W R GRACE & CO Form 10-K February 24, 2012

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UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2011

Commission file number 1-13953

W. R. GRACE & CO.

Incorporated under the Laws of the

I.R.S. Employer Identification No.

State of Delaware

65-0773649

7500 Grace Drive, Columbia, Maryland 21044-4098 (410) 531-4000

Securities registered pursuant to Section 12(b) of the Exchange Act:

Title of each class

Name of each exchange on which registered

New York Stock Exchange, Inc.

Common Stock, \$.01 par value Preferred Stock Purchase Rights

Securities registered pursuant to Section 12(g) of the Exchange 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 Exchange 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 and (2) has been subject to such filing requirements for the past 90 days. Yes \circ 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 \acute{y} 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	Smaller reporting company o
		(Do not check if a	
		smaller reporting	
		company)	
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Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange 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, 2011 (the last business day of the registrant's most recently completed second fiscal quarter) based on the closing sale price of \$45.63 as reported on the New York Stock Exchange was \$2,505,113,785.*

At January 31, 2012, 73,939,155 shares of W. R. Grace & Co. Common Stock, \$.01 par value, were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

None.

*

Based on 54,900,587 shares of W. R. Grace & Co. ("Grace") Common Stock, \$.01 par value, held by non-affiliates (73,515,568 shares outstanding as of June 30, 2011 less 18,614,981 shares held by stockholders, whose beneficial ownership exceeds 10% of the outstanding shares of Grace Common Stock, as listed in the Grace 2010 Annual Report on Form 10-K as filed with the SEC on February 25, 2011, directors and named executive officers). Exclusion of shares held by any person should not be construed to indicate that such person possesses the power, direct or indirect, to direct or cause the direction of the management or policies of Grace, or that such person is controlled by or under common control with Grace.

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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.

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 its two operating segments, Grace Davison and Grace Construction Products. 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 originated 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 and, since then, has been subject to the jurisdiction of the United States Bankruptcy Court for the District of Delaware.

On November 30, 2009, we completed the sale of a 5% interest in Advanced Refining Technologies LLC, or ART, to our partner Chevron Products Company. We reduced our 55% interest to 50% to achieve a balanced ownership structure with Chevron. We deconsolidated ART's results from our consolidated financial statements on a prospective basis effective December 1, 2009 and now report ART using the equity method. Previously, we reported 100% of ART's sales and 55% of ART's income, with the remaining 45% of ART's income reported as income attributable to noncontrolling interests.

Our principal executive offices are located at 7500 Grace Drive, Columbia, Maryland 21044, telephone (410) 531-4000. As of December 31, 2011, we had approximately 6,300 global employees.

Grace Davison markets its products to a wide range of industrial customers, including those in the energy and refining industry, consumer, industrial and packaging industries, petrochemical and biochemical industries and the pharmaceutical and life sciences industries. Grace Davison includes the following product groups:

Refining Technologies, which includes:

Fluid Catalytic Cracking, or FCC, catalysts, that help to "crack" the hydrocarbon chain in distilled crude oil to improve yield and quality of 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, and

Hydroprocessing catalysts, most of which are marketed through our ART joint venture, 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;

Materials Technologies which includes:

Engineered Materials, including silica-based and silica-alumina-based materials, used in:

Industrial Applications, such as rubber and tires, precision investment casting, refractory, insulating glass windows, and drying applications, fulfilling various functions such as reinforcement, high temperature binding and moisture scavenging,

Consumer Applications, as a free-flow agent, carrier or processing aid in food and personal care products; as a toothpaste abrasive; and for the processing and stabilization of edible oils and beverages,

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Coatings and Print Media Applications, consisting of functional additives that provide matting effects and corrosion protection for industrial coatings, enable enhanced media and paper quality in ink jet coatings, and act as a functional filler and retention aid in paper,

Packaging Materials, including can and closure sealants used to seal and enhance the shelf life of can and bottle contents, and 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 technologies designed to reduce off-taste effects and extend the shelf-life of packaged products; and

Specialty Technologies, which includes:

Polyolefin Catalysts and Catalyst Supports that are essential components in the manufacture of polyethylene and polypropylene resins, and other chemical catalysts and process technologies used in a variety of industrial, environmental and consumer applications,

Catalysts and Adsorbents for the efficient conversion of renewable feedstocks to fuels and chemicals,

Silica-based Separation Media and complementary purification products including chromatography columns and consumables used in the healthcare, pharmaceutical, life science and related industries, silica excipients used in pharmaceutical formulations and CO₂ adsorbents used in anesthesiology and mine safety applications, and

Instrumentation and reference standards used in the pharmaceutical, life science and related industries.

Grace Davison accounted for 69.1% of our 2011 sales.

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

Additives used in cement processing to improve energy efficiency in manufacturing, enhance the characteristics of finished cement and improve ease of use;

Building Materials used in commercial and residential construction and renovation to protect buildings and civil engineering structures from water, vapor and air penetration; and

Fire Protection Materials used to retard the spread of fire in buildings.

Grace Construction Products accounted for 30.9% of our 2011 sales.

On February 8, 2012, we announced that effective for the 2012 first quarter, we are realigning our business into three operating segments: Grace Catalysts Technologies; Grace Materials Technologies; and Grace Construction Products.

Grace Catalysts Technologies will include catalysts and related technologies used in refining, petrochemical and other chemical manufacturing applications. Revenues for 2011 for this segment were approximately \$1.4 billion. Grace's ART joint venture will be managed in this segment.

Grace Materials Technologies will include engineered materials, coatings and sealants used in industrial, consumer, pharmaceutical and packaging applications. Revenues for 2011 for this segment were approximately \$800 million.

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Grace Construction Products will include specialty construction chemicals and specialty building materials used in commercial, infrastructure and residential construction. Revenues for 2011 for this segment were approximately \$1.0 billion.

Global Scope

We operate our business on a global scale with approximately 71% of our 2011 sales outside the United States. We conduct business in over 40 countries and in more than 30 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. 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 while continuing to enhance manufacturing processes and operations;

expand sales and manufacturing into emerging economies, 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 supply chain management, which include both procurement, materials management and logistics.

CHAPTER 11 FILING

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 in the United States Bankruptcy Court for the District of Delaware. The cases are being jointly administered under case number 01-01139. Our non-U.S. subsidiaries and certain of our U.S. subsidiaries were not included in the bankruptcy filing.

Background of Chapter 11

A bankruptcy filing under Chapter 11 of the United States Bankruptcy Code is generally a voluntary action taken by a debtor to resolve financial problems such as major liabilities. Chapter 11 gives a debtor the chance to restructure its finances so that it may continue to operate, provide its employees with jobs and pay its creditors. Chapter 11 can be used by debtors that are faced with large numbers of product liability lawsuits in multiple jurisdictions to provide a practical way to address the potential liabilities under the supervision of one court. A Chapter 11 filing generally stops all lawsuits against a debtor and prevents creditors from taking action to enforce claims or collect any monies or property that might be owed at the time of filing.

Chapter 11 permits a debtor to define and resolve its liabilities under a court-supervised process generally referred to as a reorganization. Unlike a Chapter 7, or liquidation bankruptcy, which results in the sale or distribution of all of the assets of a business, Chapter 11 reorganization permits a debtor to continue its normal business operations. Existing management may continue to manage

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the debtor's operations during the reorganization. As a debtor-in-possession, a debtor is able to do business with suppliers and customers in a routine manner. Certain other activities, including transactions outside the ordinary course of business, generally require specific approval of the bankruptcy court.

The Chapter 11 process generally ends when a plan of reorganization for the debtor is confirmed by the bankruptcy court and the plan becomes effective following the satisfaction or waiver of any conditions, including the resolution of any appeals. In cases similar to ours with complex asbestos liabilities, debtors have taken several years to complete the Chapter 11 process.

Grace Chapter 11 Filing

We voluntarily entered Chapter 11 to resolve comprehensively the nearly 130,000 asbestos personal injury and property damage claims against us, as well as any future demands which may be asserted. These claims and demands relate to past products and processes that involved asbestos, a mineral formerly used widely for many decades in building and other commercial products. Prior to 2000, we were able to resolve asbestos-related claims through direct negotiations and litigation, paying over \$2 billion in claims and legal costs over a 20-year period. In most of the personal injury lawsuits, we are one of many defendants. In 2000 and the first quarter of 2001, the litigation environment changed with an unexpected 81% increase in personal injury claims filed against us, which we believe was caused by a surge in unmeritorious claims. We also became a defendant in class action lawsuits alleging damages from Zonolite® Attic Insulation, or ZAI, a former attic insulation product. Trends in claims filing and settlement demands showed no sign of returning to historic levels and these unfavorable trends were exacerbated by the bankruptcy filings of several of our co-defendants in asbestos personal injury litigation. These trends greatly increased the risk that we would not be able to resolve our pending and future asbestos-related claims under the state court system.

After a thorough review of these developments, our Board of Directors concluded that a federal court-supervised bankruptcy process provided the best forum available to achieve fairness in resolving these claims and demands. On April 2, 2001, we, along with 61 of our 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, referred to herein as the Bankruptcy Court. Since that time, we have been subject to the jurisdiction of the Bankruptcy Court.

We are currently operating as a debtor-in-possession under court protection from creditors and claimants. We believe that our bankruptcy filing will permit a comprehensive resolution of the claims against us, while preserving the inherent value of our businesses. As a consequence of our bankruptcy filing, litigation against us as of the petition date is generally stayed (subject to certain exceptions in the case of governmental authorities), and no party may take any action to realize its pre-petition claims except pursuant to an order of the Bankruptcy Court. Since our bankruptcy filing, the Bankruptcy Court has approved all motions necessary for us to conduct normal business activities.

Four committees have been appointed in the bankruptcy cases, two representing asbestos claimants, a third representing other unsecured creditors and a fourth representing shareholders. These committees, a legal representative of future asbestos personal injury claimants and a legal representative of future asbestos property damage claimants, have the right to be heard on all matters that come before the Bankruptcy Court and are playing important roles in the bankruptcy cases. We are required to bear certain costs of the committees and of the representatives of future asbestos claimants, including those of their counsel and financial advisors.

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On January 31, 2011, the Bankruptcy Court issued an order confirming Grace's Joint Plan of Reorganization, which we refer to as the Joint Plan. On January 31, 2012, the U.S. District Court for the District of Delaware issued an order affirming the Bankruptcy Court's confirmation order, denying all appeals of the confirmation order and confirming the Joint Plan in its entirety. In order for the Joint Plan to become effective, all conditions for effectiveness set forth in the Joint Plan must be satisfied or waived.

Appeals may be filed in the federal appellate court challenging the District Court order confirming the Joint Plan. Any such appeals may take a significant period of time to resolve and, while they are pending, certain conditions to the effectiveness of the Joint Plan, including for example, substantial payments from third parties resulting from litigation settlements and the availability of the third-party funding that Grace requires to fund the Joint Plan, might not be satisfied. If any such appeals are resolved adversely to Grace and the other Joint Plan proponents, the Joint Plan may not become effective, which could have a material effect on the terms and timing of Grace's emergence from Chapter 11.

See disclosure in this Report in Item 8 (Financial Statements and Supplementary Data) in the Financial Supplement under Note 2 (Chapter 11 Information) and Note 3 (Asbestos-Related Litigation) to the Consolidated Financial Statements for a description of our proposed joint plan of reorganization and a detailed discussion of our Chapter 11 cases and asbestos-related liabilities.

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 or 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:

value-added products 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 Davison Operating Segment

Grace Davison principally applies silica, alumina, zeolite and rubber and latex technology in the design and manufacture of products to create significant value for our diverse customer base. Our customers include major oil refiners, plastics and chemicals manufacturers, producers of rigid food and beverage packaging, coatings manufacturers, consumer product manufacturers and pharmaceutical companies. We believe that our technological expertise provides a competitive advantage, allowing us to quickly design products and materials that help our customers create value in their markets.

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

	20	11		20	10		20	09
		% of			% of			% of
		Grace			Grace			Grace
	Sales	Revenu	le	Sales	Revenue		Sales	Revenue
				(In mi	llions)			
Refining Technologies*	\$ 1,077.5	33.	6% \$	742.0	27.7%	6\$	992.1	35.1%
Materials Technologies	714.4	22.	2%	673.6	25.2%	6	606.0	21.5%
Specialty Technologies	428.0	13.	3%	386.1	14.5%	6	337.3	11.9%
Total Grace Davison Revenue	\$ 2,219.9	69.	1%\$	1,801.7	67.49	6\$	1,935.4	68.5%

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Grace deconsolidated ART's sales as of December 1, 2009 and has reported its share of ART's income using the equity method since that time.

