change-in-control severance agreements are designed to reinforce and encourage the continued attention and dedication of the executive officers to their assigned duties without distraction in the face of potentially adverse circumstances arising from the possibility of a change in control of Grace. Certain terms of these agreements are described below under the Potential Payments Upon Termination or Change-In-Control Table.

Severance Arrangements

As described below under "Termination and Change-in-Control Arrangements-Other Executive Officer Severance Arrangements," we have entered into severance arrangements with each of the named executive officers. Payments under these arrangements are triggered by involuntary termination of employment under most circumstances. Our severance arrangements are designed to encourage and reinforce the continued attention and dedication of our executive officers to their assigned duties without undue concern regarding their job security. In the case of Mr. La Force and Ms. Wagoner, the severance arrangements are contained in agreements that were negotiated on an arms-length basis prior to the time they joined Grace. The payments required by these agreements were designed to encourage Mr. La Force and Ms. Wagoner to join and remain with Grace in lieu of other employment opportunities available to them. Certain terms of these arrangements are described below under the Potential Payments Upon Termination or Change-In-Control Table.

Executive Salary Protection Plan

As described below under "Termination and Change-in-Control Arrangements-Executive Salary Protection Plan," our Executive Salary Protection Plan provides payments to our named executive officers, or their respective beneficiaries, in the event of their disability or death prior to age 70 while employed by Grace. The plan is designed to encourage the continued attention and dedication of our executive officers to their assigned duties without undue concern regarding their ability to earn a living and support their families in the event of death or disability. Certain terms of this plan are described below under the Potential Payments Upon Termination or Change-In-Control Table.

Chapter 11 Emergence Bonus

On February 3, 2014, the Joint Plan became effective, concluding our status as a debtor under Chapter 11. The Joint Plan as confirmed by the Bankruptcy Court provides $6 million for the payment of special cash bonuses to our executives, including the executive officers named in the Summary Compensation Table. On February 25, 2014, the Committee determined to pay emergence bonuses to the Named Executive Officers in the following amounts:

Name	Emergence Bonus ($)
A. E. Festa	1,500,000
H. La Force III	750,000
G. E. Poling	750,000
M. A. Shelnitz	1,000,000
P. K. Wagoner	250,000

These emergence bonuses were paid in recognition by the Committee of the outstanding performance and leadership of our executive team in managing the Chapter 11 process to a successful conclusion. Grace expects that the emergence bonuses will be paid in March 2014.

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Deductibility of Executive Compensation

Under the Omnibus Budget Reconciliation Act of 1993, provisions were added to the Internal Revenue Code of 1986, as amended, under Section 162(m) that limit the tax deduction for compensation expense in excess of $1 million paid to certain executive officers unless such compensation is "performance-based" and satisfies certain other conditions. The committee believes that compensation payable to executive officers should generally meet the conditions required for full deductibility under Section 162(m). Tax deductibility is one criterion the committee considers when establishing compensation plans. The AICP and LTIPs are structured with the intention that the compensation payable thereunder will generally qualify as deductible "performance-based" compensation. While the committee believes that it is important to preserve the ability to structure compensation plans to meet a variety of corporate objectives even if the compensation is not deductible, due to the committee's focus on performance-based compensation plans, the committee expects that, despite its power to exercise positive discretion in establishing payments under the AICP, the vast majority of compensation paid to the named executive officers will be tax deductible.

Compensation Committee Report

We, the undersigned members of the Compensation Committee of the Board of Directors of Grace, have reviewed Grace's Compensation Discussion and Analysis for 2013 and have discussed it with Grace management. Based on our review and this discussion, we recommend to the Board that the Compensation Discussion and Analysis be included in Grace's Annual Report on Form 10-K.

COMPENSATION COMMITTEE

Jeffry N. Quinn, Chair
H. Furlong Baldwin
Ronald C. Cambre
Marye Anne Fox
Janice K. Henry
Christopher J. Steffen
Mark E. Tomkins

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Summary Compensation Table

The following table sets forth the compensation we paid for the periods indicated to our Chief Executive Officer, our Chief Financial Officer and each of our other three most highly compensated executive officers who were executive officers as of December 31, 2013, determined by reference to the total compensation earned by such individuals for 2013 (reduced by the amount set forth in the table below under the caption "Change in Pension Value and Nonqualified Deferred Compensation Earnings").

Name and Principal Position	Year	Salary ($)	Bonus ($)	Stock Awards(a) ($)	Option Awards(a) ($)	Non-Equity Incentive Plan Compensation ($)		Change in Pension Value and Nonqualified Deferred Compensation Earnings(c) ($)	All Other Compensation(d) ($)	Total ($)
						AICP(b)	LTIP(b)			
A. E. Festa	2013	975,000	—-	1,849,992	1,761,324	243,750	—-	57,000	162,603	5,049,669
Chairman & Chief	2012	975,000	—-	—-	2,381,400	848,250	1,499,985	798,000	162,811	6,665,446
Executive Officer	2011	968,500	—-	—-	4,087,685	1,350,000	2,156,005	646,000	157,805	9,365,995
H. La Force III	2013	453,333	—-	399,986	380,834	94,000	—-	64,000	46,572	1,438,725
Senior Vice President & Chief	2012	430,000	—-	—-	587,990	299,280	309,997	170,000	53,275	1,850,542
Financial Officer	2011	430,000	—-	—-	773,333	435,000	352,001	119,000	50,700	2,160,034
G. E. Poling	2013	579,167	—-	749,993	714,046	135,000	—-	(41,000)	62,004	2,199,210
President & Chief	2012	550,000	—-	—-	1,190,700	430,650	382,496	1,222,000	70,375	3,846,221
Operating Officer	2011	466,667	—-	—-	1,073,933	600,000	482,502	1,017,000	61,900	3,702,002
M. A. Shelnitz	2013	383,750	—-	275,038	261,820	68,250	—-	(114,000)	38,143	913,001
Vice President,	2012	375,000	—-	—-	396,900	228,375	239,998	571,000	41,875	1,853,148
General Counsel & Secretary	2011	375,000	—-	—-	541,333	300,000	280,001	522,000	39,000	2,057,334
P. K. Wagoner Vice President & Chief Human Resources Officer	2013	330,833	—-	224,982	214,218	58,625	—-	48,000	33,141	909,799

(a) Amounts reflect the aggregate grant date fair value of performance-based unit awards (in the “Stock Awards” column) and option awards (in the “Option Awards” column), in each case computed in accordance with FASB ASC

Topic 718, "Compensation-Stock Compensation." In the case of performance-based units, the amounts shown in the Stock Awards column are based on the probable outcome of performance conditions, consistent with the estimate of aggregate compensation cost to be recognized over the service period determined as of the grant date under FASB ASC Topic 718, excluding the effect of estimated forfeitures. The values of the performance-based unit awards at the grant date if the highest level of performance conditions were to be achieved would be as follows: Mr. Festa - $3,699,984; Mr. La Force - $799,972; Mr. Poling - $1,499,985; Mr. Shelnitz - $550,076; and Ms. Wagoner - $449,965. The assumptions used to calculate the compensation expense reported for 2013 are described in this Report in Item 8 (Financial Statements and Supplementary Data) in the Financial Supplement under Note 18 (Stock Incentive Plans) to the Consolidated Financial Statements and are incorporated herein by reference.

(b) The 2013 amount consists of payments that we expect to make in March 2014 pursuant to the 2013 Annual Incentive Compensation Plan (AICP). Since the 2010-2012 LTIP, for which a final payment was made in March 2013, we have not awarded cash LTIPs.

(c) The 2013 amount consists of the aggregate change in the actuarial present value of the individual's accumulated benefit under the Grace Pension Plan and Grace Supplemental Executive Retirement Plan (SERP) from December 31, 2012, to December 31, 2013, assuming a 4.76% discount rate and retirement at age 62 with benefits payable on a straight life annuity basis and other assumptions used for financial reporting purposes under generally accepted accounting principles as described in this Report in Item 8 (Financial Statements and Supplementary Data) in the Financial Supplement under Note 11 (Pension Plans and Other Postretirement Benefits Plans) to the Consolidated Financial Statements as follows:

Name	Change in Pension Plan Value ($)	Change In SERP Value ($)	Total Change in Pension Value ($)
A. E. Festa	11,000	46,000	57,000
H. La Force III	12,000	52,000	64,000
G. E. Poling	(5,000)	(36,000)	(41,000)
M. A. Shelnitz	(22,000)	(92,000)	(114,000)
P. K. Wagoner	22,000	26,000	48,000

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(d) The 2013 amount consists of the following:

Name	Personal Benefits* ($)		S&I Plan Matching Payments ($)	S&I Plan Replacement Payments ($)	Liability Insurance ($)	Total ($)
A. E. Festa	51,793	**	15,300	94,095	1,415	162,603
H. La Force III	n/a		15,300	29,857	1,415	46,572
G. E. Poling	n/a		15,300	45,289	1,415	62,004
M. A. Shelnitz	n/a		15,300	21,428	1,415	38,143
P. K. Wagoner	n/a		15,300	16,426	1,415	33,141

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* Consists of our aggregate incremental cost of providing personal benefits if the aggregate amount of personal benefits provided to the individual equaled or exceeded $10,000.

** Consists of personal use of Grace-provided aircraft, calculated based on personal-use flight hours as a percentage of total flight hours charged to Grace, ($49,673) and participation in the executive physical examination program ($2,120).

Grants of Plan-Based Awards in 2013

The following table provides information regarding grants under our Annual Incentive Compensation Plan, or AICP, and Long Term Incentive Plan, or LTIP, to the executive officers named in the Summary Compensation Table during 2013.

Name	Plan	Grant Date	Estimated Possible Payouts Under Non-Equity Incentive Plan Awards(a)			Estimated Future Payouts Under Equity Incentive Plan Award(s)			All Other Option Awards: Number of Securities Underlying Options (#)(d)	Exercise or Base Price of Option Awards ($/Sh)(e)	Closing Price on Grant Date ($/Sh)	Grant Date Fair Value of Stock and Option Awards ($)(f)
			Threshold ($)(b)	Target ($)(b)	Maximum ($)(b)	Threshold (#)(c)	Target (#)(c)	Maximum (#)(c)				
A. E. Festa	2013 AICP	n/a	243,750	975,000	1,950,000	—	—	—	—	—	—	—
	2013 LTIP (Option)	5/2/2013	—	—	—	—	—	—	90,986	76.655	77.480	1,761,3
	2013 LTIP (PBU)	5/2/2013	—	—	—	12,067	24,134	48,268	—	—	—	1,849,9
H. La Force III	2013 AICP	n/a	94,000	376,000	752,000	—	—	—	—	—	—	—
	2013 LTIP (Option)	5/2/2013	—	—	—	—	—	—	19,673	76.655	77.480	380,834
	2013 LTIP (PBU)	5/2/2013	—	—	—	2,609	5,218	10,436	—	—	—	399,986
G. E. Poling	2013 AICP	n/a	135,000	540,000	1,080,000	—	—	—	—	—	—	—
	2013 LTIP	5/2/2013	—	—	—	—	—	—	36,886	76.655	77.480	714,046

	(Option)											
	2013 LTIP (PBU)	5/2/2013	—-	—-	—-	4,892	9,784	19,568	—-	—-	—-	749,993
M. A. Shelnitz	2013 AICP	n/a	68,250	273,000	546,000	—-	—-	—-	—-	—-	—-	—-
	2013 LTIP (Option)	5/2/2013	—-	—-	—-	—-	—-	—-	13,525	76.655	77.480	261,820
	2013 LTIP (PBU)	5/2/2013	—-	—-	—-	1,794	3,588	7,176	—-	—-	—-	275,038
P. K. Wagoner	2013 AICP	n/a	58,625	234,500	469,000	—-	—-	—-	—-	—-	—-	—-
	2013 LTIP (Option)	5/2/2013	—-	—-	—-	—-	—-	—-	11,066	76.655	77.480	214,218
	2013 LTIP (PBU)	5/2/2013	—-	—-	—-	1,468	2,935	5,870	—-	—-	—-	224,982

(a) Actual payments pursuant to the 2013 AICP that we expect to pay in March 2014 have been determined and are reflected in the Summary Compensation Table.

(b) Amounts are based upon base salary actually paid during 2013.

(c) The number of performance-based units that are earned, if any, will be based on performance for fiscal years 2013 to 2015 and will be determined after the close of fiscal year 2015.

(d) Options are exercisable in one-third increments on May 2, 2014, May 1, 2015 and May 2, 2016.