The following table sets forth Grace Davison sales by region as a percentage of Grace Davison total revenue.

		201	11	20	10	20	09
			% of		% of		% of
			Grace		Grace		Grace
			Davison		Davison		Davison
	5	Sales	Revenue	Sales	Revenue	Sales	Revenue
				(In mi	llions)		
North America	\$	635.5	28.7% \$	486.2	27.0% \$	563.1	29.1%
Europe Middle East Africa		978.8	44.1%	791.7	43.9%	802.1	41.4%
Asia Pacific		400.5	18.0%	318.1	17.7%	378.4	19.6%
Latin America		205.1	9.2%	205.7	11.4%	191.8	9.9%
Total Grace Davison			100.000 0		100.000 \$		100.0 %
Revenue*	\$	2,219.9	100.0% \$	5 1,801.7	100.0%\$	1,935.4	100.0%

*

Grace deconsolidated ART's sales as of December 1, 2009 and has reported its share of ART's income using the equity method since that time.

Refining Technologies

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 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 disproportionately greater amount of FCC catalyst. In recent years global economic growth, especially in emerging markets, 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

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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 sweet to heavy 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 NOMUS catalyst product portfolios to enable our customers to increase the efficiency and yield of high-resid feedstock refining.

As a result of volatility in the price of diesel fuel as compared to gasoline, refiners desire the flexibility to adjust the yield of light cycle oil, a component of diesel fuel, from their FCC units. We have designed our MIDAS® 300 catalyst and DieseliseR catalyst products to increase the yield of light cycle oil from refinery FCC units.

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 for these materials. In response, we have developed new products with lower rare earth such as ResidUltra catalyst and launched our REpLaCeR® catalyst product line of no-rare earth FCC catalysts designed to mitigate the higher cost of rare earths without sacrificing performance. Approximately 80 percent of our FCC customers have reformulated to a catalyst containing at least one of these lower rare earth products.

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 XNOx® and CP®P additives are designed to achive reductions in nitrogen oxides emissions comparable to those obtained from capital intensive alternatives available to a refinery.

Global economic growth, especially in emerging economies, 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® 5 additives and our SuRCA® and Neptune catalyst families.

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

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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, ebullating-bed resid hydrocracking and distillate hydrotreating processes.

We also offer a full line of catalysts, customized for individual refiners, used in processing 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.

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

Materials Technologies

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. 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:

Application Industrial	Use Reinforcing agents for rubber and tires	Key Brands 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®, PHONOSORB MTX®, SYLOBEAD®, SYLOSIV®, CRYOSIV®, SAFETYSORB®
	Chemical metal polishing aids and formulations for chemical mechanical planarization/electronics applications	LUDOX®, PoliEdge®
Consumer	Toothpaste abrasives and thickening agents, free-flow agents, anticaking agents, tabletting aids, cosmetic additives and flavor carriers	SYLODENT®, SYLOID® FP, SYLOBLANC®, ELFADENT®, SYLOID®, SYLOSIV®
	Edible oil refining agents, beer stabilizers and clarification aids for beer, juices and other beverages 8	DARACLAR®, TriSyl®

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Application Coatings and Print Media	Use Matting agents, anticorrosion pigments, TiO_2 extenders and moisture scavengers for paints and lacquers	Key Brands 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®
Packaging	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®
	Active packaging including oxygen scavenging closure sealants and moisture scavenging silica sachets, polymeric desiccants and desiccants for bottlestopper applications	Celox®, SYLOSORB®, SAFETYSORB®
	ntegrated into our customers' manufacturing processes and, when combined	
enficiency and performa	nce of their products. By working closely with our customers, we help then	n to respond quickly to the changing ne

Our products 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, active packaging with oxygen or moisture scavenging functionality, 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 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 discovery of new applications, the need for sustainability and rising disposable income in emerging economies. 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 economies.

Our Materials Technologies product group is global. Our major competitors include PQ/INEOS, Evonik, UOP and Altana, all of which market their products on a global basis. Competition is generally based on product performance, technical service and reliability, as well as additional value-added features to address the needs of our customers, end-users and brand owners.

Specialty Technologies

Specialty Catalysts and Process Technologies

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 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 polymer performance, particularly for impact-resistant applications such as automobile bumpers and household appliances.

Our Sylobloc® polymer additives for producers and processors of plastic products prevent layers of polymer film from sticking together, improve dispersment of pigments and ease removal from molds.

Our renewables product line draws upon our expertise in catalysis and separations to develop and provide technologies for purification, drying, and biofeedstock conversion, including our EnSieve® desiccants for ethanol dehydration and EnPure® adsorbents for biodiesel purification. We are also using our catalyst development and manufacturing capabilities to commercialize catalysts that efficiently convert bio-based feedstocks, including sugars, cellulose and natural oils, to fuels and chemicals. Growth in our renewables business is driven by sales into ethanol dehydration and bio-diesel purification applications as a result of government mandates and escalating fuel prices.

Our Davicat® standard and customized catalysts offer a wide range of chemical and physical properties based on our material science technology for supported catalysts and biotechnology applications such as nylon and artificial sweeteners. Our Raney® nickel, cobalt and copper hydrogenation and dehydrogenation catalysts are used for the synthesis of organic compounds for the fibers, pharmaceuticals, plastics, perfumes, soaps, color couplers and petroleum industries.

Our Sylobead® process adsorbents are used in petrochemical and natural gas processes for such applications as ethylene-cracked-gas-drying, natural gas drying and sulfur removal.

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

Koy Drondo

Sodasorb®

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Discovery Sciences

We market chromatography and related purification products, pharmaceutical excipients and CO₂ adsorbents including:

Products

Flash chromatography systems and consumables	Reveleris®, RevealX®, GraceResolv
Analytical scale high performance liquid chromatograph (HPLC) columns and detectors	VisionHT , Vydac®, Alltech®, Alltima
Preparative scale purification products including media, column hardware, and equipment	Davisil®, Vydac®, MODcol®, Spring®, Multipacker®
Pharmaceutical excipients	Syloid® FP

CO₂ adsorbents for anesthesiology and re-breathing applications

² Our 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 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.

Manufacturing

Our Grace Davison products are manufactured by a network of globally coordinated 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.

Marketing and Sales

We use a global organization of technical professionals with extensive experience in refining processes, catalyst development, and catalyst applications to market our Refining Technologies 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 generally sell our hydroprocessing catalysts through multiple-year supply agreements with our geographically diverse customer base.

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 and Discovery Sciences 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, especially with respect to our Discovery Sciences products, by a network of agents and distributors.

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We use a global direct sales force for our other Specialty Technologies products 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 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 Grace Davison 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. 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.

Raw Materials

The principal raw materials for Grace Davison products include caustic soda, alumina, rare earths, nickel, aluminum, cobalt, kaolin, molybdenum, sodium aluminate, sodium silicate, resins, rubber and latexes (including certain food-grade raw materials). 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, we have implemented surcharges on certain FCC catalysts and we have taken other actions to reduce the impact of these higher costs on us and our customers.

As in many chemical businesses, we consume significant quantities of natural gas in the production of Grace Davison 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 economies using raw materials from suppliers in the U.S., Europe and other advanced economies, changes in the values of the currencies of these emerging economies 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

Grace Construction Products, or GCP, produces and sells specialty construction chemicals and specialty building materials. GCP manages its business under a geographic organizational structure that focuses on the following regions:

GCP Americas includes products sold to customers in North, Central and South America;

GCP Europe includes products sold to customers in Eastern and Western Europe, the Middle East, Africa and India; and

GCP Asia Pacific includes products sold to customers in Asia (excluding India and the Middle East), Australia and New Zealand.

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

		20	11		2	2010			20)09	
			% GC				of CP			% G(of ~p
	S	ales	Reve		Sales	-	venue	S	ales	Reve	
					(In n	nillion	is)				
GCP Americas	\$	511.6		51.6% \$	6 448.3	3	51.3%	\$	458.4		51.5%
GCP Europe*		288.3		29.0%	265.5	5	30.4%		296.6		33.3%
GCP Asia Pacific		192.1		19.4%	159.5	5	18.3%		134.6		15.2%
Total GCP Revenue	\$	992.0	1	00.0%\$	8 873.3	3	100.0%	\$	889.6		100.0%

*

Includes the Middle East, Africa and India.

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

		20	11		20)10	2	009
			% of			% of		% of
			Grace			Grace		Grace
	S	Sales	Revenue	5	Sales	Revenue	Sales	Revenue
					(In mi	illions)		
Specialty Construction								
Chemicals	\$	654.5	20.4%	\$	586.8	21.9%	\$ 578.1	20.5%
Specialty Building Materials		337.5	10.5%)	286.5	10.7%	311.5	11.0%
Total GCP Revenue	\$	992.0	30.9%	\$	873.3	32.6%	\$ 889.6	31.5%

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 shows our principal specialty construction chemicals and specialty building materials products:

Products	Uses	Customers	Key Brands
Concrete admixtures	Concrete admixtures and polymeric fibers are used	Ready-mix and precast	ADVA®,
	to reduce the production and in-place costs of	concrete producers,	STRUX®,
	concrete, increase the performance of concrete and	engineers and	PolarSet®,

improve the life cycle cost of the structure.	specifiers	Eclipse®	
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Products Additives for cement processing	Uses Cement additives added to the grinding stage of the cement manufacturing process 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.	Customers Cement manufacturers	Key Brands 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 are 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®
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®
Structural waterproofing, vapor and air barrier systems	Structural waterproofing and air barrier systems prevent water, vapor and/or air infiltration in commercial structures. Products include 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®, Perm-A-Barrier®, Adprufe®, Hydroduct®, Perm-A-Barrier®, Adcor ES, Silcor

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Products Residential building materials	Uses Specialty roofing membranes and flexible flashings for windows, doors, decks and detail areas include fully- adhered roofing underlayments, synthetic underlayments and self-adhered flashing.	Customers Roofing contractors, home builders and remodelers; specialty roofing distributors, lumberyards and home centers; homeowners; architects and specifiers	Key Brands Ice & Water Shield®, Tri-Flex®, Bondera®, Vycor®
Fire protection	Fire protection products are 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®

In view of this 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. 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.

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.

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. We also seek to extend our product portfolio and geographic reach through acquisitions.

In addition to new product introductions, product enhancements and acquisitions, we look for growth opportunities in emerging economies 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 commodity chemical producers, petroleum companies and paper manufacturers. The majority of our raw materials are olefins and organic chemicals. We also make significant

purchases of inorganic materials such as gypsum, as well as specialty materials including specialty films, papers, membranes and fibers. In most instances, these materials are available from multiple sources. Global supply and demand factors, changes in currency valuations, and petroleum prices significantly impacted the price and availability of key raw materials in recent years.

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 in North America and Europe.

FINANCIAL INFORMATION ABOUT INDUSTRY SEGMENTS AND GEOGRAPHIC AREAS

Disclosure of financial information about industry segments and geographic areas for 2011, 2010 and 2009 is provided in this Report in Item 8 (Financial Statements and Supplementary Data) in the Financial Supplement under Note 22 (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).

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 applications to obtain world-wide patents 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 systems or processes that could circumvent our patents or may acquire patent rights applicable to our business.

Research and development expenses were approximately \$70 million, \$60 million and \$70 million in 2011, 2010 and 2009, respectively. 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.

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

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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. During the Chapter 11 proceeding, we generally are not participating in the funding of investigation and remediation at sites that we do not own. We expect that our ultimate liability with respect to many of these sites will be determined as part of the Chapter 11 proceeding.

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 estimated expenditures in 2012 and 2013, 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	Facilit Wa	tion of ies and aste oosal	Car Expen (In mi	ditures	Site Ediation
2009	\$	47	\$	7	\$ 8
2010		48		7	8
2011		58		6	12
2012		61		8	19*
2013		61		9	24*

*

Amounts exclude payments of claims in our Chapter 11 proceeding and 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, 2011, we employed approximately 6,300 persons, of whom approximately 2,700 were employed in the United States. Of our total employees, approximately 3,900 work in Grace Davison facilities, approximately 1,700 work in Grace Construction Products facilities, and approximately 700 are dedicated to corporate activities and/or are shared through globally managed professional groups such as finance, legal services, human resources, information technology, communications, supply chain and environment, health and safety.

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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 1,600 employees.

RISK MANAGEMENT

We have programs in place to address the following significant risks to Grace:

Disasters We have disaster recovery plans in effect at key sites, and we have built a certain amount of redundancy into our production plants where feasible. We also have a formalized risk management program, which includes several types and layers of insurance. We are advised by risk management professionals and brokers who are familiar with recent trends in the insurance markets worldwide. The level of insurance carried, and other related aspects such as deductibles, self-insurance levels and policy terms, are monitored by management on a regular basis.

Environmental We are committed to the health and safety of all employees and to protecting the environment from damage through the use or production of our products. Our Environment, Health and Safety (EH&S) organization is global in scope and is charged with assuring that we live up to our commitments in this important area. The group performs EH&S audits of our facilities and regularly monitors local laws and regulations. Where appropriate, we use outside consultants and experts to augment our in-house staff. We continue to implement our EH&S management system in our facilities worldwide. Our EH&S management system is designed to enable us to apply "best practices" and "continual improvement" principles across our business.

Ethics and Fraud We insist that our employees maintain the highest standards of ethical behavior. We have preventative and investigatory programs in place to maintain these standards, as follows:

We have established online ethics and compliance training programs in several languages.

All U.S. salaried employees and many employees outside the U.S. must sign an annual ethics statement in which they renew their commitment to operate ethically and according to the Grace code of conduct. They must also report any actual or potential conflicts of interest for evaluation by management and, if necessary, remediation.

We have an anonymous third party toll-free telephone line to report fraudulent or unethical behavior. Reports of the calls are relayed to our Chief Ethics Officer, General Counsel and Chief Human Resources Officer. The direct line is available to all employees worldwide where local law allows such a facility. Any allegation of fraud is required to be reported to the Audit Committee of the Board of Directors.

Our Internal Audit Department is independent of management and reports functionally to the Chairman of the Audit Committee of the Board of Directors. The department conducts investigations in collaboration with the Chief Ethics Officer when alleged frauds have accounting, financial reporting or fiscal aspects.

We provide training to personnel in key positions covering topics such as the U.S. Foreign Corrupt Practices Act, competition law, the Sarbanes Oxley Act of 2002, and other laws and regulations relating to ethical or legal matters.

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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.

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, projections or other "forward-looking" information; that is, information related to future, not past, events. Such information generally includes the words "believes," "plans," "intends," "targets," "will," "expects," "anticipates," or similar expressions and includes all statements regarding our Chapter 11 proceeding, expected financial position, 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 of management 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 information to prove incorrect. Factors that could cause actual events to materially differ from those contained in the forward-looking information to prove incorrect. Readers are cautioned not to place undue reliance on our projections and forward-looking information, which speak only as of the date thereof. We undertake no obligation to publicly release any revisions to the projections and forward-looking information, which speak only as of the date thereof. We undertake no obligation to publicly release any revisions to the projections and forward-looking information, which speak only as of the date thereof. To update them to reflect events or circumstances occurring after the date of this



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document. In addition to general economic, business and market conditions, we are subject to other risks and uncertainties, including, without limitation, the following:

COMPANY RISKS

Our proposed joint plan of reorganization, if it becomes effective, may substantially impact the value of currently outstanding shares of Grace common stock.

On January 31, 2012, the United States District Court for the District of Delaware issued an order confirming the Joint Plan. The Joint Plan is designed to address all pending and future asbestos-related claims and all other pre-petition claims as outlined therein. The Joint Plan provides for the issuance to the asbestos personal injury trust of a warrant to purchase 10 million shares of Grace common stock at a price of \$17 per share. If the Joint Plan becomes effective and this warrant is exercised, it will dilute the ownership interests of holders of currently outstanding Grace common stock and may adversely affect the value of such common stock.

If our proposed joint plan of reorganization does not become effective, the outcome of our Chapter 11 cases could result in the substantial dilution or cancellation of Grace's currently outstanding common stock.

Certain parties-in-interest in our Chapter 11 case have objected to several provisions of the Joint Plan. Appeals may be filed in the federal appellate court challenging the District Court order confirming the Joint Plan. If any such appeals are resolved adversely to Grace and the other Joint Plan proponents, the Joint Plan may not become effective. Further, the effectiveness of the Joint Plan is subject to the fulfillment of numerous conditions, which may not ultimately be fulfilled. If the Joint Plan does not become effective, the outcome of our Chapter 11 cases would depend primarily upon the resolution of our asbestos-related and other contingent liabilities. We would likely return to the bankruptcy court estimation trial that was suspended in April 2008. We expect that the estimate resulting from this process would form the basis for a plan of reorganization that would provide for the funding of one or more trusts to which all pending and future asbestos-related claims would be channeled. If the amount of our asbestos-related liabilities, as determined through estimation or otherwise, and other liabilities exceeded the assets available for funding, then we likely would issue shares of Grace common stock to satisfy such liabilities under such plan of reorganization might provide for the interests of current Grace shareholders. Alternatively, such plan of reorganization might provide for the cancellation of the interests of current Grace shareholders. Because of this risk of substantial dilution or cancellation, the value of Grace common stock is highly speculative and any investment in Grace common stock poses a high degree of risk.

Appeals of the order confirming the Joint Plan could materially affect the timing and terms of our emergence from bankruptcy.

Appeals may be filed in the federal appellate court challenging the district court order confirming the Joint Plan. Matters that may be appealed include, without limitation: whether certain creditors are entitled to interest at rates higher than provided for in the Joint Plan; whether the Joint Plan impairs insurers' contractual rights; the validity of the asbestos trust structure called for in the Joint Plan; and the classification and treatment of claims under the Joint Plan. Any such appeals may take a significant period of time to resolve and, while they are pending, certain conditions to the effectiveness of the Joint Plan, including for example, payments pursuant to the Sealed Air Settlement and the Fresenius Settlement and the availability of the third-party funding that Grace requires to fund the Joint Plan, might not be satisfied. If any such appeals are resolved adversely to Grace and the other Joint Plan proponents, the Joint Plan may not become effective, which could have a material effect on the terms and timing of Grace's emergence from Chapter 11.

The bankruptcy process may disrupt our business.

We have attempted to minimize the adverse effect of our Chapter 11 reorganization on our relationships with our employees, suppliers, customers and other parties. Nonetheless, our relationships with our customers, suppliers and employees may be adversely impacted and our operations could be materially and adversely affected. In addition, the continuation of our reorganization could negatively affect our ability to attract new employees and retain existing high performing employees.

Chapter 11 limits the flexibility of our management team in running our business.

While we operate our businesses as debtor-in-possession under supervision by the bankruptcy court, we are required to obtain the approval of the bankruptcy court prior to engaging in activities or transactions outside the ordinary course of business. For example, our strategic plan includes the acquisition of businesses in the specialty chemicals and specialty building materials industries. Such acquisitions generally require bankruptcy court approval if made by W. R. Grace & Co. or its U.S. subsidiaries and affiliates that are debtors in the Chapter 11 cases. Bankruptcy court approval of non-ordinary course activities entails preparation and filing of appropriate motions with the bankruptcy court, negotiation with the various creditors' committees and other parties-in-interest and one or more hearings. The creditors' and shareholders' committees and other parties-in-interest may be heard at any bankruptcy court hearing and may raise objections with respect to these motions. This process delays major transactions and limits our ability to respond quickly to opportunities and events in the marketplace. Furthermore, in the event the bankruptcy court does not approve a proposed activity or transaction, we would be prevented from engaging in activities and transactions that we believe are beneficial to Grace.

Our financial statements do not reflect all terms of the proposed Joint Plan.

Our financial statements include estimates of asbestos-related liabilities that are based on the conditions precedent to the amended plan of reorganization that we filed in 2005, the Prior Plan, rather than the Joint Plan. The Joint Plan may result in substantially different amounts for the asbestos-related liabilities in our financial statements. When we adjust our financial statements based on the Joint Plan or another plan that is filed and/or confirmed, such adjustments could be material to our consolidated financial position and results of operations.

We may not be able to collect all asbestos-related insurance payments that may be due to us.

We have insurance coverage for a portion of the asbestos-related claims against us. We estimate that, assuming an ultimate payout of asbestos-related claims equal to the \$1,700 million of asbestos-related liabilities recorded on our balance sheet, our insurance policies should provide approximately \$500 million of insurance recovery. Under the Joint Plan, these insurance policies would be assigned to the asbestos personal injury trust established under the Joint Plan. However, if the Joint Plan does not become effective, these policies would remain with us unless assigned to creditors under the terms of another plan of reorganization. The estimated recovery of \$500 million pertains only to insurance carriers with which we have asbestos settlement agreements, and/or which are currently solvent and we cannot be sure that all these amounts will be collected. In addition, the timing and amount of future payments depends on the continued solvency of the insurers and the resolution of disputes regarding coverage as well as the nature and timing of actual claims paid. If the Joint Plan does not become effective, the receipt of timely and complete payments from the insurers would be important to the success of our reorganization.



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We are subject to environmental clean-up 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 naturally occurring asbestos. Grace is working in cooperation with EPA to investigate the Libby vermiculite mine and the surrounding bodies of water and forest lands. We do not have sufficient information to estimate the cost of any required remediation of the Libby mine. 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. In late 2011, EPA requested that we conduct additional remediation at seven of these facilities based on revised risk-based criteria developed by EPA. It is probable that EPA will request additional remediation at some 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. Any liability in connection with alleged violations of environmental laws may not be discharged upon confirmation of a plan of reorganization.

We are subject to liabilities with respect to businesses that we have divested in the past.

Over the years, particularly during the 1980s and 1990s, we divested a substantial number of businesses that were not then consistent with our business strategy. With respect to many of these former businesses, we have contractually agreed to indemnify the buyer against liabilities arising prior to the closing of the transaction, including environmental liabilities. In many cases, we have also retained pension liabilities for the current and former employees of these businesses. Some of these obligations would not be discharged under the Joint Plan. We have recorded liabilities with respect to indemnification obligations that we believe are probable and estimable and retained pension liabilities. As we receive additional information or new claims, our recorded liabilities may change materially.

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

We maintain U.S. and non-U.S. defined benefit pension plans covering employees who meet age and service requirements. Our net pension liability and cost is materially affected by the

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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, particularly equity securities, 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, 2011 were approximately \$955 million, or approximately \$216 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.

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 2011 sales outside the United States. We conduct business in over 40 countries and in more than 30 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 significant portion 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:

agreements may be more difficult to enforce and receivables more difficult to collect;

foreign countries may impose additional withholding taxes or adopt other restrictions on foreign trade or investment, including currency exchange controls;

we may have difficulty transferring our profits or capital from foreign operations to other countries where such funds could be more profitably deployed;

foreign governments may nationalize private enterprises;

we may experience unexpected adverse changes in export duties, quotas and tariffs and difficulties in obtaining export licenses;

intellectual property rights may be more difficult to enforce;

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.

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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. Fluctuations in currencies of other countries, especially the euro, 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 non-U.S. currencies, at a constant level of business, our reported non-U.S. 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.

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 contemplated in 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. In order to preserve these future tax deductions, the bankruptcy court has approved trading restrictions on Grace common stock until the effective date of a plan of reorganization. These restrictions prohibit (without the consent of Grace) a person from acquiring more than 4.75% of the outstanding Grace common stock or, for any person already holding more than 4.75%, from increasing such person's holdings. The Joint Plan 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 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.



While Grace is in bankruptcy, we are not permitted to pay dividends on Grace common stock and following emergence from bankruptcy, we are not likely to pay dividends for the foreseeable future.

We are not permitted to pay dividends on Grace common stock while we are in bankruptcy. Following emergence from bankruptcy, we may be subject to covenants in connection with our financing arrangements that limit or prevent us from paying dividends. Furthermore, it is likely that following our emergence from bankruptcy, our board of directors will decide to prioritize the investment of our cash flow in our businesses. For the foreseeable future, investors in Grace common stock, in all likelihood, will obtain an economic benefit from their shares only by selling them.

INDUSTRY RISKS

The length and depth of product and industry business cycles in our segments may result in periods of reduced sales and operating margins, and operating losses.