(e) The exercise price was determined based on the average of the high and low trading prices of Grace common stock on the New York Stock Exchange on the grant date.

(f) The grant date fair value is generally the amount that Grace would expense in its financial statements over the award's service period, but does not include a reduction for forfeitures.

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2013 Annual Incentive Compensation Plan (AICP)

The AICP is a cash-based pay-for-performance incentive plan. Awards under the AICP are allocated from the incentive pool, the amount of which is determined by the extent to which business performance objectives are achieved. The committee has discretion to establish or increase the size of the incentive pool even if performance objectives are not achieved. Once the incentive pool is established, an executive officer's award payment is determined based on the individual's target award, performance and other factors determined by the committee.

In order to receive an AICP award payment for a specific calendar year, employees generally must be actively employed by Grace through the payout date, which is typically in March of the following year. See "Potential Payments Upon Termination or Change-In-Control—Termination and Change-in-Control Arrangements" for a description of the circumstances under which AICP payments would be made upon termination of an executive's employment with Grace.

Long-Term Incentive Plan (LTIP)

Our long-term incentive plans are multi-year, pay-for-performance incentive plans. Awards under our 2013-2015 LTIP consisted of a performance-based unit award and an award of stock options under our Amended and Restated 2011 Stock Incentive Plan.

Outstanding Equity Awards at Fiscal Year End 2013

The following table provides information regarding outstanding stock options held by the executive officers named in the Summary Compensation Table as of December 31, 2013.

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Name	Option Awards					Stock Awards		
	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable		Option Exercise Price ($)	Option Expiration Date	Equity incentive plan awards: number of unearned units that have not vested (#)	Equity incentive plan awards: payout value of unearned units that have not vested (#)	
A. E. Festa	—	—		—	—	24,134	2,386,129	(a)
	—	90,986	(b)	76.655	5/2/2018	—	—	
	54,000	108,000	(c)	48.450	6/28/2017	—	—	
	176,193	88,097	(d)	42.255	5/5/2016	—	—	
	262,500	—		27.745	5/5/2015	—	—	
	108,236	—		9.785	5/7/2014	—	—	
H. La Force III	—	—		—	—	5,218	515,904	(a)
	—	19,673	(b)	76.655	5/2/2018	—	—	
	13,336	26,664	(c)	48.450	6/28/2017	—	—	
	33,333	16,667	(d)	42.255	5/5/2016	—	—	
	54,250	—		27.745	5/5/2015	—	—	
	34,744	—		9.785	5/7/2014	—	—	
G. E. Poling	—	—		—	—	9,784	967,344	(a)
	—	36,886	(b)	76.655	5/2/2018	—	—	
	27,000	54,000	(c)	48.450	6/28/2017	—	—	
	6,667	3,333	(e)	41.250	11/3/2016	—	—	
	40,001	19,999	(d)	42.255	5/5/2016	—	—	
	66,938	—		27.745	5/5/2015	—	—	
M. A. Shelnitz	—	—		—	—	3,588	354,746	(a)
	—	13,525	(b)	76.655	5/2/2018	—	—	
	9,000	18,000	(c)	48.450	6/28/2017	—	—	
	23,333	11,667	(d)	42.255	5/5/2016	—	—	
	42,000	—		27.745	5/5/2015	—	—	
	40,590	—		9.785	5/7/2014	—	—	
P. K. Wagoner	—	—		—	—	2,935	290,183	(a)
	—	11,066	(b)	76.655	5/2/2018	—	—	
	7,669	15,331	(c)	48.450	6/28/2017	—	—	
	20,001	9,999	(d)	42.255	5/5/2016	—	—	
	35,000	—		27.745	5/5/2015	—	—	

(a) Market value of performance-based units that have not been earned is based on the December 31, 2013 closing market price of Grace common stock of $98.87 per share. The performance-based units will be earned or forfeited based on Grace performance from fiscal year 2013 through fiscal year 2015. Performance for fiscal year 2013 was at a level in excess of one-third of the performance threshold; therefore, the target amounts are shown.
(b) Options are exercisable in one-third increments on May 2, 2014, May 1, 2015 and May 2, 2016.
(c) Options are exercisable in one-third increments on June 28, 2013, June 28, 2014 and June 28, 2015.
(d) Options are exercisable in one-third increments on May 4, 2012, May 3, 2013 and May 5, 2014.
(e) Options are exercisable in one-third increments on November 2, 2012, November 1, 2013 and November 3, 2014.

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Option Exercises and Stock Vested in 2013

The following table provides information regarding the exercise of options held by the executive officers named in the Summary Compensation Table during 2013.

Name	Option Awards Number of Shares Acquired on Exercise (#)	Value Realized on Exercise ($)	Stock Awards Number of Shares Acquired on Vesting (#)	Value Realized on Vesting ($)
A. E. Festa	312,964	21,813,410	—	—
H. La Force III	61,186	3,856,979	—	—
G. E. Poling	71,030	4,711,402	—	—
M. A. Shelnitz	31,710	1,802,427	—	—
P. K. Wagoner	0	0	—	—

Pension Benefits

The following table provides information regarding benefits under our Retirement Plan for Salaried Employees, or Pension Plan, our Supplemental Executive Retirement Plan, or SERP, and any supplemental pension arrangements under employment agreements for the executive officers named in the Summary Compensation Table.

Name	Plan Name	Number of Years Credited Service (years)	Present Value of Accumulated Benefit* ($)	Payments During Last Fiscal Year ($)
A. E. Festa	Pension Plan	10.08	314,000	—
	SERP	10.08	2,658,000	—
H. La Force III	Pension Plan	5.75	145,000	—
	SERP	5.75	352,000	—
G. E. Poling	Pension Plan	34.42	1,300,000	—
	SERP	34.42	4,315,000	—
M. A. Shelnitz	Pension Plan	30.17	1,003,000	—
	SERP	30.17	1,823,000	—
P. K. Wagoner	Pension Plan	4.42	122,000	—
	SERP	4.42	143,000	—

* Amounts comprise the actuarial present value of the executive officer's accumulated benefit under the Pension Plan and SERP as of December 31, 2013, assuming a 4.76% discount rate and retirement at age 62 with benefits payable on a straight life annuity basis and other assumptions used for financial reporting purposes under generally accepted accounting principles as described in this Report in Item 8 (Financial Statements and Supplementary Data) in the Financial Supplement under Note 11 (Pension Plans and Other Postretirement Benefits Plans) to the Consolidated Financial Statements. The Pension Plan and SERP provide for a reduction in pension benefits to employees that elect early retirement ranging from a 17% reduction for retirement at age 55 to no reduction for retirement at age 62.

Retirement Plan for Salaried Employees

Full-time salaried employees who are 21 or older and who have one or more years of service are eligible to participate in our Retirement Plan for Salaried Employees, or Pension Plan. Under this basic retirement plan, pension benefits are based upon (a) the employee's average annual compensation for the 60 consecutive months in which his or her compensation is highest during the last 180 months of continuous participation, and (b) the number of years of the employee's credited Grace service. At age 62, a participant is entitled to full benefits under the Pension Plan but a participant may elect reduced payments upon early retirement beginning at age 55. For purposes of the Pension Plan, compensation generally includes base salary and AICP awards; however, for 2013, federal income tax law limits to $255,000 the annual compensation on which benefits under the Pension Plan may be based. The Pension Plan is

further described in Item 8 (Financial Statements and Supplementary Data) in the

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Financial Supplement under Note 11 (Pension Plans and Other Postretirement Benefits Plans) to the Consolidated Financial Statements and in Item 7 (Management's Discussion and Analysis of Financial Condition and Results of Operations under the caption "Financial Condition, Liquidity, and Capital Resources—Employee Benefit Plans—Defined Benefit Pension Plans") in the Financial Supplement.

Supplemental Executive Retirement Plan

We also have an unfunded, nonqualified Supplemental Executive Retirement Plan, or SERP, under which an employee will receive the full pension to which he or she would be entitled in the absence of the limitations described above and other limitations imposed under federal income tax law. In addition, the SERP recognizes deferred base salary, deferred annual incentive compensation awards and, in some cases, periods of employment during which an employee was ineligible to participate in the basic retirement plan. In respect to payments, the SERP generally operates in the same manner as the Pension Plan. Since 2001, we have not permitted deferrals of base salary or incentive compensation. The SERP is further described in Item 8 (Financial Statements and Supplementary Data) in the Financial Supplement under Note 11 (Pension Plans and Other Postretirement Benefits Plans) to the Consolidated Financial Statements and in Item 7 (Management's Discussion and Analysis of Financial Condition and Results of Operations under the caption "Financial Condition, Liquidity, and Capital Resources—Employee Benefit Plans—Defined Benefit Pension Plans") in the Financial Supplement.

Non-Qualified Deferred Compensation Plan

The following table summarizes the compensation deferred by the named executive officer pursuant to the provisions of Grace's incentive compensation plan in 1998, under which certain employees were permitted to voluntarily defer receipt of shares of Grace common stock. Such deferred shares were contributed to a "rabbi trust" held for the benefit of the deferred compensation plan participants. Shares held in the plan are fully vested and may be distributed to the plan beneficiary upon retirement or termination of service with us. Since 1998, executives may no longer defer receipt of shares under the plan, although existing balances remain in place.

Fiscal Year 2013 Non-Qualified Deferred Compensation

Name	Executive Contributions in Fiscal Year 2013 ($)	Registrant Contributions in Fiscal Year 2013 ($)	Aggregate Earnings in Fiscal Year 2013 ($)		Aggregate Withdrawals/ Distributions in Fiscal Year 2013 ($)	Aggregate Balance at Fiscal Year 2013 End ($)	
M. A. Shelnitz	—	—	298,075	(a)	—	931,439	(b)

(a) Amount represents the increase in value of 9,420.8496 shares of Grace common stock held in the plan based on the closing prices of Grace common stock on December 31, 2012, of $67.23 and December 31, 2013, of $98.87. Amounts reflected are not included in the "Summary Compensation Table" because the earnings are not "above market."

(b) Amount represents the value of 9,420.8496 shares of Grace common stock held in the plan based on the closing price of Grace common stock on December 31, 2013, of $98.87.

Potential Payments Upon Termination or Change-In-Control

The following table sets forth potential payments to executive officers named in the Summary Compensation Table in the event of the listed events, calculated under the assumption that employment terminated on the last day of 2013. The following table does not include payments pursuant to contracts, agreements, plans and arrangements that do not discriminate in scope, terms or operation, in favor of executive officers and that are available generally to all salaried employees. The value of payments to be made following termination of employment pursuant to the Grace Retirement Plan and the Grace SERP are described above under the caption "Pension Benefits." The value of payments to be made following termination of employment pursuant to Mr. Shelnitz's deferred shares arrangement are described above under the caption "Non-Qualified Deferred Compensation Plan."

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Name	Involuntary Termination Without Cause ($)(a)	Change-in-Control ($)(b)	Involuntary Termination Without Cause Following Change-in-Control ($)(c)(d)	Death ($)(c)(e)	Disability ($)(c)(f)
A. E. Festa	3,412,500	12,454,226	7,620,376	1,770,376	1,102,876
H. La Force III	705,000	2,725,037	3,085,968	641,968	344,301
G. E. Poling	1,200,000	4,866,393	4,282,448	922,448	442,448
M. A. Shelnitz	780,000	1,868,545	2,380,249	508,249	215,749
P. K. Wagoner	502,500	1,584,914	2,039,728	431,728	208,385

(a) Consists: (i) in the case of Mr. Festa, of minimum severance payments pursuant to his employment agreement as described below under "—Termination and Change-in-Control Arrangements—CEO Severance Arrangements;" and (ii) in the case of the other executive officers, minimum severance payments pursuant to severance agreements as described below under "—Termination and Change-in-Control Arrangements—Other Executive Officer Severance Arrangements." Amount excludes cash LTIP payments (in amounts set forth below in footnote (c)) and/or AICP payments that executive officers may receive in the discretion of the Compensation Committee as described below under "—Termination and Change-in-Control Arrangements."

(b) Upon change-in-control, stock options immediately become fully vested and exercisable. Amount shown represents the in-the-money value of unvested stock options as of December 31, 2013.