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. The U.S. residential and global commercial construction industries have experienced a significant downturn in recent years. Additionally, the uncertainty surrounding the euro, the debt crisis, and unrest in the Middle East has significantly affected construction spending in Europe and the Middle East. As a result, we have experienced reduced demand for our specialty construction products and a continuation of this downturn could result in a further reduction of sales and operating margins as well as potential impairments in our Grace Construction Products segment.

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 inputs 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 2010 and 2011, the price of the rare earth metals used in many of our FCC catalysts increased substantially. In response, we took actions designed to mitigate the effect of these higher prices, including surcharges on the affected products, the introduction of new products with low- and no-rare earth content, and other manufacturing and supply chain actions. These actions had a substantial favorable effect on our Grace Davison sales and segment operating income in 2011. In the 2011 third quarter, rare earth prices reached a peak and have since declined significantly. We are again adjusting our pricing, sales, manufacturing, and supply chain strategies to maximize our profitability based on lower rare earth prices. 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.

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 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, 2011, we had approximately 6,300 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. Collective bargaining agreements with unions representing employees at several of our facilities are scheduled to expire during 2012 and we expect that they will require renegotiation. 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.

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 both of our operating segments. We own all of our major manufacturing plants. 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 and foreseeable growth.

Our Grace Davison operating segment operates 40 facilities in the following regions:

	Number		
	of		
Region	Facilities		
North America	14		
Europe Middle East Africa	12		
Asia Pacific	12		
Latin America	2		

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

Our Grace Construction Products operating segment operates 69 facilities in the following regions:

	Number
	of
Region	Facilities
North America	19
Europe Middle East Africa and India	23
Asia Pacific	22
Latin America	5

Our largest GCP facilities are located in Cambridge, Massachusetts and Mount Pleasant, Tennessee. Because our GCP products generally have short shelf lives and must be delivered to numerous job sites, GCP requires a greater number of facilities to service our customers than Grace Davison. Also, these facilities are generally smaller and less capital intensive than our Grace Davison 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 22 (Operating Segment Information) to our Consolidated Financial Statements, which disclosure is incorporated herein by reference.

We also operate a shared services facility in Manila, Philippines.

Item 3. LEGAL PROCEEDINGS

CHAPTER 11 PROCEEDINGS

Disclosure provided in this Report in Item 1 (Business) under the caption "Chapter 11 Filing" 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 "Voluntary Bankruptcy Filing," Note 2 (Chapter 11 Information) and Note 3 (Asbestos-Related Litigation) 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 Information) and Note 3 (Asbestos-Related Litigation) 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.

LITIGATION RELATED TO FORMER PACKAGING AND MEDICAL CARE BUSINESSES

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

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.

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 Information) under the caption "Plans 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.

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 the Financial Supplement, under the heading "Selected Financial Data" opposite the caption "Other Statistics Common shareholders of record," and in this Report in Item 8 (Financial Statements and Supplementary Data) in the Financial Supplement in Note 17 (Shareholders' Equity (Deficit)) and Note 25 (Quarterly Summary and Statistical Information (Unaudited)), opposite the caption "Market price of common stock," to the Consolidated Financial Statements and 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, which will remain outstanding under the proposed Joint Plan, 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.

DIVIDENDS ON GRACE COMMON STOCK

We are not permitted to pay dividends on Grace common stock while we are in bankruptcy and have not done so since the filing of our bankruptcy petitions in 2001. Following emergence from bankruptcy, we may be subject to covenants in connection with our financing arrangements that limit or prevent us from paying dividends. Furthermore, it is likely that following our emergence from bankruptcy, our Board of Directors will decide to prioritize the investment of our cash flow in our businesses.

STOCK TRANSFER RESTRICTIONS

In order to preserve significant tax benefits which are subject to elimination or limitation in the event of a change in control (as defined by the Internal Revenue Code of 1986, as amended) of Grace, the bankruptcy court has approved trading restrictions on Grace common stock until the effective date of a plan of reorganization. These restrictions prohibit (without our consent) a person from acquiring more than 4.75% of the outstanding Grace common stock or, for any person already holding more than 4.75%, from increasing such person's holdings. This summary of the stock transfer restrictions does not purport to be complete and is qualified in its entirety by reference to the order of the bankruptcy court, which has been filed with the SEC.

Also, in order to preserve these tax assets in the event of a change in control (as defined by the Internal Revenue Code of 1986, as amended) of Grace after emergence from Chapter 11, the Joint Plan provides that under certain circumstances, the Board of Directors would have the authority to impose restrictions on the transfer of Grace common stock with respect to certain 5% shareholders. 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.

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 debt obligations, global operations, and our raw materials and energy requirements expose us to various market risks. We use derivative financial instruments to mitigate certain market 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.

Interest Rate Risk

Interest rate fluctuations directly affect interest expense and cash to be paid out in the form of interest payments on variable-rate debt, and can potentially lead to changes in the market value of the associated variable-rate debt.

We have \$500.0 million of outstanding pre-petition variable-rate borrowings under bank credit agreements, and interest is accrued on this debt based on the prime rate. Due to our Chapter 11 filing, interest accrued on pre-petition debt is added to the principal balance. As of December 31, 2011 and 2010, total interest accrued on this debt and added to the \$500.0 million principal was \$407.3 million and \$378.5 million, respectively. If the prime rate were to vary in the near-term by one percentage point, the effect would be to increase or decrease interest expense and accrued interest on outstanding principal by approximately \$9.3 million over the twelve-month period ending December 31, 2012.

We do not currently use derivative instruments to mitigate interest rate risk.

Currency Exchange Rate Risk

Because we do business in over 40 countries, our results of operations are exposed to fluctuations in currency exchange rates. We seek to minimize exposure to these fluctuations 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 \notin 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 forward contracts are aligned with the anticipated payment dates of the intercompany loans, which extend from November 2012 through November 2013. The total amount outstanding under the intercompany loans was \notin 245.6 million as of December 31, 2011 (approximately \$318.3 million). Currency fluctuations on these loans and the related forward contracts are recorded as components of operating results.

The following tables provide information about our significant currency forward exchange agreements as of December 31, 2011 and 2010, 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 2011 Expected Maturity Date							
Currency Forward Exchange Agreements		2012	2	013	г	fotal	_	Fair alue
• • • •			-	010			V	
Contract amount	\$	267.7	\$	72.9	\$	340.6	\$	20.1
Average contractual exchange rate		1.37		1.46		1.39		N/A
		31						

Euro Forward Contracts December 31, 2010 Expected Maturity Date

									F	air
Currency Forward Exchange Agreements	2	2011	2	012	2	013	T	otal	V	alue
Contract amount	\$	201.6	\$	72.6	\$	72.9	\$	347.1	\$	16.2
Average contractual exchange rate		1.37		1.45		1.46		1.41		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 caustic, alumina, rare earths, nickel, aluminum, cobalt carbonate, kaolin, molybdenum, sodium aluminate, sodium silicate, olefins, gypsum, resins, rubber 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, energy and currency.

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 and aluminum prices, we have entered into fixed price swaps to hedge a portion of our U.S. natural gas and 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 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 swaps 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 twelve months.

	Commodity Derivatives December 31, 2011								
		Weig	hted	T	otal				
	Contract	Ave	rage	Cor	ntract	F	air		
Type of Contract	Volumes	Price		Am	ount	Va	alue		
Natural gas swaps	3.1	\$	4.21	\$	13.1	\$	(3.3)		
Aluminum swaps	3.3	\$	1.09	\$	3.6	\$	(0.5)		

	Commodity Derivatives December 31, 2010								
		Weig	hted	Т	otal				
	Contract	Aver	age	Con	tract	F	air		
Type of Contract	Volumes	Price		Am	ount	Va	alue		
Natural gas swaps	2.3	\$	4.80	\$	11.2	\$	(0.8)		
Aluminum swaps	3.2	\$	1.06	\$	3.4	\$	0.2		

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

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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.

See Note 9 for additional disclosure around market risk.

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, 2011 that has materially affected, or is reasonably likely to materially affect, Grace's internal control over financial reporting.

Item 9B. OTHER INFORMATION

None.

PART III

Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Our current directors and executive officers 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. In view of the Chapter 11 filing, the directors are continuing to serve beyond the expiration of their respective terms. Executive officers are elected to serve until their next annual meeting of the Board of Directors or until their respective successors are elected.

		First
Name and Age*	Office	Elected
John F. Akers (77)	Class II Director	05/09/97
H. Furlong Baldwin (80)	Class I Director	01/16/02
Ronald C. Cambre (73)	Class III Director	09/01/98
Alfred E. Festa (52)	Class II Director	09/08/04
	Chairman of the Board	01/01/08
	Chief Executive Officer	06/01/05
Marye Anne Fox (64)	Class I Director	05/10/96
Janice K. Henry (60)	Class I Director	01/18/12
Christopher J. Steffen (70)	Class I Director	11/01/06
Mark E. Tomkins (56)	Class III Director	09/06/06
Thomas A. Vanderslice (80)	Class I Director and Lead Independent Director	05/10/96
D. Andrew Bonham (51)	Vice President & President, Grace Construction Products	09/11/07
Hudson La Force III (47)	Senior Vice President & Chief Financial Officer	04/01/08
Gregory E. Poling (56)	President and Chief Operating Officer	11/03/11
Mark A. Shelnitz (53)	Vice President, General Counsel & Secretary	04/27/05
Pamela K. Wagoner (48)	Vice President & Chief Human Resources Officer	07/13/09

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John J. Murphy resigned from the Board of Directors and all committees effective February 23, 2012.

Mr. Akers served as Chairman of the Board and Chief Executive Officer of International Business Machines Corporation from 1985 until his retirement in 1993. He is a director of Lehman Brothers Holdings, Inc. and was a director of The New York Times Company and PepsiCo, Inc. until 2007. Mr. Akers' brings to the Board his experience as chief executive of a global information technology company and his extensive expertise in corporate leadership, financial management, information technology and global business operations. Mr. Akers also has substantial governance and oversight experience developed as a director of multiple public companies.

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 is Chairman of NASDAQ OMX Group, Inc. He 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. Baldwin also has substantial governance and oversight experience developed as a director of multiple public companies.

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

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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 as President and Chief Operating Officer. He was elected Chief Executive Officer in 2005 and Chairman in January 2008. In November 2011 he stepped down as President. 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 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 has been Chancellor of the University of California San Diego and Distinguished Professor of Chemistry at that institution since 2004. 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 major chemicals and materials manufacturer. She also has significant governance and oversight experience from her service on public and private corporate boards.

Mr. Steffen most recently served as Vice Chairman of Citicorp and its principal subsidiary, Citibank N.A. He is currently a private investor. Mr. Steffen is a director of Accelrys, Inc., Viasystems Group, Inc., and Platinum Underwriters Holdings, Ltd. 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. 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 January 2006. He served as CFO of Vulcan Materials Company from 2001 to

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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 CVR Energy, Inc. and Elevance Renewable Sciences Inc., a privately-held renewable polymer and energy company. He is currently a corporate consultant and private investor. With his background as a Chief Financial Officer of multiple public companies and an auditor, 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.

Mr. Vanderslice served as Chairman and Chief Executive Officer of M/A-COM, Inc., a designer and manufacturer of radio frequency and microwave components, devices and subsystems for commercial and defense applications, from 1989 until 1995. Previously, he served as Chief Executive Officer of Apollo Computer Inc., President and Chief Operating Officer of GTE Corporation and an officer of General Electric Company. He is currently a private investor. Mr. Vanderslice holds a Ph.D. in chemistry and physics from Catholic University. The Board meets in executive session at all Board meetings and, as Lead Independent Director, Mr. Vanderslice presides at all executive sessions of the Board. Mr. Vanderslice brings to the Board his strong chemistry background, knowledge of our products and extensive experience in corporate leadership, management, strategic planning, technology development and marketing developed as a senior executive of several industrial companies and as a director of multiple public companies.

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

Mr. La Force joined Grace in 2008 as Senior Vice President and Chief Financial Officer. Prior to joining Grace, he was Chief Operating Officer and Senior Counselor to the Secretary at the U.S. Department of Education. Prior to entering public service in 2005, Mr. La Force held general management and financial management positions of increasing responsibility at Dell Inc. and AlliedSignal, (now Honeywell). Mr. La Force is a member of the advisory board of Madison Capital Partners, a Chicago-based private equity firm.

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.

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 John F. Akers, H. Furlong Baldwin, Ronald C. Cambre, Marye Anne Fox, Janice K. Henry, Christopher J. Steffen, Mark E. Tomkins and Thomas A. Vanderslice, 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 John F. Akers, H. Furlong Baldwin, Ronald C. Cambre, Marye Anne Fox, Janice K. Henry, Christopher J. Steffen, Mark E. Tomkins and



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Thomas A. Vanderslice, each of whom meets the independence standards of the New York Stock Exchange. Mr. Vanderslice serves as Chair of the Nominating and Governance Committee, Mr. Akers 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 2011.

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 2011. 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

Item 11. EXECUTIVE COMPENSATION

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performing similar functions.

Compensation Discussion and Analysis

2011 Compensation Highlights

2011 Corporate Performance Exceeded Annual Incentive Plan Goals. Our 2011 Annual Incentive Plan targets were based on our 2011 Operating Plan goals. The views of the Grace Compensation Committee as to good versus outstanding Grace financial performance are reflected in the target and maximum performance goals.

		AICP shold		AICP rget		AICP imum		.011 ctual
(In millions)	Perfor	mance	Perfor	mance	Perfo	rmance	Perfo	ormance
Adjusted EBIT*	\$	300	\$	375	\$	506	\$	376.2*
Adjusted Operating Cash Flow*		290		363		490		396.7*

*

As adjusted by the Compensation Committee in the exercise of their discretion as described below under the caption " Annual Incentive Compensation."

Changes in Executive Officer Group. During 2011, Greg Poling, formerly Vice President and President Grace Davison, was promoted to President and Chief Operating Officer. Brian McGowan, formerly Senior Vice President of Administration retired from Grace and Bill Corcoran, formerly Vice President in charge of environment, health and safety, corporate communications and government relations, assumed a reduced role in contemplation of his retirement in 2012.

Elimination of Cash-based Long Term Incentive Plan. In 2011, in order to better align the interests of our executives with those of our shareholders and market practice, the Compensation

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Committee eliminated the cash component of our long-term incentive compensation and issued only stock options.

Executive Summary

The Board of Directors established our 2011 incentive compensation targets on February 24, 2011 after considering its objectives for the company and the general economic environment in which we expected to be operating during the year. As in 2010, the Board of Directors focused on the dual objectives of generating cash, to provide capital for growth and to implement the provisions of the Joint Plan, and growing earnings to reflect the improving economic environment, the business opportunities we have and the investments we have made.

The Compensation Committee established objective annual incentive targets based on the performance targets in our 2011 operating plans. The Compensation Committee evaluated the difficulty of achieving the performance targets in light of uncertainties in the general economy and the chemicals industry and ongoing weakness in our construction products business, and concluded that achievement of such targets would constitute good to outstanding Grace financial performance.

The Compensation Committee gave equal weight to cash and earnings performance measures for our annual incentive program. The Compensation Committee continued with the metrics used in 2010 of Adjusted EBIT and Adjusted Operating Cash Flow (as such terms are described in this Report in Item 7 (Management's Discussion and Analysis of Financial Condition and Results of Operations) in the Financial Supplement) to be consistent with our publicly reported performance measures. These metrics ensure the continuing alignment of the economic interests of our executives with our annual operating plans and the interests of our stakeholders. The actual amount of the 2011 Annual Incentive Compensation Program incentive pool, based on these metrics, was 114% of the targeted amount.

In 2001, after our Chapter 11 filing, the Compensation Committee discontinued the use of equity-based compensation that had been a traditional element of our long-term incentive programs and granted solely cash-based awards. In April 2008, due to developments in our Chapter 11 cases, the Compensation Committee decided to once again grant equity-based incentive compensation as part of our long-term incentives. In 2011, the Compensation Committee eliminated the cash component of our long-term incentive compensation and issued only stock options reflecting the Compensation Committee's desire to better align the interests of our executives with those of our shareholders and market practice.

Overview

The Board of Directors has designated six of our officers (including the five executive officers named in the Summary Compensation Table) as executive officers. The executive officers include the Chief Executive Officer (CEO), Chief Financial Officer and vice presidents in charge of operating segments or principal functions or who have policy-making authority. The Board of Directors has delegated authority for approving and administering the compensation program 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 2011, the committee used the services of Towers Watson, a human resources consulting firm and we expect the committee to continue working with Towers Watson during 2012. During 2010, 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. The committee also asked Towers Watson to provide suggestions and alternatives regarding the form of various elements of executive compensation. The committee expects Towers Watson and our executive officers, including our CEO, General Counsel and 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. During 2011, Towers Watson provided consulting services to management in connection with our employee benefit plans.

Compensation Elements

The following table outlines the major elements of compensation in 2011 for the executive officers named in the Summary Compensation Table:

Compensation Element	Definition	Rationale
Base Salary	Fixed cash compensation paid twice monthly	Payment for completion of day-to-day responsibilities
Annual Incentive Compensation Program	Variable cash compensation earned by annual personal performance and our achievement of pre-established corporate and business unit annual performance goals	Builds accountability for our annual goals and individual executives
Long-Term Incentive Compensation Program (Cash-Based)*	Variable, cash compensation that is earned when pre-established three-year financial goals are achieved	Builds accountability for achieving sustained financial results Forfeiture provisions encourage
Long-Term Incentive Compensation Program (Equity-Based)	Equity compensation with staggered vesting that increases in value with increases in share price	retention Aligns long-term interests of executive officers and shareholders Forfeiture provisions encourage retention
U. S. Defined Contribution Retirement Plans	Savings and Investment (S&I) Plan (401(k)) Standard tax-qualified defined contribution retirement benefit subject to limitations on compensation and benefits under the Internal Revenue Code S&I Plan Replacement Payment	Provides U.S. employees with opportunity to save for retirement on tax-advantaged basis with matched contributions from Grace Highly-paid U.S. employees made
	Program (nonqualified)	eligible for the same level of Grace match as all other participants in the Plan notwithstanding Internal Revenue Code limitations
U. S. Defined Benefit Retirement Plans	Qualified 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 Restores benefits that are limited by the Internal Revenue Code in the qualified plan for most highly-paid U.S. employees	Highly-paid U.S. employees made eligible for the same benefit formula as all other participants in the Plan notwithstanding Internal Revenue Code limitations

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Executive Compensation Philosophy and Objectives

General

The key objective of the Grace executive compensation program is to help achieve the business objectives of the Board of Directors by enabling 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

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stakeholders (including creditors, security holders and others with an interest in the Chapter 11 proceedings as required by the Bankruptcy Code). 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 programs 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 committee's assessment of an executive officer's leadership, technical skill, management and operational performance, and potential to contribute to our future success. In making this assessment, the committee relies upon its intimate familiarity with each executive officer and his or her performance that has resulted from each executive officer's attendance and regular presentations at board meetings. In addition, since the number of executive officers is small, the committee is able to spend considerable time with most of them outside committee meetings. In evaluating executive officers other than the CEO, the committee receives substantial input from the CEO. The CEO proposes compensation levels for the other executive officers and, although not a member of the committee, attends committee meetings and participates in committee deliberations regarding compensation levels for the other executive officers. The CEO is excused from deliberations regarding his own compensation and from the "executive 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, and most recently during 2010, 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 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 2011 compensation, the peer group consisted of:

Albemarle Cabot Celanese Cytec Industries EcoLab Ferro FMC Georgia Gulf International Flavors & Fragrances Lubrizol* Nalco Olin OM Group PolyOne Rockwood Holdings RPM International A. Schulman Sigma-Aldrich Solutia TPC Group Valspar Westlake

*

Lubrizol is no longer a stand-alone company so it will be dropped from the peer group.

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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 adjusted, in each case, to reflect our sales. These data are used as a secondary reference for executive officer compensation, largely as a check on the compensation peer group 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. Although these factors apply to Mr. Festa, his compensation is also subject to the terms of his employment agreement. Grace executives are generally eligible for annual compensation reviews.

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 subject to the terms of his employment agreement. 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 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

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view is consistent with the practices of the compensation peer group companies and the broad industry data that it has reviewed.

Chief Operating Officer

On November 3, 2011, Greg Poling, then Vice President and President Grace Davison, was promoted to President and Chief Operating Officer. In connection with his promotion, the committee applied the process described above under the caption "Executive Compensation Philosophy and Objectives General" to determine Mr. Poling's compensation in his new position.

Base Salary

In 2011, the committee did not implement a general salary increase for executive officers named in the Summary Compensation Table, referred to herein as named executive officers. Following an industry and peer company review of executive compensation conducted by Towers Watson during 2010, the committee approved 2010 annual base salary increases for our executive officers that were effective for executive officers other than Mr. Festa in October 2010. Mr. Festa's increase was effective March 1, 2011. As a result of his promotion to President and Chief Operating Officer, Mr. Poling's annual base salary was increased effective November 1, 2011.

Named Executive Officer	ŀ	se Salary Rate as 2/31/2010	Base Salary Rate as of 12/31/2011	Percentage Increase in Base Salary Rate
A. E. Festa	\$	936,000	\$ 975,00	0 4.2%
H. La Force III		430,000	430,00	0 -0-
G. E. Poling		450,000	550,00	0 22.2%
D. A. Bonham		410,000	410,00	0 -0-
M. A. Shelnitz		375,000	375,00	-0-
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Annual Incentive Compensation

The Annual Incentive Compensation Program, or AICP, is a cash-based pay-for-performance incentive program. 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 any changes the committee makes in the exercise of its discretion; and

the individual's personal performance.

Following an industry and peer company review of executive compensation conducted by Towers Watson during 2010, the committee approved AICP target increases for certain of our



executive officers. Mr. Festa elected not to accept an increase in his AICP target. The AICP target increases were effective January 1, 2011 as follows:

	AICP Target as Percent of Base Salary Actually Paid	AICP Target as Percent of Base Salary Actua Paid	
Named Executive Officer	During 2010	During 2011	
A. E. Festa	100%	_	100%
H. La Force III	75%		80%
G. E. Poling	80%		80%*
D. A. Bonham	75%		80%
M. A. Shelnitz	65%		70%

*

In connection with his promotion to President and Chief Operating Officer Mr. Poling's AICP Target was increased to 90% of base salary effective November 1, 2011.

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.

To support the Board of Directors' dual objectives of generating cash and growing earnings, the funding level of the 2011 AICP is based equally on cash generation and earnings growth. The committee believes that for 2011, Adjusted EBIT and Adjusted Operating Cash Flow, (calculated in each case as described in this Report in Item 7 (Management's Discussion and Analysis of Financial Condition and Results of Operations) in the Financial Supplement) are the best indicators of the performance of our business in growing earnings and generating cash, respectively.

The target AICP incentive pool is the sum of the target awards of all participants in the AICP. The actual funded amount is determined by our actual performance. For 2011, 50% of the available AICP incentive pool was established based on our performance in respect of Adjusted EBIT and 50% on performance in respect of Adjusted Operating Cash Flow. We refer to the related targets as the Adjusted EBIT Target and the Adjusted Operating Cash Flow Target, respectively. With respect to each performance measure:

if our actual performance equals the target amount, the AICP incentive pool in respect of that performance measure (50% of the available incentive pool) would be funded at 100%;

if our actual performance equals 80% of the target amount, the AICP incentive pool in respect of that performance measure (50% of the available incentive pool) would be funded at 25%;

if our actual performance was less than 80% of the target amount, the AICP incentive pool in respect of that performance measure (50% of the available incentive pool) would not be funded; and

if our actual performance equals or exceeds 135% of the target amount, the AICP incentive pool in respect of that performance measure (50% of the available incentive pool) would be funded at 200%.

The committee determined the 2011 AICP performance targets based on the targets in our 2011 operating plan. The committee evaluated the difficulty of achieving the performance targets in light of continued uncertainties in the general economy and the chemicals industry and continued weakness in our construction products business, and concluded that achievement of such targets would constitute good to outstanding Grace financial performance.