(c) Includes payments under the 2013-2015 Performance-based Units (PBUs) calculated as described below under "--Termination and Change-in-Control Arrangements--Long Term Incentive Program (PBU Awards)" under the assumption that the 2013 PBUs pay out at the target amount as follows:

Name	2013-2015 PBUs ($)
A. E. Festa	795,376
H. La Force III	171,968
G. E. Poling	322,448
M. A. Shelnitz	118,249
P. K. Wagoner	96,728

(d) Includes contractual payments pursuant to each executive's respective Change-in-Control Severance Agreement calculated under the assumption that no excise tax will apply as follows:

Name	Change-in-Control Severance Payments ($)
A. E. Festa	6,825,000
H. La Force III	2,914,000
G. E. Poling	3,960,000
M. A. Shelnitz	2,262,000
P. K. Wagoner	1,943,000

(e) Includes the sum of payments under the Grace Executive Salary Protection Plan (ESPP) during the first year following death. Amount excludes AICP payments executive officers may receive under certain circumstances in the discretion of the Compensation Committee as described below under "—Termination and Change-in-Control Arrangements." During subsequent years after death until the specified termination year (reflecting the executive officer's age as of December 31, 2013), the sum of payments each year would be as follows:

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Name	ESPP Payments Each Year Following Year of Death ($)	Year of Termination of Payments*
A. E. Festa	487,500	2024
H. La Force III	235,000	2024
G. E. Poling	300,000	2021
M. A. Shelnitz	195,000	2024
P. K. Wagoner	167,500	2024

* Payments terminate 10 years following death; provided however, if the executive officer is over age 55 at the time of death, the duration of payments is reduced.

(f) Includes sum of payments under the Grace Executive Salary Protection Plan during the first year following disability, assuming the executive officer remains disabled for at least 12 consecutive months. Amounts reflect the offset of expected payments under Grace's long-term and short-term disability plans that are based, in part, on the duration of the executive officer's employment. Amount excludes AICP payments they may receive under certain circumstances in the discretion of the Compensation Committee as described below under "—Termination and Change-in-Control Arrangements—Annual Incentive Compensation Plan." During subsequent years after disability until the specified termination year or earlier death or end of disability, the sum of payments each year would be:

Name*	ESPP Payments Each Year Following Year of Disability ($)	Year of Termination of Payments
A. E. Festa	225,000	2024
H. La Force III	47,000	2029
M. A. Shelnitz	39,000	2023

* Due to the offset of expected payments under Grace's long-term and short-term disability plans, Grace expects that the other named executive officers would not receive any additional payments under the ESPP after the first year of disability.

Termination and Change-in-Control Arrangements

Change-in-Control Severance Agreements. We have entered into severance agreements with all of our executive officers, which renew automatically unless the Board elects not to renew them. These agreements generally provide that in the event of the involuntary termination of the individual's employment without cause (including constructive termination caused by a material reduction in his or her authority or responsibility or by certain other circumstances) following a "change in control," he or she will generally receive a severance payment equal to three times the sum of his or her annual base salary plus target annual incentive compensation, subject to reduction, pro rata in the case of an executive officer who is within 36 months of normal retirement age (65) or, under certain circumstances, to minimize the effect of certain excise taxes if applicable. For purposes of the severance agreements, "change in control" means the acquisition of 20% or more of the outstanding Grace common stock (but not if such acquisition is the result of the sale of common stock by Grace that has been approved by the Board), the failure of Board-nominated directors to constitute a majority of any class of the Board of Directors, the occurrence of a transaction in which the Grace shareholders immediately preceding such transaction do not own more than 50% of the combined voting power of the entity resulting from such transaction, or the liquidation or dissolution of Grace. The severance amount would be paid in a single lump-sum after termination. The description of the severance agreements in Item 11 of this Report does not purport to be complete and is qualified in its entirety by reference to the form of such agreement, which has been filed with the SEC.

CEO Severance Arrangements. Under the terms of Mr. Festa's employment agreement, if we terminate Mr. Festa's employment without cause, or he terminates his employment as a result of constructive discharge, he would be entitled to a severance payment equal to two times a dollar amount equal to 175% of his annual base salary at the time of his termination. The severance amount would be paid in installments over a period of 24 months; however, at Mr. Festa's option, as approved by the Compensation Committee, the entire severance amount may be paid in a single lump-sum after termination. The provisions of Mr. Festa's employment agreement pertaining to this severance amount survived the expiration of the agreement on May 31, 2013. Severance

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payments under Mr. Festa's employment agreement are contingent upon Mr. Festa's execution of an agreement releasing Grace from liabilities related to Mr. Festa's employment by Grace. The description of Mr. Festa's employment agreement in Item 11 of this Report does not purport to be complete and is qualified in its entirety by reference to the agreement, which has been filed with the SEC.

Other Executive Officer Severance Arrangements. We have entered into severance agreements with Messrs. La Force (included in his employment agreement), Poling and Shelnitz and Ms. Wagoner (included in her employment Agreement). Under the terms of the severance arrangements applicable to these named executive officers, in the event of the involuntary termination of the executive officer's employment under circumstances that would qualify the executive officer for severance pay under the severance plan that generally covers our salaried employees, the executive officer would be entitled to severance pay equal to two times his annual base salary, in the case of Messrs. Poling and Shelnitz, or one and one-half times his or her annual base salary, in the case of Mr. La Force and Ms. Wagoner. The severance amount would be paid in installments in the form of salary continuation, provided that an executive officer could elect to receive the entire severance amount as a single lump sum after termination in conjunction with the termination of certain employee benefit coverage. Severance payments are contingent upon the named executive officer's execution of an agreement releasing Grace from liabilities related to his or her employment by Grace. Other than with respect to the amount of severance, the severance arrangements for these named executive officers are the same. The description of the severance arrangements in Item 11 of this Report does not purport to be complete and is qualified in its entirety by reference to Mr. La Force's employment agreement, Ms. Wagoner's employment agreement, the form of executive severance agreement and the Grace Severance Pay Plan for Salaried Employees, each of which has been filed with the SEC.

Executive Salary Protection Plan. All executive officers participate in the Executive Salary Protection Plan which provides that, in the event of a participant's disability or death prior to age 70, we will continue to pay all or a portion of base salary to the participant or a beneficiary for a period based on the participant's age at the time of disability or death. Payments under the plan may not exceed 100% of base salary for the first year and 60% thereafter in the case of disability (50% in the case of death). Any payment under the plan as a result of disability would be reduced by the amount of disability income received under Grace's long-term and short-term disability plans that are generally applicable to U.S. salaried employees. The payments would be paid in installments in the form of salary continuation. The description of the plan in Item 11 of this Report does not purport to be complete and is qualified in its entirety by reference to the text of the Executive Salary Protection Plan, as amended, which is filed with the SEC.

Annual Incentive Compensation Plan. An employee whose employment terminates prior to an AICP payout date will generally not receive an AICP payment. However, in the discretion of the Compensation Committee, an employee whose employment terminates prior to the payout date may receive an AICP award payment if the employee has more than three months' service under the AICP and employment terminates for any of the following reasons: retirement under a Grace retirement plan; death; disability; divestment; or other termination of employment by Grace that is not for cause. If an employee whose employment terminates prior to the end of a year receives an AICP award payment for that year, the amount of the AICP award payment will generally be prorated for the period of the employee's service during the year and paid at the time the award is paid to active Grace employees. The description of the AICP in Item 11 of this Report does not purport to be complete and is qualified in its entirety by reference to the text of the AICP which is filed with the SEC.

Long Term Incentive Plan (Amended and Restated 2011 Stock Incentive Plan--Performance-based Unit (PBU) Awards). An employee whose employment terminates prior to the payout date will forfeit any unpaid PBU award payment if employment terminates for any of the following reasons:

- voluntary termination without the consent of the Compensation Committee;
- retirement under a Grace retirement plan prior to age 62 without the consent of the Compensation Committee; or
- termination for cause.

An employee whose employment terminates prior to the payout date will receive a PBU award payment if employment terminates for any of the following reasons:

- retirement under a Grace retirement plan either at or after age 62;
- death or disability; or

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- involuntary termination after a change in control of Grace ("change in control" means that a person beneficially owns 20% or more of the outstanding Grace common stock (but not if such ownership is the result of the sale of Grace common stock by Grace that has been approved by the Board or pursuant to a plan of reorganization that is confirmed and effective), the failure of Board-nominated directors to constitute a majority of any class of the Board of Directors, the occurrence of a corporate transaction in which the Grace shareholders immediately preceding such transaction do not own more than 50% of the combined voting power of the entity resulting from such transaction, or the liquidation or dissolution of Grace).

In the discretion of the Compensation Committee, an employee whose employment terminates for a reason that is not described above (i.e. involuntary termination not for cause or transfer to the buyer of a Grace business unit) prior to the payout date may receive a PBU award payment. If an employee whose employment terminates prior to the end of a PBU performance period receives a PBU award payment for that performance period, the amount of the PBU award payment will be prorated for the period of the employee's service during the performance period and paid at the time the award is paid to active Grace employees. The description of the Amended and Restated 2011 Stock Incentive Plan--Performance-based Unit (PBU) Awards in Item 11 of this Report does not purport to be complete and is qualified in its entirety by reference to the text of the Amended and Restated 2011 Stock Incentive Plan and the Form of Performance-based Unit Grant Agreement which are filed with the SEC.

Long Term Incentive Plan (2000, 2011 and Amended and Restated 2011 Stock Incentive Plans--Stock Option Awards). Any stock option held by an employee whose employment terminates prior to exercise will terminate:

- when employment terminates, if employment terminates voluntarily, without the consent of the Compensation Committee, or for cause;
- three years after employment terminates, if employment terminates due to death or incapacity;
- three years after employment terminates, if employment terminates due to retirement under a Grace retirement plan, provided the employee continues to serve Grace until the first installment of the stock option becomes exercisable; or
- three months (subject to extension by the Compensation Committee for up to three years) after employment terminates, if employment terminates for another reason; provided however, if the holder dies or becomes incapacitated during the three-month period (or such longer period as the Compensation Committee approves) the option shall terminate three years after employment termination.

In the event of a Change in Control, any stock options outstanding under the 2000, 2011 and Amended and Restated Stock Incentive Plans, that are not exercisable and vested, shall become fully exercisable and vested to the full extent of the original grant. For purposes of the 2000, 2011 and Amended and Restated 2011 Stock Incentive Plans, "change in control" means:

- the acquisition of 20% or more of the outstanding Grace Common Stock (but not if such acquisition is the result of the sale of Grace common stock by Grace that has been approved by the Board);
- the failure of Board-nominated directors to constitute a majority of any class of the Board of Directors;
- the occurrence of a transaction in which the Grace shareholders immediately preceding such transaction do not own more than 50% of the combined voting power of the entity resulting from such transaction; or
- the liquidation or dissolution of Grace.

The description of the 2000, 2011 and Amended and Restated 2011 Stock Incentive Plan--Stock Option Awards in Item 11 of this Report does not purport to be complete and is qualified in its entirety by reference to the text of the 2000, 2011 and Amended and Restated 2011 Stock Incentive Plans and the Form of Stock Option Grant Agreement which are filed with the SEC.

Director Compensation for 2013

Under the compensation program for nonemployee directors in effect during 2013, each nonemployee director received an annual retainer that is split between cash (44%) and equity (56%). Under this program, each nonemployee director received: an annual retainer of $80,000 in cash, 50% of which was paid in January and 50% of which was paid in December; and an annual award of approximately $100,000 of Grace common stock which

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was issued in May. Additional annual cash retainers were paid in December as follows: the Lead Independent Director received $20,000; the Audit Committee Chair received $15,000; and the Chairs of the Compensation and the Nominating and Governance Committees each received $10,000. We reimburse directors for expenses they incur in attending Board and committee meetings and other activities incidental to their service as directors. Our directors, and all Grace employees, are entitled to participate in the Grace Foundation's Matching Grants Program. We also maintain business travel accident insurance coverage for our directors. Mr. Festa's compensation is described above in the Summary Compensation Table and he receives no additional compensation for serving as a member of the Board of Directors.

The following table sets forth amounts that we paid to our nonemployee directors in connection with their services to Grace during 2013.

Name	Fees Earned or Paid in Cash ($)(b)	Stock Awards ($)	Option Awards ($)	Non-Equity Incentive Plan Compensation ($)	Change in Pension Value and Nonqualified Deferred Compensation Earnings ($)	All Other Compensation ($)(c)		Total ($)
J. F. Akers(a)	85,000	100,035	—	—	—	—		185,035
H. F. Baldwin	80,000	100,035	—	—	—	—		180,035
R. C. Cambre	80,000	100,035	—	—	—	2,000	(d)	182,035
M. A. Fox	80,000	100,035	—	—	—	—		180,035
J. K. Henry	80,000	100,035	—	—	—	—		180,035
J. N. Quinn	85,000	100,035	—	—	—	—		185,035
C. J. Steffen	110,000	100,035	—	—	—	3,000	(d)	213,035
M. E. Tomkins	95,000	100,035	—	—	—	—		195,035

(a) John F. Akers resigned from the Board of Directors and all committees effective January 17, 2014.

(b) Amount consists of annual cash retainer in the amount of $80,000 and additional payments to: Mr. Akers and Mr. Quinn for serving as Chair of the Compensation Committee in the amounts of $5,000; Mr. Tomkins for serving as Chair of the Audit Committee in the amount of $15,000; and Mr. Steffen for serving as Chair of the Nominating and Governance Committee and Lead Independent Director in the amount of $30,000.

(c) Grace paid an aggregate of $1,909 in premiums for business travel accident insurance coverage for all directors during 2013.

(d) Consists of charitable contributions paid during 2013 to academic institutions at the request of the director pursuant to the Grace Foundation's Matching Grants Program.

Compensation Policies and Practices Relating to Risk Management

We do not believe that risks arising from our compensation policies and practices for our employees are reasonably likely to have a material adverse effect on Grace through excessive risk taking incentives or otherwise. Our compensation program, though tailored to our specific needs, is generally similar to compensation programs used by other companies in our industry. We have many years of experience with the various components of our compensation program, including our incentive plans under which payments may vary based on the performance of the business. We believe these plans, backed by our corporate ethics program and the Grace Core Values, have been successful in aligning the interests of our executives and senior employees with the interests of our stakeholders and in encouraging the responsible pursuit of corporate objectives by our employees.

Compensation Committee Interlocks and Insider Participation

During 2013, the Compensation Committee of the Board was composed of Messrs. Akers (Chair until May 2, 2013), Baldwin, Cambre, Quinn (Chair, effective May 2, 2013), Tomkins and Steffen, Dr. Fox and Ms. Henry. None of these persons is a current or former Grace officer or employee, nor did we have any reportable transactions with any of

these persons. None of our executive officers serves or in the past has served as a member of the board of directors or compensation committee of any entity that has one or more of its executive officers serving on our Board of Directors or our Compensation Committee.

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Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

SECURITY OWNERSHIP

The following table sets forth the amount of Grace common stock beneficially owned, directly or indirectly, as of January 31, 2014, by:

- each person that we know is the beneficial owner of more than 5% of the outstanding shares of Grace common stock;
- each current director;
- each of the executive officers named in the Summary Compensation Table set forth in Item 11 above; and
- all directors and all executive officers as a group.

Name and Address of Beneficial Owner(1)(2)	Shares of Common Stock Beneficially Owned(3)		Percent(4)	
WRG Asbestos PI Trust(5) 1100 North Market Street Wilmington, Delaware 19890-1625W Trust Advisory Committee c/o Caplin & Drysdale Chartered One Thomas Circle, N.W., Suite 1100 Washington, D.C. 20005-5802 Roger Frankel c/o Frankel Wyron LLP 2101 L Street, N.W., Suite 800 Washington, D.C. 20037	10,000,000	(W)	13.0	%
Iridian Asset Management LLC(6) David L. Cohen Harold J. Levy 276 Post Road West Westport, CT 06880-4704	4,774,915		6.2	%
The Vanguard Group, Inc.(7) 100 Vanguard Blvd. Malvern, PA 19355	4,139,329		5.4	%
FMR LLC(8) Edward C. Johnson 3d 245 Summer Street Boston, Massachusetts 02109	4,080,235		5.3	%
H. F. Baldwin	23,223			
	15,000	(T)		
	38,223		*	
R. C. Cambre	10,000		*	
A. E. Festa	150,517			
	600,929	(O)		
	751,446		1.0	%
M. A. Fox	56,651			
	8,942	(T)		
	65,593		*	
J. K. Henry	1,305		*	
J. N. Quinn	1,305		*	

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Name and Address of Beneficial Owner(1)(2)	Shares of Common Stock Beneficially Owned(3)		Percent(4)
C. J. Steffen	11,305		*
M. E. Tomkins	12,000		*
H. La Force III	50,000		
	135,663	(O)	
	185,663		*
G. E. Poling	140,606	(O)	
	18,000	(T)	
	158,606		*
M. A. Shelnitz	53,500		
	114,923	(O)	
	9,421	(T)	
	177,844		*
P. K. Wagoner	62,670	(O)	*
Directors and executive officers as a group (12 persons)	369,806		
	1,054,791	(O)	
	51,363	(T)	
	1,475,960		1.9 %

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* Indicates less than 1%

(W) Shares covered by warrant exercisable in the event a tender offer, or other proposed transaction that would result in a change in control of the Grace, is announced.

(O) Shares covered by stock options exercisable on or within 60 days after January 31, 2014.

(T) Shares owned by trusts and other entities as to which the person has the power to direct voting and/or investment.

(1) The address of each of our directors and executive officers is c/o Secretary, W. R. Grace & Co., 7500 Grace Drive, Columbia, MD 21044.

(2) John F. Akers resigned from the Board of Directors and all committees effective January 17, 2014.

(3) Except as otherwise indicated, to our knowledge, each individual, along with his or her spouse, has sole voting and investment power over the shares.

(4) Based on 77,063,385 shares of Grace common stock outstanding on January 31, 2014.

(5) The ownership information set forth is based in its entirety on material contained in a Schedule 13D filed with the SEC by the WRG Asbestos PI Trust (the “PI Trust”), the Trust Advisory Committee (the “TAC”) and Roger Frankel, the Asbestos PI Future Claimants’ Representative (the “FCR”) on February 11, 2014. The Trust is the holder of a warrant to acquire 10 million shares of Common Stock at an exercise price of $17.00 per share, expiring February 3, 2015 (the “PI Warrant”). Grace has entered into an agreement to settle the PI Warrant in cash on or prior to February 3, 2015. The settlement is terminable by the PI Trust in the event a tender offer, or other proposed transaction that would result in a change in control of Grace, is announced on or prior to February 3, 2015. In such event, the PI Warrant would be settled in shares of Common Stock. The PI Trust is administered through three trustees, Harry Huge, Lewis Sifford and Dean M. Trafelet. The TAC is a four member advisory committee made up of Russell W. Budd, John D. Cooney, Joseph F. Rice and Perry Weitz. The PI Trust (acting through its trustees) has sole investment power over the shares held by the PI Trust. Under its trust agreement, the PI Trust must obtain the consent of the TAC (acting through its members) and the FCR to vote shares held by the PI Trust solely for purposes of electing members of the Grace Board of Directors. For additional information regarding the PI Warrant and the warrant settlement, see disclosure provided in this Report in Item 8 (Financial Statements and Supplementary Data)

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in the Financial Supplement under Note 2 (Joint Plan of Reorganization) to the Consolidated Financial Statements.

(6) The ownership information set forth is based in its entirety on material contained in a Schedule 13G/A filed with the SEC by Iridian Asset Management LLC ("Iridian"), David L. Cohen and Harold J. Levy on February 4, 2014. Iridian is majority owned by Arovid Associates LLC. Arovid is owned and controlled by the following: 12.5% by Mr. Cohen, 12.5% by Mr. Levy, 37.5% by LLMD LLC and 37.5% by ALHERO LLC. LLMD LLC is owned 1% by Mr. Cohen and 99% by a family trust controlled by Mr. Cohen. ALHERO LLC is owned 1% by Mr. Levy and 99% by a family trust controlled by Mr. Levy. Iridian has shared voting and investment power with respect to 4,774,915 shares held in accounts for which it serves as the investment adviser. Messrs. Cohen and Levy may be deemed to possess beneficial ownership of the shares of Common Stock beneficially owned by Iridian by virtue of their indirect controlling ownership of Iridian and having the shared voting and investment power over shares of Common Stock owned by Iridian as joint Chief Investment Officers of Iridian. Messrs. Cohen and Levy disclaim beneficial ownership of such shares.

(7) The ownership information set forth is based in its entirety on material contained in a Schedule 13G filed with the SEC by The Vanguard Group, Inc. ("VGI") on February 12, 2014. VGI has sole voting power over 47,794 shares and sole and shared investment power over 4,096,435 and 42,894 shares, respectively. Vanguard Fiduciary Trust Company, a wholly-owned subsidiary of VGI, is the beneficial owner of 42,894 shares as a result of serving as investment manager of collective trust accounts. Vanguard Investments Australia, Ltd., a wholly-owned subsidiary of VGI, is the beneficial owner of 4,900 shares as a result of its serving as investment manager of Australian investment offerings.

(8) The ownership information set forth is based in its entirety on material contained in a Schedule 13G filed with the SEC jointly by FMR LLC ("FMR") and Edward C. Johnson 3d ("Mr. Johnson") on February 14, 2014. FMR and Mr. Johnson have sole voting power with respect to 27,133 shares and sole investment power with respect to 4,080,235 shares. Mr. Johnson is Chairman of FMR and members of Mr. Johnson's family may be deemed a controlling group with respect to FMR due to their ownership of FMR voting shares and their entry into a voting agreement with respect to such shares. Fidelity Management & Research Company ("Fidelity") 245 Summer Street, Boston MA 02210 and Fidelity SelectCo, LLC ("SelectCo") 1225 17th Street, Suite 1100, Denver, Colorado 80202 are each wholly-owned subsidiaries of FMR. Mr. Johnson and FMR, through its control of Fidelity and SelectCo, respectively, each has sole investment power over 2,866,650 shares and 1,181,370 shares owned by various investment companies for which Fidelity and SelectCo, respectively, serves as investment advisor. Strategic Advisors, Inc. ("SAI") 245 Summer Street, Boston MA 02210, is a wholly-owned subsidiary of FMR. Mr. Johnson and FMR, through its control of SAI, each has beneficial ownership of 1,624 shares owned by accounts managed by SAI. Pyramis Global Advisors, LLC ("PGA"), 900 Salem Street, Smithfield, Rhode Island 02917, is a wholly-owned indirect subsidiary of FMR. Mr. Johnson and FMR, through its control of PGA, each has sole investment power over 440 shares owned by accounts or funds advised by PGATC. Pyramis Global Advisors Trust Company ("PGATC"), 900 Salem Street, Smithfield, Rhode Island 02917, is a wholly-owned indirect subsidiary of FMR. Mr. Johnson and FMR, through its control of PGATC, each has sole investment power over 21,981 shares and sole voting power over 17,291 shares owned by institutional accounts managed by PGATC. Mr. Johnson is Chairman of FIL Limited ("FIL"), Pembroke Hall, 42 Crow Lane, Hamilton, Bermuda, and partnerships controlled predominantly by members of Mr. Johnson's family, or trusts for their benefit, own FIL shares representing between 25% and 50% of the total votes which may be cast by all holders of FIL voting stock. FMR and FIL disclaim that they are acting as a "group" for purposes of Section 13(d) under the Securities Exchange Act of 1934. FIL and various foreign-based subsidiaries provide investment advisory and management services to a number of non-U.S. investment companies and certain institutional investors. FIL is the beneficial owner of 8,170 shares.

EQUITY COMPENSATION PLAN INFORMATION

The following table sets forth information as of December 31, 2013, with respect to our compensation plans under which shares of Grace common stock are authorized for issuance upon the exercise of options, warrants or other rights. The only such compensation plans in effect are stock incentive plans providing for the issuance of stock options, restricted stock and other equity awards.

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Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (#)(2)	Weighted-average exercise price of outstanding options, warrants and rights ($)(2)(3)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities to be issued upon exercise of outstanding options, warrants and rights) (#)(2)
Equity compensation plans approved by security holders (1)	2,998,504	42.59	269,506

(1) The 2000 Stock Incentive Plan was approved by stockholders at an annual meeting of Grace stockholders on May 10, 2000. The 2011 Stock Incentive Plan and the Amended and Restated 2011 Stock Incentive Plan were approved on behalf of Grace stockholders by the Official Committee of Equity Security Holders in the Grace Chapter 11 case and by the U.S. Bankruptcy Court for the District of Delaware on April 8, 2011 and April 16, 2013, respectively.

(2) Under the 2000 Plan, there are 898,467 shares of Grace common stock to be issued upon the exercise of outstanding options, the weighted-average exercise price of outstanding options is $22.68 and no shares of Grace common stock are available for future issuance (excluding shares to be issued upon exercise of outstanding options). Under the 2011 Plan, there are 1,585,983 shares of Grace common stock to be issued upon the exercise of outstanding options, the weighted-average exercise price of outstanding options is $45.28 and no shares of Grace common stock are available for future issuance (excluding shares to be issued upon exercise of outstanding options). Under the Amended 2011 Plan, there are 399,252 shares of Grace common stock to be issued upon the exercise of outstanding options and 114,802 shares to be issued upon completion of the performance period for stock-settled performance-based unit awards (PBUs) (assuming the maximum number of shares are earned in respect of outstanding PBUs), the weighted-average exercise price of outstanding options is $76.70 and 269,506 shares of Grace common stock are available for future issuance (excluding shares to be issued upon exercise of outstanding options and completion of the performance period for PBUs).