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2011 AICP Targets

Adjusted EBIT	Adjusted Operating Cash Flow	Portion of 50% of Available Incentive Pool funded in
(in millions)	(in millions)	respect of Target
Less than \$300	Less than \$290	0%
300	290	25%
375	363	100%
506	490	200%
2011 Adjusted Performance Measures		

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

For 2011, the committee decreased the calculation of Adjusted EBIT and Adjusted Operating Cash Flow for use in the AICP calculation by eliminating the benefit resulting from material items that were not considered at the time the AICP targets were established. These items included lower pension expense resulting from the \$180 million accelerated pension contribution in March 2011, and higher income and cash flow resulting from the improved sales and gross profits in the catalysts business.

The adjustments made by the committee for purposes of calculating the AICP pool are set forth in the table below.

	2011			2011
	Ad	ljusted	sted Operating	
(In millions)	I	EBIT	1 0	
Initial 2011 AICP Performance Measures*	\$	478.6	\$	416.7
Discretionary Adjustment by Compensation Committee		(102.4)		(20.0)
2011 AICP-Adjusted Performance Measures	\$	376.2	\$	396.7

*

Calculated as described in this Report in Item 7 (Management's Discussion and Analysis of Financial Condition and Results of Operations) in the Financial Supplement.

The actual amount of the 2011 AICP incentive pool established in respect of the Adjusted EBIT Target (50% of the available incentive pool) and Adjusted Operating Cash Flow Target (50% of the available incentive pool) was determined solely by applying linear interpolation between the related target amounts specified above in the 2011 AICP Targets table. The total AICP incentive pool established is the sum of these two amounts. As shown in the table below, the calculated funding amount for 2011 was 114% of the aggregate target amounts of the participants.

2011 AICP Funding

2011 AICP-Adjusted EBIT (in millions)	\$ 376.2
Interpolated Portion of 50% of AICP Incentive Pool funded in respect of Adjusted EBIT Target	101%
2011 AICP-Adjusted Operating Cash Flow (in millions)	\$ 396.7
Interpolated Portion of 50% of AICP Incentive Pool funded in respect of Adjusted Operating Cash Flow Target	127%
Total Portion of Target AICP Incentive Pool funded	114%

The committee has the discretion under the terms of the 2011 AICP to increase or decrease the amount of the actual 2011 AICP payments to each executive officer from the amount generally applicable to the AICP incentive pool of 114% of target award. The committee exercised this discretion to adjust the 2011 AICP payments to each executive officer as follows:

	AICP			AICP Payment as	
	Payment at	Individual Discretionary		Percentage of	
	114% of	AICP	AICP	AICP	
Name	Target	Adjustment	Payment	Target	Basis for Committee Discretion
A. E. Festa	\$1,104,090	\$ 245,910	\$ 1,350,000	139.4%	⁶ Mr. Festa's award reflects his leadership of Grace with respect to Grace's overall growth as well as the committee's recognition of his ongoing management of, and Grace's significant progress in, the Chapter 11 cases.
H. La Force III	392,160	42,840	435,000	126.5%	Mr. La Force's award reflects his successful implementation of our investor relations re-engagement strategy and his overall financial management performance.
G. E. Poling	436,050	163,950	600,000	156.9%	Mr. Poling's award reflects the performance of 6 Grace Davison, his ongoing outstanding performance that led to his promotion to President and Chief Operating Officer and his strategic oversight of Grace's overall business both before and after his promotion.
D. A. Bonham	373,920	1,080	375,000	114.3%	Mr. Bonham's award is generally consistent with b the payment amount applicable to the overall incentive pool.
M. A. Shelnitz	299,250	750	300,000	114.3%	Mr. Shelnitz's award is generally consistent with the payment amount applicable to the overall incentive pool.

Although the committee exercised its discretion on the basis of the factors set forth in the table above, the committee made no attempt to apply quantitative criteria to each factor to determine the specific amount payable to each executive officer. The committee has determined that specific objectives for the executive officers that are directly linked to compensation amounts are unnecessary because the members of the committee have close contact with each executive officer and they are intimately familiar with his or her performance throughout each performance year. Accordingly, the committee exercised its discretion on the basis of the collective judgment of its members regarding each executive officer's performance.

Long-Term Incentive Compensation (Stock Options)

Our Long-Term Incentive Plans, or LTIPs, are designed to motivate and reward approximately 165 of our eligible upper-level employees, including our named executive officers, for their

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contributions to our performance over a multi-year period and align their financial interests with those of our stakeholders by making a significant portion of their total compensation variable and dependent upon our sustained financial performance. In 2011, awards consisted only of stock options reflecting the committee's desire to better align the interests of our executives with those of our shareholders and market practice.

The committee believes that the LTIP awards encourage executive retention because the right to any unvested or unexercised option is generally subject to forfeiture if the employee terminates employment voluntarily (other than due to retirement) or is terminated for cause.

In determining the value of stock option awards, the committee considered an analysis of stock option value based on an adjusted Black-Scholes option pricing model with their independent consultant, Towers Watson. The committee approved the stock option grants included in the 2011 LTIP on May 5, 2011 after approval of the 2011 LTIP by the Bankruptcy Court on April 8, 2011. The exercise price of the options was \$42.255, which was the average of the high and low trading prices of Grace common stock on the New York Stock Exchange on May 5, 2011. The term of the options is five years and they vest over three years in substantially equal annual installments commencing the year after the date of grant.

In connection with his promotion to President and Chief Operating Officer, on November 3, 2011, the committee awarded Mr. Poling 10,000 stock options. The exercise price of the options was \$41.250, which was the average of the high and low trading prices of Grace common stock on the New York Stock Exchange on November 3, 2011. The term of the options is five years and they vest over three years in substantially equal annual installments commencing the year after the date of grant.

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 2011, federal income tax law limits to \$245,000 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 75 upper level employees, including the executive officers, whose annual compensation exceeds that amount, under which 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 Program

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 substantial company match that increases (in dollar amount, not percentage of compensation) with the level of participation in the plan and increases in the employee's annual compensation is an effective recruiting and retention tool for our employees, including our executive officers. For 2011, federal income tax law limits the total contributions, which include an employee's contribution plus the employer's matching contributions, that can be made to an employee's 401(k) plan account to \$49,000 and qualifying annual compensation for 401(k) plan purposes to \$245,000. As a result, the committee has implemented an S&I Plan Replacement Payment Program that currently applies to approximately 60 of our employees, including our executive officers, whose annual compensation exceeds \$245,000, under which 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. Mr. Festa has access to corporate 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 agreements with each of the named executive officers, other than Mr. Festa, whose severance arrangements are included in his employment agreement, and Mr. Bonham, whose severance arrangements were established by committee approval. 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. Certain terms of these agreements 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.

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Employment Agreements

We have entered into an employment agreement with Mr. Festa pursuant to which he serves as our CEO. Certain terms of this employment agreement are described below under the Summary Compensation Table and Potential Payments Upon Termination or Change-In-Control Table. This agreement was approved by the Bankruptcy Court and was designed to encourage Mr. Festa to continue as our CEO, remain with Grace and work diligently in pursuit of corporate objectives. Mr. Festa's employment agreement includes a minimum salary and AICP target that were negotiated with Mr. Festa and are based on his business experience, his past performance as our CEO and a competitive analysis of the base salary and annual bonus paid to CEOs at the compensation peer group companies. The agreement also provides for severance payments that are designed to encourage and reinforce Mr. Festa's continued attention and dedication to his assigned duties without undue concern regarding his job security.

We have also entered into an employment agreement with Mr. La Force pursuant to which he serves as our CFO. Certain terms of this employment agreement are described below under the Summary Compensation Table and Potential Payments Upon Termination or Change-In-Control Table. This agreement provides for salary and AICP and LTIP targets and provisions regarding severance payments. This agreement was negotiated on an arms-length basis prior to the time Mr. La Force joined Grace. The payments required by this agreement were designed to encourage Mr. La Force to join and remain with Grace in lieu of other employment opportunities available to him.

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 programs. The AICP and LTIPs are structured with the intention that the compensation payable thereunder, with the exception of any discretionary AICP payments or other non-performance based payments, will qualify as deductible "performance-based" compensation. While the committee believes that it is important to preserve the ability to structure compensation programs 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 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 2011 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 John F. Akers, Chair H. Furlong Baldwin Ronald C. Cambre Marye Anne Fox Janice K. Henry Christopher J. Steffen Mark E. Tomkins Thomas A. Vanderslice

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, 2011, determined by reference to the total compensation earned by such individuals for 2011 (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		Salary H			Option Awards(a)	Non-E Incentiv Comper (\$	ve Plan nsation	Change in Pension Value and Nonqualified Deferred Compensation Earning (Co)		(d)Total
Position	Year	•	(\$)	(\$)		AICP	LTIP(b)	(\$)	(\$)	
A. E. Festa	2011	(\$) 968,500	(ъ) -0-	(\$) -0-	(\$) 4,087,685	1,350,000	. ,		(\$)	(\$) 9,365,995
Chairman & Chief		936,000	-0-	-0-	2,660,000	1,110,000	2,156,005		·	5,647,222
Executive										
Officer	2009	936,000	-0-	-0-	1,114,838	1,370,000	1,751,967	377,000	160,219	5,710,024
H. La Force III Senior Vice	2011	430,000	-0-	-0-	773,333	435,000	352,001	119,000	50,700	2,160,034
President & Chief Financial	2010	415,000	-0-	-0-	549,733	400,000	75,002	82,000	54,300	1,576,035
Officer	2009	410,000	-0-	-0-	174,207	475,000	336,855	62,000	39,000	1,497,062
G. E. Poling	2007	466,667	-0-	-0-	1,073,933	600,000	482,502		61,900	3,702,002
President & Chief Operating	2010	442,500	-0-	-0-	678,305	550,000	100,502	733,000	63,450	2,567,757
Officer	2009	440,000	-0-	-0-	243,870	600,000	673,833	600,000	43,800	2,601,503
D. A. Bonham Vice	2011	410,000	-0-	-0-	773,333	375,000	384,001	205,000	58,427	2,205,761
President & President	2010	402,500	-0-	-0-	576,333	300,000	78,002	129,000	53,550	1,539,385
Grace Construction Products	2009	392,292	-0-	-0-	191,614	475,000	518,333	74,000	418,902	2,070,141
M. A. Shelnitz Vice	2011	375,000	-0-	-0-	541,333	300,000	280,001	522,000	39,000	2,057,334
President, Secretary &	2010	363,750	-0-	-0-	425,600	260,000	53,251	369,000	42,825	1,514,426
General Counsel	2009	360,000	-0-	-0-	139,359	335,000	336,917	341,000	33,900	1,546,176

Amount represents the grant date fair value of options computed in accordance with ASC 718. The assumptions used to calculate the compensation expense reported for 2011 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 2011 amount consists of the following payments that we expect to make in March 2012 pursuant to the 2009-2011 and 2010-2012 Long-Term Incentive Programs, or LTIPs, as follows:

	Final Payment 2009-2011 LTIP	Initial Payment 2010-2012 LTIP	Total
Name	(\$)	(\$)	(\$)
A. E. Festa	1,855,990	300,015	2,156,005
H. La Force III	289,998	62,003	352,001
G. E. Poling	405,998	76,504	482,502
D. A. Bonham	318,998	65,003	384,001
M. A. Shelnitz	231,999	48,002	280,001

(c)

The 2011 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, 2010 to December 31, 2011, assuming a 4.50% 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:

	Change in Pension Plan	Change In SERP Value	Total Change in Pension Value
Name	Value (\$)	(\$)	(\$)
A. E. Festa	65,000	581,000	646,000
H. La Force III	35,000	84,000	119,000
G. E. Poling	210,000	807,000	1,017,000
D. A. Bonham	54,000	151,000	205,000
M. A. Shelnitz	176,000	346,000	522,000

(d)

The 2011 amount consists of the following:

	Personal	S&I Plan Matching	S&I Plan Replacement	Liability		
	Benefits*	Payments	Payments	e	Other	Total
Name	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
A. E. Festa	31,895**	14,700	110,010	1,200	-0-	157,805
H. La Force III	n/a	14,700	35,100	900	-0-	50,700
G. E. Poling	n/a	14,700	46,300	900	-0-	61,900
D. A. Bonham	n/a	14,700	27,900	900	14,927***	58,427
M. A. Shelnitz	n/a	14,700	23,400	900	-0-	39,000

*

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.

Consists of benefits related to Mr. Bonham's overseas assignment in Belgium consisting of: foreign tax payments \$8,202 (paid in euros and converted at exchange rates prevailing in the month such payments were made); tax gross up payments designed to reimburse Mr. Bonham for any increase in his U.S. federal and state income tax obligations resulting from his overseas assignment \$6,225; and tax preparation fees \$500.