(3) The calculation of weighted-average exercise price does not take outstanding PBUs into account.

Item 13. CERTAIN RELATIONSHIPS, RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

BOARD INDEPENDENCE

The Board has determined that all directors, other than Mr. Festa (who is also Chief Executive Officer), but including Mr. Akers (who resigned from the Board and all committees effective January 17, 2014) are independent under New York Stock Exchange rules because none of such directors has any direct or indirect material relationship with Grace or our affiliates, other than through his or her service as a director and as an owner of less than 1% of Grace common stock. In addition to the application of the New York Stock Exchange rules, this determination was based on a number of factors, principal among them were the following:

- none of these directors, nor any member of their immediate families is (or at any time during the last three years was) a Grace executive officer or employee and none of these directors is an employee, and no member of their immediate families is an executive officer of any other entity with whom we do any material amount of business;
- none of these directors or any member of their immediate families has, during the last three years, received more than $50,000 in direct compensation from Grace (other than director and committee fees); and
- none of these directors serve, or within the last three years served, as an executive officer, director, trustee or fiduciary of any charitable organization to which we made any material charitable donation.

Only independent directors serve on our Audit, Nominating and Governance, Compensation and Corporate Responsibility Committees. Mr. Steffen has been appointed Lead Independent Director and, in this capacity, presides at executive sessions of independent directors. Interested parties may communicate with Mr. Steffen by writing him at

the following address: Christopher J. Steffen—Lead Independent Director, c/o W. R. Grace & Co., 7500 Grace Drive, Columbia, Maryland 21044.

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REVIEW, APPROVAL OR RATIFICATION OF TRANSACTIONS WITH RELATED PARTIES

The Board recognizes that transactions involving related persons in which Grace is a participant can present conflicts of interest, or the appearance thereof, so the Board has adopted a written policy as part of the Grace Corporate Governance Guidelines (which are available on our website at www.grace.com/About/Leadership/Governance/) with respect to related person transactions. The policy applies to transactions involving related persons that are required to be disclosed pursuant to SEC regulations, which are generally transactions in which:

- Grace is a participant;
- the amount involved exceeds $120,000; and
- any related person, such as a Grace executive officer, director, director nominee, 5% stockholder or any of their respective family members, has a direct or indirect material interest.

Each such related person transaction shall be reviewed, determined to be in, or not inconsistent with, the best interests of Grace and its stockholders and approved or ratified by:

- the disinterested members of the Audit Committee, if the disinterested members of the Audit Committee constitute a majority of the members of the Audit Committee; or
- the disinterested members of the Board.

In the event a related person transaction is entered into without prior approval and, after review by the Audit Committee or the Board, as the case may be, the transaction is not ratified, we will make all reasonable efforts to cancel the transaction.

Item 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The Audit Committee of the Board of Directors selected PricewaterhouseCoopers LLP, or PwC, to act as our principal independent accountants for 2013. The following table sets forth the fees that we incurred for the services of PwC for the year ended December 31, 2012, and our estimate of the fees that we incurred for the year ended December 31, 2013:

Fee Description	2013*	2012
Audit Fees	$5,200,900	$4,591,900
Audit-Related Fees	92,100	167,600
Tax Fees	195,000	352,500
All Other Fees	44,000	25,900
Total Fees	$5,532,000	$5,137,900

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* For 2013, amounts are current estimates in respect of services received for which final invoices have not been submitted.

Audit Services consisted of the audit of our Consolidated Financial Statements and our internal controls over financial reporting (as required under Section 404 of the Sarbanes-Oxley Act of 2002), the review of our consolidated quarterly financial statements and statutory audits of certain of Grace's non-U.S. subsidiaries and affiliates.

Audit-Related Services primarily consisted of audits of employee benefit plans and review procedures that are not required by statute or regulation and were performed at the request of the Company.

Tax Services consisted of tax advice and compliance for non-U.S. subsidiaries, including preparation of tax returns, and advice and assistance with transfer pricing compliance.

All Other Fees consisted of license fees for access to accounting, tax, and financial reporting literature and non-financial agreed-upon procedures.

The Audit Committee has adopted a preapproval policy that requires the Audit Committee to specifically preapprove the annual engagement of the independent accountants for the audit of our Consolidated Financial Statements and internal controls. The policy also provides for general preapproval of certain audit-related, tax and other services provided by the independent accountants. Any other services must be specifically preapproved by

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the Audit Committee. However, the Chair of the Audit Committee has the authority to preapprove services requiring immediate engagement between scheduled meetings of the Audit Committee. The Chair must report any such preapproval decisions to the full Audit Committee at its next scheduled meeting. During 2013 and 2012, no audit-related, tax, or other services were performed by PwC without specific or general approval as described above.

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PART IV

Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

Financial Statements and Schedules. The required information is set forth in the Financial Supplement under the heading "Table of Contents" which is incorporated herein by reference.

Exhibits. The exhibits to this Report are listed below. Other than exhibits that are filed herewith, all exhibits listed below are incorporated by reference.

In reviewing the agreements included as exhibits to this and other Reports filed by Grace with the Securities and Exchange Commission, please remember they are included to provide you with information regarding their terms and are not intended to provide any other factual or disclosure information about Grace or other parties to the agreements. The agreements generally contain representations and warranties by each of the parties to the applicable agreement. These representations and warranties have been made solely for the benefit of the other parties to the applicable agreement. These representations and warranties:

- are not statements of fact, but rather are used to allocate risk to one of the parties if the statements prove to be inaccurate;
- may have been qualified by disclosures that were made to the other parties in connection with the negotiation of the applicable agreement, which disclosures are not necessarily reflected in the agreement;
- may apply standards of materiality in a way that is different from what may be viewed as material to you or other investors; and
- were made only as of the date of the applicable agreement or such other date or dates as may be specified in the agreement and do not reflect more recent developments.

Accordingly, these representations and warranties may not describe the actual state of affairs as of the date they were made or at any other time. Additional information about Grace may be found elsewhere in this report and Grace's other public filings, which are available without charge through the Securities and Exchange Commission's website at http://www.sec.gov.

Exhibit No.	Exhibit	Location
2.1	Joint Plan of Reorganization of W. R. Grace & Co. and its Debtor Subsidiaries.	Exhibit 2.01 to Form 8-K (filed 2/07/14) SEC File No.: 001-13953
2.2	Order Confirming Joint Plan of Reorganization.	Exhibit 2.02 to Form 8-K (filed 2/07/14) SEC File No.: 001-13953
2.3	Asbestos Insurance Transfer Agreement dated as of February 3, 2014, by and between W. R. Grace & Co., W. R. Grace & Co.-Conn. and the other insurance contributors identified therein and the Asbestos PI Trust.	Exhibit 2.03 to Form 8-K (filed 2/07/14) SEC File No.: 001-13953
2.4	Sale and Purchase Agreement dated October 10, 2013 between The Dow Chemical Company and W. R. Grace & Co.-Conn.	Filed herewith
3.1	Amended and Restated Certificate of Incorporation.	Exhibit 3.01 to Form 8-K (filed 2/07/14) SEC File No.: 001-13953
3.2	Amended and Restated By-laws.	Exhibit 3.02 to Form 8-K (filed 2/07/14) SEC File No.: 001-13953
4.1	Amended and Restated Rights Agreement dated as of March 25, 2008 between W. R. Grace & Co. and Mellon Investor Services LLC, as Rights Agent.	Exhibit 4.1 to Form 10/A (filed 3/25/08) SEC File No.: 001-13953
4.2	Receivables Purchase Agreement dated as of January 23, 2007 between Grace GmbH & Co. KG and Coface Finanz GmbH.	Exhibit 4.10 to Form 10-K (filed 3/02/07) SEC File No.: 001-13953
4.3	Credit Agreement dated as of February 3, 2014 by and among W. R. Grace & Co., W. R. Grace & Co.-Conn., Grace GmbH & Co. KG, a Federal Republic of Germany limited partnership, each lender from	Exhibit 4.01 to Form 8-K (filed 2/07/14) SEC File No.: 001-13953

	time to time party thereto, and Goldman Sachs Bank USA, as Administrative Agent.	
4.4	Deferred Payment Agreement (PI) dated as of February 3, 2014 by and between W. R. Grace & Co.-Conn. and the WRG Asbestos PI Trust.	Exhibit 4.02 to Form 8-K (filed 2/07/14) SEC File No.: 001-13953

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Exhibit No.	Exhibit	Location
4.5	Guarantee Agreement (PI) dated as of February 3, 2014 by and between W. R. Grace & Co. and the WRG Asbestos PI Trust.	Exhibit 4.03 to Form 8-K (filed 2/07/14) SEC File No.: 001-13953
4.6	Deferred Payment Agreement (PD) dated as of February 3, 2014 by and between W. R. Grace & Co.-Conn. and the WRG Asbestos PD Trust.	Exhibit 4.04 to Form 8-K (filed 2/07/14) SEC File No.: 001-13953
4.7	Guarantee Agreement (PD) dated as of February 3, 2014 by and between W. R. Grace & Co. and the WRG Asbestos PD Trust.	Exhibit 4.05 to Form 8-K (filed 2/07/14) SEC File No.: 001-13953
4.8	Deferred Payment Agreement (PD-ZAI) dated as of February 3, 2014 by and between W. R. Grace & Co.-Conn. and the WRG Asbestos PD Trust.	Exhibit 4.06 to Form 8-K (filed 2/07/14) SEC File No.: 001-13953
4.9	Guarantee Agreement (PD-ZAI) dated as of February 3, 2014 by and between W. R. Grace & Co. and the WRG Asbestos PD Trust.	Exhibit 4.07 to Form 8-K (filed 2/07/14) SEC File No.: 001-13953
4.10	Share Issuance Agreement dated as of February 3, 2014 by and among W. R. Grace & Co., the WRG Asbestos PD Trust and the WRG Asbestos PI Trust.	Exhibit 4.08 to Form 8-K (filed 2/07/14) SEC File No.: 001-13953
4.11	Warrant Agreement dated as of February 3, 2014 by and among W. R. Grace & Co., the WRG Asbestos PI Trust and Computershare.	Exhibit 4.09 to Form 8-K (filed 2/07/14) SEC File No.: 001-13953
4.12	[Warrant] Implementation Letter dated as of October 25, 2012 by and between W. R. Grace & Co., the Official Committee of Asbestos Personal Injury Claimants, the Asbestos PI Future Claimants' Representative and the Official Committee of Equity Security Holders.	Exhibit 4.10 to Form 8-K (filed 2/07/14) SEC File No.: 001-13953
4.13	[Warrant] Registration Rights Agreement dated as of February 3, 2014 by and between W. R. Grace & Co. and the WRG Asbestos PI Trust.	Exhibit 4.11 to Form 8-K (filed 2/07/14) SEC File No.: 001-13953
10.1	WRG Asbestos PI Trust Agreement dated as of February 3, 2014 by and between W. R. Grace & Co., the Asbestos PI Future Claimants' Representative, the Official Committee of Asbestos Personal Injury Claimants, the Asbestos PI Trustees, the Wilmington Trust Company, and the members of the Trust Advisory Committee.	Exhibit 10.01 to Form 8-K (filed 2/07/14) SEC File No.: 001-13953
10.2	WRG Asbestos Property Damage Settlement Trust Agreement dated as of February 3, 2014 by and between W. R. Grace & Co., the Asbestos PD Future Claimants' Representative, the Official Committee of Asbestos Property Damage Claimants, the Asbestos PD Trustees, Wilmington Trust Company, and the members of the Zonolite Attic Insulation Trust Advisory Committee.	Exhibit 10.02 to Form 8-K (filed 2/07/14) SEC File No.: 001-13953
10.3	Settlement Agreement dated December 23, 2013 by and between W. R. Grace & Co. and the other debtors named therein and the holders of Grace's pre-petition credit facilities named therein.	Filed herewith
10.4	W. R. Grace & Co. 2000 Stock Incentive Plan, as amended.	Exhibit 10 to Form 10-Q (filed 8/14/00) SEC File No.: 001-13953*
10.5	W. R. Grace & Co. 2011 Stock Incentive Plan.	Exhibit 10.1 to Form 8-K (filed 4/13/11) SEC File No.: 001-13953*
10.6	W. R. Grace & Co. Amended and Restated 2011 Stock Incentive Plan.	Exhibit 10.1 to Form 8-K (filed 5/01/13) SEC File No.:

		001-13953*
10.7	W. R. Grace & Co. 2014 Stock Incentive Plan.	Exhibit 10.03 to Form 8-K (filed 2/07/14) SEC File No.: 001-13953*
10.8	Form of Performance-based Unit Agreement.	Exhibit 10.2 to Form 10-Q (filed 8/02/13) SEC File No.: 001-13953*
10.9	Form of Stock Option Award Agreement.	Exhibit 10.2 to Form 8-K (filed 4/13/11) SEC File No.: 001-13953*
10.10	W. R. Grace & Co. Supplemental Executive Retirement Plan, as amended.	Exhibit 10.7 to Form 10-K (filed 3/28/02) SEC File No.: 001-13953*
10.11	W. R. Grace & Co. Executive Salary Protection Plan, as amended.	Exhibit 10.8 to Form 10-K (filed 3/28/02) SEC File No.: 001-13953*

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Exhibit No.	Exhibit	Location
10.12	Form of Executive Severance Agreement between Grace and certain officers.	Exhibit 10.17 to Form 10-K (filed 3/13/03) SEC File No.: 001-13953*
10.13	Severance Pay Plan for Salaried Employees.	Exhibit 10.17 to Form 10-K (filed 3/02/07) SEC File No.: 001-13953*
10.14	Form of Retention Agreement between Grace and certain officers (includes enhanced severance provision).	Exhibit 10.28 to Form 10-K (filed 4/16/01) SEC File No.: 001-13953*
10.15	Annual Incentive Compensation Program.	Exhibit 10.1 to Form 10-Q (filed 5/3/13) SEC File No.: 001-13953*
10.16	Letter Agreement dated May 27, 2009 between John F. Akers, on behalf of Grace, and Fred Festa (includes enhanced severance provision).	Exhibit 10.1 to Form 8-K (filed 5/29/09) SEC File No.: 001-13953*
10.17	Letter Agreement dated February 28, 2008 between Fred Festa, on behalf of Grace, and Hudson La Force III (includes enhanced severance provision)	Exhibit 10.1 to Form 8-K (filed 3/07/08) SEC File No.: 001-13953*
10.18	Letter Agreement dated June 19, 2009 between Fred Festa, on behalf of Grace, and Pamela Wagoner (includes enhanced severance provision).	Filed herewith*
12	Computation of Ratio of Earnings to Fixed Charges and Combined Fixed Charges and Preferred Stock Dividends.	Filed herewith
18.1	Preferability Letter from PricewaterhouseCoopers LLP	Filed herewith
21	List of Subsidiaries of W. R. Grace & Co.	Filed herewith
23	Consent of Independent Accountants.	Filed herewith
24	Powers of Attorney.	Filed herewith
31.(i).1	Certification of Periodic Report by Chief Executive Officer under Section 302 of the Sarbanes-Oxley Act of 2002	Filed herewith
31.(i).2	Certification of Periodic Report by Chief Financial Officer under Section 302 of the Sarbanes-Oxley Act of 2002	Filed herewith
32	Certification of Periodic Report by Chief Executive Officer and Chief Financial Officer under Section 906 of the Sarbanes-Oxley Act of 2002	Filed herewith
95	Mine Safety Disclosure Exhibit	Filed herewith
101.INS	XBRL Instance Document	Filed herewith
101.SCH	XBRL Taxonomy Extension Schema	Filed herewith
101.CAL	XBRL Taxonomy Extension Calculation Linkbase	Filed herewith
101.DEF	XBRL Taxonomy Extension Definition Linkbase	Filed herewith
101.LAB	XBRL Taxonomy Extension Label Linkbase	Filed herewith
101.PRE	XBRL Taxonomy Extension Presentation Linkbase	Filed herewith

* Management contracts and compensatory plans, contracts or arrangements required to be filed as exhibits to this Report.

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SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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.

W. R. GRACE & CO.

By: /s/ ALFRED E. FESTA
Alfred E. Festa
(Chairman and Chief Executive Officer)

By: /s/ HUDSON LA FORCE III
Hudson La Force III
(Senior Vice President and
Chief Financial Officer)

By: /s/ WILLIAM C. DOCKMAN
William C. Dockman
(Vice President and Controller)

Dated: February 27, 2014

Pursuant to the requirements of the Securities Exchange Act of 1934, this Report has been signed below by the following persons on behalf of the registrant and in the capacities indicated on February 27, 2014.

Signature		Title
H. F. Baldwin*	}	
R. C. Cambre*	}	
M. A. Fox*	}	
J. K. Henry*	}	Directors
J. N. Quinn*	}	
C. J. Steffen*	}	
M. E. Tomkins*	}	

/s/ ALFRED E. FESTA (Alfred E. Festa)	Chairman, Chief Executive Officer and Director (Principal Executive Officer)
/s/ HUDSON LA FORCE III (Hudson La Force III)	Senior Vice President and Chief Financial Officer (Principal Financial Officer)
/s/ WILLIAM C. DOCKMAN (William C. Dockman)	Vice President and Controller (Principal Accounting Officer)

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* By signing his name hereto, Mark A. Shelnitz is signing this document on behalf of each of the persons indicated above pursuant to powers of attorney duly executed by such persons and filed with the Securities and Exchange Commission.

By: /s/ MARK A. SHELNITZ
Mark A. Shelnitz
(Attorney-in-Fact)

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FINANCIAL SUPPLEMENT
W. R. GRACE & CO.
ANNUAL REPORT ON FORM 10-K
FOR THE YEAR ENDED DECEMBER 31, 2013

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SIGNATURES		

The Financial Statement Schedule should be read in conjunction with the Consolidated Financial Statements and Notes thereto. Financial statements of less than majority-owned persons and other persons accounted for by the equity method have been omitted as provided in Rule 3-09 of the United States Securities and Exchange Commission's (SEC) Regulation S-X. Financial Statement Schedules not included have been omitted because they are not applicable or the required information is shown in the Consolidated Financial Statements or Notes thereto.

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Management's Report on Financial Information and Internal Controls

Responsibility For Financial Information—We are responsible for the preparation, accuracy, integrity and objectivity of the Consolidated Financial Statements and the other financial information included in this report. Such information has been prepared in conformity with accounting principles generally accepted in the United States of America and accordingly, includes certain amounts that represent management's best estimates and judgments. Actual amounts could differ from those estimates.

Responsibility For Internal Controls—We and our management are also responsible for establishing and maintaining adequate internal controls over financial reporting. These internal controls consist of policies and procedures that are designed to assess and monitor the effectiveness of the control environment including risk identification, governance structure, delegations of authority, information flow, communications and control activities. A chartered Disclosure Committee oversees Grace's public financial reporting process and key managers are required to confirm their compliance with Grace's policies and internal controls quarterly. While no system of internal controls can ensure elimination of all errors and irregularities, Grace's internal controls, which are reviewed and modified in response to changing conditions, have been designed to provide reasonable assurance that assets are safeguarded, policies and procedures are followed, transactions are properly executed and reported, and appropriate disclosures are made. The concept of reasonable assurance is based on the recognition that there are limitations in all systems of internal control and that the costs of such systems should be balanced with their benefits. The Audit Committee of the Board of Directors, which is composed solely of independent directors, meets regularly with Grace's senior financial management, internal auditors and independent registered public accounting firm to review audit plans and results, as well as the actions taken by management in discharging its responsibilities for accounting, financial reporting and internal controls. The Audit Committee is responsible for the selection and compensation of the independent registered public accounting firm. Grace's financial management, internal auditors and independent registered public accounting firm have direct and confidential access to the Audit Committee at all times.

Report On Internal Control Over Financial Reporting—We and our management have evaluated Grace's internal control over financial reporting as of December 31, 2013. This evaluation was based on criteria for effective internal control over financial reporting set forth in Internal Control—Integrated Framework (1992) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, we and our management have concluded that Grace's internal control over financial reporting is effective as of December 31, 2013. Grace's independent registered public accounting firm that audited our financial statements included in Item 15 has also audited the effectiveness of Grace's internal control over financial reporting as of December 31, 2013, as stated in their report, which appears on the following page.

Report On Disclosure Controls And Procedures—As of December 31, 2013, we and our management carried out an evaluation of the effectiveness of the design and operation of Grace's disclosure controls and procedures pursuant to Rule 13a-15 under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Based upon that evaluation, we concluded that Grace's disclosure controls and procedures are effective in ensuring that information required to be disclosed in Grace's periodic filings and submissions under the Exchange Act is accumulated and communicated to us and our management to allow timely decisions regarding required disclosures, and such information is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms.

/s/ A. E. FESTA

A. E. Festa
Chief Executive Officer

/s/ HUDSON LA FORCE III

Hudson La Force III
Senior Vice President and
Chief Financial Officer

February 27, 2014

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Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors of W. R. Grace & Co.:

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations, of comprehensive income, of equity (deficit), and of cash flows present fairly, in all material respects, the financial position of W. R. Grace & Co. and its subsidiaries (the “Company”) at December 31, 2013 and December 31, 2012, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2013 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2013, based on criteria established in Internal Control - Integrated Framework (1992) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express opinions on these financial statements and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

As discussed in Note 2 to the consolidated financial statements, the Company emerged from bankruptcy on February 3, 2014. As discussed in Note 1 to the consolidated financial statements, the Company changed the manner in which it accounts for defined benefit pension plans in 2013.

A company’s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company’s internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP

McLean, Virginia

February 27, 2014

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Consent of Independent Registered Public Accounting Firm

We hereby consent to the incorporation by reference in the Registration Statements on Forms S 8 (No. 333-173785, 333-37024) of W.R. Grace & Co. of our report dated February 27, 2014 relating to the financial statements, financial statement schedules, and the effectiveness of internal control over financial reporting, which appears in this Form 10 K.

/s/ PricewaterhouseCoopers LLP
PricewaterhouseCoopers LLP
McLean, Virginia
February 27, 2014

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W. R. Grace & Co. and Subsidiaries
Consolidated Statements of Operations

	Year Ended December 31,		
(In millions, except per share amounts)	2013	2012	2011
Net sales	$3,060.7	$3,155.5	$3,211.9
Cost of goods sold	1,918.6	2,041.1	2,099.0
Gross profit	1,142.1	1,114.4	1,112.9
Selling, general and administrative expenses	505.7	635.2	659.9
Research and development expenses	65.2	64.5	68.5
Interest expense and related financing costs	43.8	46.5	43.3
Chapter 11 expenses, net of interest income	15.3	16.6	20.0
Default interest settlement	129.0	—	—
Asbestos and bankruptcy related charges, net	21.9	384.6	—
Equity in earnings of unconsolidated affiliate	(22.9)	(18.5)	(15.2)
Other expense, net	23.5	6.1	29.4
Total costs and expenses	781.5	1,135.0	805.9
Income (loss) before income taxes	360.6	(20.6)	307.0
Benefit from (provision for) income taxes	(102.9)	61.6	(87.9)
Net income	257.7	41.0	219.1
Less: Net loss (income) attributable to noncontrolling interests	(1.6)	(1.0)	0.6
Net income attributable to W. R. Grace & Co. shareholders	$256.1	$40.0	$219.7
Earnings Per Share Attributable to W. R. Grace & Co. Shareholders			
Basic earnings per share:			
Net income attributable to W. R. Grace & Co. shareholders	$3.35	$0.53	$2.99
Weighted average number of basic shares	76.4	74.9	73.6
Diluted earnings per share:			
Net income attributable to W. R. Grace & Co. shareholders	$3.30	$0.52	$2.91
Weighted average number of diluted shares	77.7	76.3	75.5

The Notes to Consolidated Financial Statements are an integral part of these statements.

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W. R. Grace & Co. and Subsidiaries
Consolidated Statements of Comprehensive Income

	Year Ended December 31,		
(In millions)	2013	2012	2011
Net income	$257.7	$41.0	$219.1
Other comprehensive income (loss):			
Defined benefit pension and other postretirement plans, net of income taxes	4.6	2.3	6.2
Currency translation adjustments	(23.6)	5.5	(11.3)
Gain (loss) from hedging activities, net of income taxes	(0.2)	2.4	(2.1)
Gain on securities available for sale	0.1	—	—
Total other comprehensive income (loss) attributable to noncontrolling interests	(0.9)	0.8	1.8
Total other comprehensive income (loss)	(20.0)	11.0	(5.4)
Comprehensive income	237.7	52.0	213.7
Less: comprehensive income attributable to noncontrolling interests	(0.7)	(1.8)	(1.2)
Comprehensive income attributable to W. R. Grace & Co. shareholders	$237.0	$50.2	$212.5

The Notes to Consolidated Financial Statements are an integral part of these statements.

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W. R. Grace & Co. and Subsidiaries
Consolidated Statements of Cash Flows

(In millions)	Year Ended December 31, 2013	2012	2011
OPERATING ACTIVITIES			
Net income	$257.7	$41.0	$219.1
Reconciliation to net cash provided by operating activities:			
Depreciation and amortization	123.1	119.0	120.0
Equity in earnings of unconsolidated affiliate	(22.9)	(18.5)	(15.2)
Chapter 11 expenses, net of interest income	15.3	16.6	20.0
Chapter 11 expenses paid	(15.0)	(15.5)	(20.6)
Asbestos and bankruptcy-related charges, net	21.9	384.6	—
Provision for (benefit from) income taxes	102.9	(61.6)	87.9
Income taxes paid, net of refunds	(60.4)	(82.6)	(44.7)
Excess tax benefits from stock-based compensation	35.4	(36.8)	—
Interest accrued on pre-petition liabilities subject to compromise	38.1	40.4	39.0
Default interest settlement	129.0	—	—
Defined benefit pension (income) expense	(23.2)	149.6	139.9
Payments under defined benefit pension arrangements	(68.3)	(126.8)	(265.1)
Expenditures for environmental remediation	(14.0)	(13.0)	(11.8)
Changes in assets and liabilities, excluding effect of currency translation and businesses acquired:			
Trade accounts receivable	13.5	(3.0)	(80.6)
Inventories	8.6	53.2	(67.9)
Accounts payable	4.2	(11.7)	52.6
All other items, net	(30.0)	18.7	46.8
Net cash provided by operating activities	515.9	453.6	219.4
INVESTING ACTIVITIES			
Capital expenditures	(156.2)	(138.5)	(144.0)
Businesses acquired, net of cash acquired	(526.2)	(80.0)	(55.8)
Transfer to restricted cash and cash equivalents	(197.8)	(61.1)	(38.8)
Proceeds from sales of product lines	1.8	—	10.0
Other investing activities	(2.3)	(0.7)	7.7
Net cash used for investing activities	(880.7)	(280.3)	(220.9)
FINANCING ACTIVITIES			
Borrowings under credit arrangements	49.8	60.7	40.9
Repayments under credit arrangements	(64.5)	(24.8)	(19.3)
Proceeds from exercise of stock options	34.4	32.2	12.1
Excess tax benefits from stock-based compensation	(35.4)	36.8	—
Other financing activities	7.3	5.4	6.0
Net cash (used for) provided by financing activities	(8.4)	110.3	39.7
Effect of currency exchange rate changes on cash and cash equivalents	1.1	5.0	(5.6)
(Decrease) increase in cash and cash equivalents	(372.1)	288.6	32.6
Cash and cash equivalents, beginning of period	1,336.9	1,048.3	1,015.7
Cash and cash equivalents, end of period	$964.8	$1,336.9	$1,048.3

The Notes to Consolidated Financial Statements are an integral part of these statements.

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W. R. Grace & Co. and Subsidiaries
Consolidated Balance Sheets

(In millions, except par value and shares)	December 31, 2013	December 31, 2012
ASSETS		
Current Assets		
Cash and cash equivalents	$964.8	$1,336.9
Restricted cash and cash equivalents	395.4	197.6
Trade accounts receivable, less allowance of $6.0 (2012—$5.2)	469.5	474.8
Accounts receivable—unconsolidated affiliate	12.3	15.6
Inventories	295.3	283.6
Deferred income taxes	58.1	58.3
Other current assets	99.0	78.4
Total Current Assets	2,294.4	2,445.2
Properties and equipment, net of accumulated depreciation and amortization of $1,876.8 (2012—$1,785.1)	829.9	770.5
Goodwill	457.5	196.7
Technology and other intangible assets, net	315.5	82.7
Deferred income taxes	845.9	953.2
Asbestos-related insurance	500.0	500.0
Overfunded defined benefit pension plans	16.7	32.1
Investment in unconsolidated affiliate	96.2	85.5
Other assets	40.0	24.5
Total Assets	$5,396.1	$5,090.4
LIABILITIES AND EQUITY		
Liabilities Not Subject to Compromise		
Current Liabilities		
Debt payable within one year	$76.6	$83.4
Debt payable—unconsolidated affiliate	4.5	3.6
Accounts payable	249.5	249.4
Accounts payable—unconsolidated affiliate	13.0	2.6
Other current liabilities	292.0	307.3
Total Current Liabilities	635.6	646.3
Debt payable after one year	5.3	13.4
Debt payable—unconsolidated affiliate	24.3	22.4
Deferred income taxes	18.2	27.1
Underfunded and unfunded defined benefit pension plans	299.6	396.5
Other liabilities	65.8	45.0
Total Liabilities Not Subject to Compromise	1,048.8	1,150.7
Liabilities Subject to Compromise—Note 2		
Debt plus accrued interest	1,137.8	973.3
Income tax contingencies	76.6	87.6
Asbestos-related contingencies	2,092.4	2,065.0
Environmental contingencies	134.5	140.5
Postretirement benefits	176.3	190.9
Other liabilities and accrued interest	158.5	162.6
Total Liabilities Subject to Compromise	3,776.1	3,619.9
Total Liabilities	4,824.9	4,770.6
Commitments and Contingencies—Note 13		

Equity		
Common stock issued, par value $0.01; 300,000,000 shares authorized; outstanding: 77,046,143 (2012—75,565,409)	0.8	0.8
Paid-in capital	533.4	536.5
Retained earnings (accumulated deficit)	15.8	(240.3)
Treasury stock, at cost: shares: 0 (2012—1,414,351)	—	(16.8)
Accumulated other comprehensive income	10.6	29.7
Total W. R. Grace & Co. Shareholders' Equity	560.6	309.9
Noncontrolling interests	10.6	9.9
Total Equity	571.2	319.8
Total Liabilities and Equity	$5,396.1	$5,090.4

The Notes to Consolidated Financial Statements are an integral part of these statements.

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W. R. Grace & Co. and Subsidiaries
Consolidated Statements of Equity (Deficit)

(In millions)	Common Stock and Paid-in Capital	Retained Earnings (Accumulated Deficit)	Treasury Stock	Accumulated Other Comprehensive Income	Noncontrolling Interests	Total Equity (Deficit)
Balance, December 31, 2010	$456.6	$(500.0)	$(45.9)	$26.7	$ 6.9	$(55.7)
Net income (loss)	—	219.7	—	—	(0.6)	219.1
Stock-based compensation	14.0	—	—	—	—	14.0
Exercise of stock options	3.0	—	9.1	—	—	12.1
Other comprehensive income (loss)	—	—	—	(7.2)	1.8	(5.4)
Balance, December 31, 2011	473.6	(280.3)	(36.8)	19.5	8.1	184.1
Net income	—	40.0	—	—	1.0	41.0
Stock-based compensation	14.7	—	—	—	—	14.7
Exercise of stock options	12.2	—	20.0	—	—	32.2
Tax benefit related to stock plans	36.8	—	—	—	—	36.8
Other comprehensive income	—	—	—	10.2	0.8	11.0
Balance, December 31, 2012	537.3	(240.3)	(16.8)	29.7	9.9	319.8
Net income	—	256.1	—	—	1.6	257.7
Stock-based compensation	13.4	—	—	—	—	13.4
Exercise of stock options	17.6	—	16.8	—	—	34.4
Tax benefit related to stock plans	(35.4)	—	—	—	—	(35.4)
Shares issued	1.3	—	—	—	—	1.3
Other comprehensive loss	—	—	—	(19.1)	(0.9)	(20.0)
Balance, December 31, 2013	$534.2	$15.8	$—	$10.6	$ 10.6	$571.2

The Notes to Consolidated Financial Statements are an integral part of these statements.

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Notes to Consolidated Financial Statements

1. Basis of Presentation and Summary of Significant Accounting and Financial Reporting Policies
W. R. Grace & Co., through its subsidiaries, is engaged in specialty chemicals and specialty materials businesses on a global basis through three operating segments: Grace Catalysts Technologies, which includes catalysts and related products and technologies used in refining, petrochemical and other chemical manufacturing applications; Grace Materials Technologies, which includes packaging technologies and engineered materials used in consumer, industrial, coatings, and pharmaceutical applications; and Grace Construction Products, which includes specialty construction chemicals and specialty building materials used in commercial, infrastructure and residential construction.
W. R. Grace & Co. conducts substantially all of its business through a direct, wholly owned subsidiary, W. R. Grace & Co.-Conn. ("Grace-Conn."). Grace-Conn. owns substantially all of the assets, properties and rights of W. R. Grace & Co. on a consolidated basis, either directly or through subsidiaries.
As used in these notes, the term "Company" refers to W. R. Grace & Co. The term "Grace" refers to the Company and/or one or more of its subsidiaries and, in certain cases, their respective predecessors.
Chapter 11 Proceedings During 2000 and the first quarter of 2001, Grace experienced several adverse developments in its asbestos-related litigation, including: a significant increase in personal injury claims, higher than expected costs to resolve personal injury and certain property damage claims, and class action lawsuits alleging damages from Zonolite® Attic Insulation ("ZAI"), a former Grace attic insulation product.
After a thorough review of these developments, Grace's Board of Directors concluded that a federal court-supervised bankruptcy process provided the best forum available to achieve fairness in resolving these claims and on April 2, 2001 (the "Filing Date"), Grace and 61 of its United States subsidiaries and affiliates filed voluntary petitions for reorganization (the "Filing") under Chapter 11 of the United States Bankruptcy Code in the United States Bankruptcy Court for the District of Delaware (the "Bankruptcy Court").
Under Chapter 11, Grace operated its businesses under court supervision, while using the Chapter 11 process to develop and implement a plan for addressing the asbestos-related claims.
In September 2008, Grace and other parties filed a joint plan of reorganization with the Bankruptcy Court to address all pending and future asbestos-related claims and all other pre-petition claims as outlined therein (as subsequently amended, the "Joint Plan"). Following the confirmation of the Joint Plan in 2011 by the Bankruptcy Court and in 2012 by a U.S. District Court, and the resolution of all appeals, Grace emerged from bankruptcy on February 3, 2014. (See Note 2 for Chapter 11 information.)
Principles of Consolidation The Consolidated Financial Statements include the accounts of Grace and entities as to which Grace exercises control over operating and financial policies. Grace consolidates the activities of variable interest entities in circumstances where management determines that Grace is the primary beneficiary of the variable interest entity. Intercompany transactions and balances are eliminated in consolidation. Investments in affiliated companies in which Grace can significantly influence operating and financial policies are accounted for under the equity method, unless Grace's investment is deemed to be temporary, in which case the investment is accounted for under the cost method.
Noncontrolling Interests in Consolidated Entities Grace conducts certain of its business through joint ventures with unaffiliated third parties. For joint ventures in which Grace has a controlling financial interest, Grace consolidates the results of such joint ventures in the Consolidated Financial Statements. Grace recognizes a liability for cumulative amounts due to the third parties based on the financial results of the joint ventures, and deducts the amount of income attributable to noncontrolling interests in the measurement of its consolidated net income.
Operating Segments Grace reports financial results of each of its operating segments that engage in business activities that generate revenues and expenses, and whose operating results are regularly reviewed by Grace's Chief Executive Officer.
Use of Estimates The preparation of financial statements in conformity with U.S. generally accepted accounting principles (U.S. GAAP) requires management to make estimates and assumptions that affect the reported amount of assets and liabilities and disclosure of contingent assets and liabilities at the date of the Consolidated Financial

Statements, and the reported amounts of revenues and expenses for the periods presented. Actual amounts could differ from those estimates, and the differences could be material. Changes in estimates are

1. Basis of Presentation and Summary of Significant Accounting and Financial Reporting Policies (Continued)

recorded in the period identified. Grace's accounting measurements that are most affected by management's estimates of future events are:

- Contingent liabilities, which depend on an assessment of the probability of loss and an estimate of ultimate resolution cost, such as asbestos-related matters and litigation (see Note 2), income taxes (see Note 10), and environmental remediation (see Note 13);
- Pension and postretirement liabilities that depend on assumptions regarding participant life spans, future inflation, discount rates and total returns on invested funds (see Note 11);
- Realization values of net deferred tax assets, which depend on projections of future taxable income; and
- Recoverability of goodwill, which depends on assumptions used to value reporting units, such as observable market inputs, projections of future cash flows and weighted average cost of capital.