CEO Employment Agreement

Grace and Mr. Festa entered into an employment agreement, effective as of June 1, 2009, pursuant to which Mr. Festa serves as Chairman and Chief Executive Officer of Grace. Mr. Festa is entitled to an initial base annual salary of \$936,000. His targeted award under the Annual Incentive Compensation Program is 100% of his base salary earned during the applicable year (or greater, as determined by the Board). Under the agreement, Mr. Festa continues to participate in the Grace LTIPs. His 2011 award is described below under "Grants of Plan-Based Awards in 2011." Grace is obligated to indemnify Mr. Festa for all liabilities that he may incur as a result of his performance of his duties as a director, officer or employee of Grace. The agreement also provides for certain payments in the event that Mr. Festa's employment is involuntarily terminated. These severance payments are discussed below under "Potential Payments Upon Termination or Change-In-Control." 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.

CFO Employment Agreement

Grace has entered into an employment agreement with Mr. La Force. Under this agreement, Mr. La Force is entitled to an initial base salary of \$410,000 and to participate in the Annual Incentive Compensation Program at an initial target award of 75% of base salary. The agreement also provides for certain payments in the event that Mr. La Force's employment is involuntarily terminated. These severance payments are discussed below under "Potential Payments Upon Termination or

Change-In-Control." The description of Mr. La Force'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.

Grants of Plan-Based Awards in 2011

The following table provides information regarding grants under our Annual Incentive Compensation Program, or AICP, and Long Term Incentive Program, or LTIP, to the executive officers named in the Summary Compensation Table during 2011.

			Unde	Estimated Future Payouts Under Non-Equity Incentive Plan Awards(a)		All Other Option Awards: Number of Securities	Exercise or Base Price of	Grant Date Fair Value
		Option		T (N7 ·	Underlying	· •	of Option
NT	DI	Grant	Threshold	0	Maximum	-	Awards(c)	
Name	Plan	Date	(\$)(b)	(\$)(b)	(\$)(b)	(#)	(\$/Sh)	(\$)(d)
A. E. Festa	2011 AICP(e)	n/a	242,125	968,500	1,937,000	n/a	n/a	n/a
	2011 LTIP	05/05/11	,	,	,	264.200	10 055	4 007 605
H. La Force	(Option)(f)	05/05/11	n/a	n/a	n/a	264,290	42.255	4,087,685
	2011 AICD		96 000	244 000	699,000		n la	
III	2011 AICP 2011 LTIP	n/a	86,000	344,000	688,000	n/a	n/a	n/a
		05/05/11				50.000	40.055	772 222
	(Option)(f)	05/05/11	n/a	n/a	n/a	,	42.255	773,333
G. E. Poling	2011 AICP(e) 2011 LTIP	n/a	95,625	382,500	765,000	n/a	n/a	n/a
	(Option)(f)	05/05/11	n/a	n/a	n/a	60,000	42.255	928,000
	2011 LTIP	05/05/11	11/ a	11/ a	11/ a	00,000	72.233	720,000
	(Option)(g)	11/03/11	n/a	n/a	n/a	10,000	41.250	145,933
D. A.						-		-
Bonham	2011 AICP	n/a	82,000	328,000	656,000	n/a	n/a	n/a
	2011 LTIP							
	(Option)(f)	05/05/11	n/a	n/a	n/a	50,000	42.255	773,333
M. A.								
Shelnitz	2011 AICP	n/a	65,625	262,500	525,000	n/a	n/a	n/a
	2011 LTIP							
	(Option)(f)	05/05/11	n/a	n/a	n/a	35,000	42.255	541,333

(a)

Actual payments pursuant to the 2011 AICP, final payments pursuant to the 2009-2011 LTIP and initial payments pursuant to the 2010-2012 LTIP that we expect to pay in March 2012 have been determined and are reflected in the Summary Compensation Table.

(b)

For AICP, amounts are based upon base salary actually paid during 2011.

(c)

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.

(d)

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.

(e)

Estimated AICP future payouts are prorated to reflect Mr. Festa's base salary increase that was effective March 1, 2012 and Mr. Poling's base salary and AICP target increases that were effective November 1, 2011.

(f)

Options are exercisable in 33% increments on May 4, 2012, May 3, 2013 and May 5, 2014.

(g)

Options are exercisable in 33% increments on November 2, 2012, November 1, 2013 and November 3, 2014.

2011 Annual Incentive Compensation Program (AICP)

The AICP, is a cash-based pay-for-performance incentive program. 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 Program (LTIP)

Our long-term incentive programs are multi-year, pay-for-performance incentive programs. Awards under our 2009-2011 and 2010-2012 LTIPs consist of a cash-based award and an award of stock options under our 2000 Stock Incentive Plan.

In 2011, in order to better align the interests of our executives with those of our shareholders and market practice, we eliminated the cash component of our LTIP. Awards under our 2011 LTIP consist entirely of an award of stock options under our 2011 Stock Incentive Plan. We will continue to make payments under the 2010 and 2009 Cash LTIPs, however, which payments are described below.

Cash-based awards under the 2009-2011 and 2010-2012 LTIPs are payable based on the extent to which we achieve a specified compound annual growth in our Core EBIT over the three-year period using results for the year prior to the first year of the performance period as the baseline. Cumulative Core EBIT for the three year period is used to determine the compound annual growth rate for this calculation. We generally refer to this growth objective as a CAGR.

Core EBIT

Our LTIP Adjusted Core EBIT for the performance periods of our 2009-2011 and 2010-2012 LTIPs are calculated as follows:

(In millions)	2	2008	2	2009	2	2010	2	2011
Adjusted EBIT*	\$	297.3	\$	229.0	\$	326.4	\$	478.6
Adjustments:								
Restructuring expenses and related asset impairments		(5.2)		(33.4)		(11.2)		(6.9)
Gains (loss) on sales of product lines and gain related to the sale of interest in an								
unconsolidated affiliate				33.9				(0.8)
Defined benefit pension expense previously reported as noncore, now reported in								
Adjusted EBIT		11.2		16.7		13.7		8.3
Non-asbestos provision for environmental remediation previously reported as noncore,								
now reported in Adjusted EBIT		6.4		(0.5)		1.3		1.5
Other noncore (income) expense		(10.0)		9.6		1.0		2.8
Core EBIT	\$	299.7	\$	255.3	\$	331.2	\$	483.5

*

Calculated as described in this Report in Item 7 (Management's Discussion and Analysis of Financial Condition and Results of Operations) in the Financial Supplement.

In completing the CAGR calculation, Core EBIT for each year after the baseline year is adjusted to eliminate the effect of changes in pension expense related to core operations and LTIP expense as follows:

2009-2011 LTIP Adjusted Core EBIT

2009-2011 LTIP Plan (In millions)	_	2008 Iseline	2009	2	2010	2	2011
Core EBIT	\$	299.7	\$ 255.3	\$	331.2	\$	483.5
Adjustments:							
Change in Pension Expense related to core operations			23.3		17.9		9.6
Long-term Incentive Plan Expense			(5.9)		(2.8)		7.4
LTIP Core EBIT	\$	299.7	\$ 272.7	\$	346.3	\$	500.5
		50					

2010-2012 LTIP Adjusted Core EBIT

2010-2012 LTIP Plan	2	2009				
(In millions)	Ba	seline	2	2010	2	2011
Core EBIT	\$	255.3	\$	331.2	\$	483.5
Adjustments:						
Change in Pension Expense related to core operations				(5.4)		(13.7)
Long-term Incentive Plan Expense				3.1		13.3
LTIP Core EBIT	\$	255.3	\$	328.9	\$	483.1

The compound annual growth rates in Core EBIT (reflecting the LTIP adjustments reflected in the tables above) as of December 31, 2011 for the 2009-2011 and 2010-2012 LTIPs are as follows:

LTIP	CAGR
2009-2011 LTIP (full 3-year period)	11.34%
2010-2012 LTIP (partial 2-year period)	35.22%

In order to earn the target award, our CAGR must be 6%, to earn the maximum of 200% of the target award, our CAGR must be 25% and no award is earned if our CAGR is -0- or negative as reflected in the following table:

Compound Annual Growth Rate in LTIP Adjusted Core EBIT (CAGR) Target	Portion of LTIP Target Amount Earned
25%	200%
15%	147%
10%	121%
6%	100%
3%	50%
-0-	-0-

The actual funded amount of each LTIP is determined solely by applying linear interpolation using the CAGR for the relevant performance period between the related target amounts specified above.

Employees who become entitled to cash payments under an LTIP are generally paid in two installments: one in March of the third year of the performance period as partial payment based on our performance during the first two years of the performance period; and the other in March of the year following the performance period (as final payment based on the complete three-year performance period but offset by any prior partial payment). Partial payments to participants are calculated by: (i) multiplying the participant's target award by 66.67% to determine the two-year partial target; (ii) multiplying the two-year partial target by the interpolated amount from the table above based on our CAGR for the two-year partial performance period to determine the portion of the two-year partial target earned; and (iii) multiplying the portion of the two-year partial target earned by 50%. In any case, the partial payment is subject to a cap equal to 50% of the target amount for the first two years.

Based on 2010 and 2011 operating performance, partial payments under the 2010 Cash LTIP are calculated based upon 200% of the two-year partial target for each participant as follows:

	2010 Cash LTIP Target	2-year Partial Target (66.67% of Target)	Portion of 2-year Partial Target Earned Up to 100% of Partial Target (100% of Partial Target)	2010 Cash LTIP Interim Payment (50% of Partial Target Earned)
Name	(\$)	(\$)	(\$)	(\$)
A. E. Festa	900,000	600,030	600,030	300,015
H. La Force III	186,000	124,006	124,006	62,003
G. E. Poling	229,500	153,008	153,008	76,504
D. A. Bonham	195,000	130,007	130,007	65,003
M. A. Shelnitz	144,000	96,005	96,005	48,002

Based on 2009-2011 operating performance, payments under the 2009 Cash LTIP are calculated based upon 128% of the full three-year target for each participant as follows:

LTIP Target	200% of Target (128% of Target)	LTIP Partial Payment Paid in 2011 (\$)	2009 Cash LTIP Final Payment (\$)
1,600,000	2,048,000	192,010	1,855,990
250,000	320,000	30,002	289,998
350,000	448,000	42,002	405,998
275,000	352,000	33,002	318,998
200,000	256,000	24,001	231,999
	Target (\$) 1,600,000 250,000 350,000 275,000	D09 Cash Target LTIP (128% of Target Target) (\$) (\$) 1,600,000 2,048,000 250,000 320,000 350,000 448,000 275,000 352,000	200% of Partial 009 Cash Target Payment LTIP (128% of Paid in Target Target) 2011 (\$) (\$) (\$) 1,600,000 2,048,000 192,010 250,000 320,000 30,002 350,000 448,000 42,002 275,000 352,000 33,002

In order to receive a cash LTIP award payment, employees generally must be actively employed by Grace through the payout date. See "Potential Payments Upon Termination or Change-In-Control Termination and Change-In-Control Arrangements Long-Term Incentive Program (Cash Awards)" for a description of the circumstances under which LTIP payments would be made upon termination of an executive's employment with Grace.

Outstanding Equity Awards at Fiscal Year-End

The following table provides information regarding outstanding stock options held by the executive officers named in the Summary Compensation Table as of December 31, 2011.

	Option Awards Number of Number of				
	Number of Securities Underlying Unexercised Options (#)	Securities Underlying Unexercised Options (#)	Option Exercise Price	Option Expiration	
Name	Exercisable	Unexercisable	(\$)	Date	
A. E. Festa	-0-	264,290(a)	42.255	5/05/16	
	87,502	174,998(b)	27.745	5/05/15	
	216,474	108,236(c)	9.785	5/07/14	
	171,490	-0-(d)	19.710	9/11/13	
H. La Force III	-0-	50,000(a)	42.255	5/05/16	
	18,084	36,166(b)	27.745	5/05/15	
	33,826	16,914(c)	9.785	5/07/14	
	70,190	-0-(d)	19.710	9/11/13	
G. E. Poling	-0-	10,000(e)	41.250	11/03/16	
	-0-	60,000(a)	42.255	5/05/16	
	22,314	44,624(b)	27.745	5/05/15	
	47,354	23,676(c)	9.785	5/07/14	
	106,540	-0-(d)	19.710	9/11/13	
D. A. Bonham	-0-	50,000(a)	42.255	5/05/16	
	18,959	37,916(b)	27.745	5/05/15	
	37,206	18,604(c)	9.785	5/07/14	
	60,880	-0-(d)	19.710	9/11/13	
M. A. Shelnitz	-0-	35,000(a)	42.255	5/05/16	
	14,002	27,998(b)	27.745	5/05/15	
	27,060	13,530(c)	9.785	5/07/14	
	63,420	-0-(d)	19.710	9/11/13	

⁽a)

Options are exercisable in 33% increments on May 4, 2012, May 3, 2013 and May 5, 2014.