Revenue Recognition   Grace recognizes revenue when all of the following criteria are satisfied: risk of loss and title transfer to the customer; the price is fixed and determinable; persuasive evidence of a sales arrangement exists; and collectability is reasonably assured. Risk of loss and title transfers to customers are based on individual contractual terms which generally specify the point of shipment. Terms of delivery are generally included in customer contracts of sale, order confirmation documents and invoices.

Certain customer arrangements include conditions for volume rebates. Grace accrues a rebate allowance and reduces recorded sales for anticipated selling price adjustments at the time of sale. Grace regularly reviews rebate accruals based on actual and anticipated sales patterns.

Cash Equivalents   Cash equivalents consist of liquid instruments and investments with maturities of three months or less when purchased. The recorded amounts approximate fair value.

Inventories   Inventories are stated at the lower of cost or market. The method used to determine cost is first-in/first-out, or "FIFO." Market values for raw materials are based on current cost and, for other inventory classifications, net realizable value. Inventories are evaluated regularly for salability, and slow moving and/or obsolete items are adjusted to expected salable value. Inventory values include direct and certain indirect costs of materials and production. Abnormal costs of production are expensed as incurred.

Long Lived Assets   Properties and equipment are stated at cost. Depreciation of properties and equipment is generally computed using the straight-line method over the estimated useful life of the asset. Estimated useful lives range from 20 to 40 years for buildings, 3 to 7 years for information technology equipment, 3 to 10 years for operating machinery and equipment, and 5 to 10 years for furniture and fixtures. Interest is capitalized in connection with major project expenditures. Fully depreciated assets are retained in properties and equipment and related accumulated depreciation accounts until they are removed from service. In the case of disposals, assets and related accumulated depreciation are removed from the accounts and the net amount, less any proceeds from disposal, is charged or credited to earnings. Obligations for costs associated with asset retirements, such as requirements to restore a site to its original condition, are accrued at net present value and amortized along with the related asset.

Other intangible assets with finite lives consist of technology, customer lists, trademarks and other intangibles and are amortized over their estimated useful lives, ranging from 1 to 30 years.

Grace reviews long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be fully recoverable. No impairment charge was required in 2013 or 2012; however, there were impairment charges related to certain restructuring activities in 2011 (see Note 14).

Goodwill   Goodwill arises from certain business combinations. Grace reviews its goodwill for impairment on an annual basis at October 31 and whenever events or changes in circumstances indicate that the carrying amount may not be fully recoverable. Recoverability is assessed at the reporting unit level most directly associated with the business combination that generated the goodwill. For the purpose of measuring impairment under the provisions of ASC 350 "Intangibles—Goodwill and Other", Grace has identified its reporting units at one level below its operating segments. Grace has evaluated its goodwill annually with no impairment charge required in any of the periods presented.

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Notes to Consolidated Financial Statements (Continued)

1. Basis of Presentation and Summary of Significant Accounting and Financial Reporting Policies (Continued)

Financial Instruments   Grace uses commodity forward, swap and/or option contracts and currency forward and/or option contracts to manage exposure to fluctuations in commodity prices and currency exchange rates. Grace does not hold or issue derivative financial instruments for trading purposes. Derivative instruments are recorded in the Consolidated Balance Sheets as either assets or liabilities at their fair value. For derivative instruments designated as fair value hedges, changes in the fair values of the derivative instruments closely offset changes in the fair values of the hedged items in "other expense, net" in the Consolidated Statements of Operations. For derivative instruments designated as cash flow hedges, if the derivative instruments qualify for hedge accounting pursuant to ASC 815, the effective portion of any hedge is reported as "accumulated other comprehensive income" in the Consolidated Balance Sheets until it is cleared to earnings during the same period in which the hedged item affects earnings. The ineffective portion of all hedges, and changes in the fair values of derivative instruments that are not designated as hedges, are recorded in current period earnings. Cash flows from derivative instruments are reported in the same category as the cash flows from the items being hedged.

Income Taxes   Deferred tax assets and liabilities are recognized with respect to the expected future tax consequences of events that have been recorded in the Consolidated Financial Statements. If it is more likely than not that all or a portion of deferred tax assets will not be realized, a valuation allowance is provided against such deferred tax assets. The assessment of realization of deferred tax assets is performed based on the weight of the positive and negative evidence available to indicate whether the asset is recoverable, including tax planning strategies that are prudent and feasible.

Grace records a liability for income tax contingencies when it is more likely than not that a tax position it has taken will not be sustained upon audit. Grace evaluates such likelihood based on relevant facts and tax law. Grace adjusts its recorded liability for income tax matters due to changes in circumstances or new uncertainties, such as amendments to existing tax law. Grace's ultimate tax liability depends upon many factors, including negotiations with taxing authorities in the jurisdictions in which it operates, outcomes of tax litigation, and resolution of disputes arising from federal, state, and foreign tax audits. Due to the varying tax laws in each jurisdiction senior management, with the assistance of local tax advisors as necessary, assesses individual matters in each jurisdiction on a case-by-case basis. Grace researches and evaluates its income tax positions, including why it believes they are compliant with income tax regulations, and these positions are documented internally.

Tax benefits from an uncertain tax position are recognized only if it is more likely than not that the tax position will be sustained upon examination by the taxing authorities based on the technical merits of the position. Tax benefits recognized in the financial statements from such a position are measured based on the largest benefit that has a greater than fifty percent likelihood of being realized upon ultimate settlement.

Stock-Based Compensation   The Company recognizes expenses related to stock-based compensation payment transactions in which it receives employee services in exchange for (a) equity instruments of the Company or (b) liabilities that are based on the fair value of the Company’s equity instruments or that may be settled by the issuance of equity instruments. Stock-based compensation cost for restricted stock units (RSUs) and share settled performance based units (PBUs) are measured based on the high/low average of the Company’s common stock on the date of grant. Cash settled performance based units (CSPBU) are remeasured at the end of each reporting period based on the closing fair market value of the Company’s common stock. Stock-based compensation cost for stock options is estimated at the grant date based on each option’s fair value as calculated by the Black-Scholes-Merton ("BSM") option pricing model. The Company recognizes stock-based compensation cost as expense ratably on a straight-line basis over the requisite service period.

Currency Translation   Assets and liabilities of foreign subsidiaries (other than those located in countries with highly inflationary economies) are translated into U.S. dollars at current exchange rates, while revenues, costs and expenses are translated at average exchange rates during each reporting period. The resulting translation adjustments are included in "accumulated other comprehensive loss" in the Consolidated Balance Sheets. The financial statements of any subsidiaries located in countries with highly inflationary economies are remeasured as if the functional currency

were the U.S. dollar; the remeasurement creates translation adjustments that are reflected in net income in the Consolidated Statements of Operations.

On February 8, 2013, the Venezuelan government announced that, effective February 13, 2013, the official exchange rate of the bolivar to U.S. dollar would devalue from 4.3 to 6.3. As a result of this currency devaluation,

1. Basis of Presentation and Summary of Significant Accounting and Financial Reporting Policies (Continued)

Grace incurred a charge to net income of $8.5 million in the 2013 first quarter. Of this amount, $1.6 million is included in segment operating income.
Reclassifications and Revisions Certain amounts in prior years' Consolidated Financial Statements have been reclassified to conform to the current year presentation. Such reclassifications have not materially affected previously reported amounts in the Consolidated Financial Statements.
Certain pension costs previously reported as a separate line item in the Consolidated Statements of Operations are now reported in "cost of goods sold" and in "selling, general and administrative expenses" based upon the functions of the employees to which the pension costs relate. Grace has revised its accounting such that a portion of the defined benefit pension expense has been and will continue to be capitalized into inventories prior to being reported in "cost of goods sold." See "Change in Accounting Principle Regarding Pension Benefits" for further discussion related to the change in pension accounting.
Certain prior period amounts related to borrowings and repayments under credit arrangements reported as financing activities on the Consolidated Statements of Cash Flows have been revised. These amounts were originally presented on a net basis and are now being presented on a gross basis. Grace concluded that these revisions were not material to the prior-year Consolidated Financial Statements.
Change in Accounting Principle Regarding Pension Benefits The Company changed its method of accounting for actuarial gains and losses relating to its global defined benefit pension plans to a more preferable method under U.S. generally accepted accounting principles ("GAAP"). The Company's new method of accounting is referred to as "mark-to-market accounting" and includes immediate recognition of actuarial gains and losses in the period in which they occur. Under the Company's previous accounting method, such amounts were deferred and amortized. In addition, the Company will no longer update the balance sheet funded status of its pension plans each quarter for changes in discount rates and actual returns on assets, but rather will perform such update annually as of the end of each year. Should a significant event occur, the Company's pension obligation and plan assets would be remeasured at an interim period, and the gains or losses on remeasurement would be recognized in that period. This new accounting method was adopted in the 2013 fourth quarter, and retrospectively applied to the Company's financial results for all periods presented.
Under mark-to-market accounting, the Company's pension costs consist of two elements: 1) ongoing costs recognized quarterly, which include service and interest costs, expected returns on plan assets, and amortization of prior service costs/credits; and 2) mark-to-market gains and losses recognized annually in the fourth quarter resulting from changes in actuarial assumptions, such as discount rates and the difference between actual and expected returns on plan assets. Grace believes that the mark-to-market accounting method is preferable as it better aligns the economics of the defined benefit pension plans with their accounting measures, eliminates delays in recognizing gains and losses in operating results, and improves transparency in Grace's operating results by immediately recognizing the effects of economic and interest rate trends on plan investments and assumptions in the year these effects actually occur.
As a result of the retrospective application of the new accounting method, accumulated actuarial losses have been reclassified from "accumulated other comprehensive income" to "retained earnings (accumulated deficit)." In addition, in order to better reflect the nature of pension costs in the Company's operating results, the Company retrospectively revised the classification of defined benefit pension expense. Pension costs previously reported as a separate line item in the Consolidated Statements of Operations are now reported in "cost of goods sold" and in "selling, general and administrative expenses" based upon the functions of the employees to which the pension costs relate. Finally, the Company has revised its accounting such that a portion of the defined benefit pension expense has been and will continue to be capitalized into inventories prior to being reported in "cost of goods sold." The Company believes that the change in classification of defined benefit pension costs and the change to inventory capitalization are not material to all prior periods.
The Company continues to manage its defined benefit pension plans at the corporate level. Accordingly, defined benefit pension expense is excluded from segment operating income. Profitability performance measures for the

business segments are unchanged from amounts previously reported. Mark-to-market adjustments are excluded from the Company's non-GAAP Adjusted EBIT measure.

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Notes to Consolidated Financial Statements (Continued)

1. Basis of Presentation and Summary of Significant Accounting and Financial Reporting Policies (Continued)

These changes have been reported through retrospective application of the new policies to all periods presented. The impacts of all adjustments made to the financial statements are summarized below:
Consolidated Statements of Operations

	Year Ended December 31, 2013		
(In millions, except per share amounts)	Previous Method	As Reported	Effect of Change
Cost of goods sold	$1,925.3	$1,918.6	$(6.7)
Gross profit	1,135.4	1,142.1	6.7
Selling, general and administrative expenses	522.2	505.7	(16.5)
Defined benefit pension expense	73.4	—	(73.4)
Total costs and expenses	871.4	781.5	(89.9)
Income (loss) before income taxes	264.0	360.6	96.6
Provision for income taxes	(72.9)	(102.9)	(30.0)
Net income	191.1	257.7	66.6
Net income attributable to W. R. Grace & Co. shareholders	189.5	256.1	66.6
Basic earnings per share			
Net income attributable to W. R. Grace & Co. shareholders	2.48	3.35	0.87
Diluted earnings per share			
Net income attributable to W. R. Grace & Co. shareholders	2.44	3.30	0.86

	Year Ended December 31, 2012		
(In millions, except per share amounts)	Previously Reported	Revised	Effect of Change
Cost of goods sold	$1,989.2	$2,041.1	$51.9
Gross profit	1,166.3	1,114.4	(51.9)
Selling, general and administrative expenses	537.5	635.2	97.7
Defined benefit pension expense	71.2	—	(71.2)
Total costs and expenses	1,108.5	1,135.0	26.5
Income (loss) before income taxes	57.8	(20.6)	(78.4)
Benefit from income taxes	37.3	61.6	24.3