(b)

Options are exercisable in 33% increments on May 5, 2011 and May 7, 2012 and May 6, 2013.

(c)

Options are exercisable in 33% increments on May 7, 2010, May 6, 2011 and May 7, 2012.

(d)

(e)

Options are fully exercisable.

Options are exercisable in 33% increments on November 2, 2012, November 1, 2013 and November 3, 2014.

Option Exercises and Stock Vested

The following table provides information regarding the exercise of options held by the executive officers named in the Summary Compensation Table during 2011.

	Option Awards Number of		Stock Awards Number of		
	Shares Acquired on Exercise	Value Realized on Exercise	Shares Acquired on Vesting	Value Realized on Vesting	
Name	(#)	(\$)	(#)	(\$)	
A. E. Festa	-0-	-0-	-0-	-0-	
H. La Force III	-0-	-0-	-0-	-0-	
G. E. Poling	16,500	595,099	-0-	-0-	
D. A. Bonham	-0-	-0-	-0-	-0-	
M. A. Shelnitz	8,200	295,746	-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	8.08	220,000	-0-
H. La Force III	SERP Pension Plan	8.08 3.75	1,897,000 84,000	-0- -0-
n. La force III	SERP	3.75	179,000	-0- -0-
G. E. Poling	Pension Plan	32.42	1,065,000	-0-
6	SERP	32.42	3,369,000	-0-
D. A. Bonham	Pension Plan	6.25	165,000	-0-
	SERP	6.25	365,000	-0-
M. A. Shelnitz	Pension Plan	28.17	817,000	-0-
	SERP	28.17	1,552,000	-0-

*

Amounts comprise the actuarial present value of the executive officer's accumulated benefit under the Pension Plan and SERP as of December 31, 2011, assuming a 4.5% 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

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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 2011, federal income tax law limits to \$245,000 the annual compensation on which benefits under the Pension Plan may be based.

Supplemental Executive Retirement Plan

We also have a 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. Since 2001, we have not permitted deferrals of base salary or incentive compensation.

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 program 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 2011 Non-Qualified Deferred Compensation

						Agg	gregate
	Executi	ive	1	Aggregate	Aggreg	gate Ba	alance
	Contribu	tions Regis	strant	Earnings	Withdray	wals/	at
	in Fisc	al Contri	butions	in Fiscal	Distribut	tions F	'iscal
	Year	in F	iscal	Year	in Fisc	cal Y	Year
Name	2011	Year	2011	2011	Year 20	011 201	1 End
M. A. Shelnitz	\$	-0- \$	-0-	\$ 101,651(a) \$	-0- \$	432,605(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, 2010 of \$35.13 and December 31, 2011 of \$45.92. 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, 2011 of \$45.92.

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 business day of 2011. 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 to

Mr. Shelnitz's deferred shares arrangement are described above under the caption "Non-Qualified Deferred Compensation Plan."

	Involuntary Termination	Involuntary Termination Without Cause Following Change-in-		
	Without Cause	Control	Death	Disability
Name	(\$)(a)	(\$)(b)(c)	(\$)(b)(d)	(\$)(b)(f)
A. E. Festa	3,412,500	8,306,020	4,535,110(e)	3,932,610(e)
H. La Force III	645,000	2,736,004	844,004	564,501
G. E. Poling	1,100,000	3,694,006	1,109,006	669,004
D. A. Bonham	615,000	2,663,005	859,005	571,998
M. A. Shelnitz	750,000	2,240,504	703,004	403,004

(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 LTIP payments (in amounts and estimated amounts set forth below in footnote (b)) 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)

Includes actual final LTIP payment under the 2009 Cash LTIP (as included in footnote (b) to the Summary Compensation Table) and payments under the 2010 Cash LTIP calculated as described below under " Termination and Change-in-Control Arrangements Long Term Incentive Program (Cash Awards)" under the assumption that the 2010 Cash LTIP pays out at the target amount as follows:

	2009-2011 LTIP (Cash)	2010-2012 LTIP (Cash)	Total
Name	(\$)	(\$)	(\$)
A. E. Festa	1,855,990	600,030	2,456,020
H. La Force III	289,998	124,006	414,004
G. E. Poling	405,998	153,008	559,006
D. A. Bonham	318,998	130,007	449,005
M. A. Shelnitz	231,999	96,005	328,004

⁽c)

Includes contractual payments pursuant to each executive's respective Change-in-Control Severance Agreement calculated under the assumption that no excise tax will apply.

(d)

Includes the sum of payments under the Grace Executive Salary Protection Plan during the first year following death. During subsequent years after death until the specified termination year (reflecting the executive officer's age as of December 31, 2011), the sum of payments each year would be as follows: Mr. Festa \$487,500, Mr. La Force \$215,000, Mr. Poling \$275,000, Mr. Bonham \$205,000 and Mr. Shelnitz \$187,500. For executive officers other than Mr. Festa, 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."

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(e)

Includes 2011 AICP payment calculated solely on the basis of Grace's 2011 financial performance in the amount of \$1,104,090 pursuant to Mr. Festa's employment agreement as described below under " Termination and Change-in-Control Arrangements CEO Severance Arrangements."

(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 programs that are based, in part, on the duration of the executive officer's employment. During subsequent years after disability, the sum of payments each year to Mr. Festa would be \$225,000 until the earlier of the month he was no longer deemed disabled or until he attained age 65 in 2024. Due to the offset of expected payments under Grace's long-term and short-term disability programs, Grace expects that the other executive officers would not receive any additional payments under the plan after the first year of disability. For executive officers other than Mr. Festa, 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 Program."

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. As a result of Grace's Chapter 11 filing, the following events will not constitute a "change in control": (i) the acquisition of Grace common stock by a trust established for purposes of administering asbestos-related claims pursuant to a plan of reorganization; and (ii) a corporate transaction pursuant to Section 363 of the U.S. Bankruptcy Code or a plan of reorganization. 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, prior to the expiration of the agreement in 2013, 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. Also under the terms of this agreement, Mr. Festa will not be entitled to any unpaid award under the AICP or any LTIP if his employment with Grace terminates prior to the date that the award is paid to active Grace employees, except that Mr. Festa would be entitled to a pro-rated portion (based, in the case of the AICP, solely



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on Grace financial results for that calendar year) of such an unpaid award in the event that his employment is terminated by Grace without cause or he terminates his employment as a result of constructive discharge after Grace emerges from Chapter 11, or his employment terminates as a result of his death or disability, in each case, before the applicable payment date. Assuming Mr. Festa's employment was terminated as of December 31, 2011 under any of the above listed circumstances, Mr. Festa would be eligible to receive LTIP payments as described below under the caption "Termination and Change-in-Control Arrangements Long Term Incentive Program." 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 that establish severance arrangements with Messrs. La Force (included in his employment agreement), Poling and Shelnitz. Mr. Bonham's severance arrangements were established by Compensation Committee approval. 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 or her annual base salary, in the case of Messrs. Poling and Shelnitz, or one and one-half times his annual base salary, in the case of Messrs. La Force and Bonham. 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. 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, 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 Program. 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. See "CEO Severance Arrangements" for a description of the circumstances under which AICP payments would be made to Mr. Festa in the event his employment with Grace is terminated. The

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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 Program (Cash Awards). An employee whose employment terminates prior to the payout date will forfeit any unpaid LTIP 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 an LTIP 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

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 (other than a corporate transaction pursuant to Section 363 of the U.S. Bankruptcy Code or a plan of reorganization that is confirmed and effective) 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 an LTIP award payment. If an employee whose employment terminates prior to the end of an LTIP performance period receives an LTIP award payment for that performance period, the amount of the LTIP 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. See "CEO Severance Arrangements" above for a description of the circumstances under which LTIP payments would be made to Mr. Festa in the event his employment with Grace is terminated. The description of the LTIPs 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 LTIPs, which are filed with the SEC.

Long Term Incentive Program (2000 and 2011 Stock Incentive Plan 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, incapacity or retirement under a Grace retirement plan; 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

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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 and 2011 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 and 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 and 2011 Stock Incentive Plans 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 and 2011 Stock Incentive Plans, which are filed with the SEC.

Director Compensation

Under the compensation program for nonemployee directors in effect during 2011, each nonemployee director received an annual retainer of \$105,000 in cash, 50% of which was paid in January and 50% of which was paid in December. In addition, directors received \$6,000 (plus \$3,000 for the lead independent director and the Audit Committee chair and \$2,000 for other committee chairs) in cash for each meeting date in respect of the Board meeting and all committee meetings held on that date. 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. For 2012, each director will receive an annual retainer of \$142,750 in cash, 50% of which was paid in January 2012 and 50% of which will be paid in December 2012.

⁶³

The following table sets forth amounts that we paid to our nonemployee directors in connection with their services to Grace during 2011.

	Fees Earned		Γ	Non-Equit	Change in Pension Value and Jonqualified Deferred	I	
	or Paid		Option Awar (S	Plan C	ompensatio	nAll Other ompensation	Total
Name	(\$)(a)	(\$)	(\$)	(\$)	(\$)	(\$)(b)	(\$)
J. F. Akers	153,000	-0-	-0-	-0-	-0-	3,000(c)	156,000
H. F. Baldwin	141,000	-0-	-0-	-0-	-0-	-0-	141,000
R. C. Cambre	141,000	-0-	-0-	-0-	-0-	-0-	141,000
M. A. Fox	153,000	-0-	-0-	-0-	-0-	-0-	153,000
J. J. Murphy(d)	141,000	-0-	-0-	-0-	-0-	-0-	141,000
C. J. Steffen	141,000	-0-	-0-	-0-	-0-	-0-	141,000
M. E. Tomkins	159,000	-0-	-0-	-0-	-0-	-0-	159,000
T. A. Vanderslice	160,000	-0-	-0-	-0-	-0-	3,000(c)	163,000

(a)

Amount consists of annual retainer in the amount of \$105,000, meeting fees in the amount of \$36,000 (other than Mr. Vanderslice who received meeting fees of \$30,000) and additional payments to: Mr. Akers for serving as Chair of the Compensation Committee and Dr. Fox for serving as Chair of the Corporate Responsibility Committee in the amounts of \$12,000; Mr. Tomkins for serving as Chair of the Audit Committee in the amount of \$18,000; and Mr. Vanderslice for serving as Chair of the Nominating and Governance Committee and Lead Independent Director in the amount of \$25,000.

(b)

Grace paid an aggregate of \$1,909 in premiums for business travel accident insurance coverage for all directors during 2011.

(c)

Consists of charitable contributions paid during 2011 to academic institutions at the request of the director pursuant to the Grace Foundation's Matching Grants Program. For Mr. Vanderslice, \$3,000 was in respect of a 2010 charitable contribution.

(d)

Mr. Murphy resigned from the Board of Directors and all committees effective February 23, 2012.

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 programs, though tailored to our specific needs, are 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 programs, including our incentive programs under which payments may vary based on the performance of the business. We believe these programs, 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 2011, the Compensation Committee of the Board was comprised of Messrs. Akers (Chair), Baldwin, Cambre, Murphy, Vanderslice, Tomkins and Steffen and Dr. Fox. Ms. Henry joined the Board and Compensation Committee on January 18, 2012 and Mr. Murphy resigned from the Board and the Compensation Committee effective February 23, 2012. 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.

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, 2012 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	Percent(3)
FMR LLC(4)	9,194,298	12.4%
Fidelity Management & Research Company Edward C. Johnson 3d 82 Devonshire Street Boston, Massachusetts 02109 R. Ted Weschler(5) 404B East Main Street 2 nd Floor Charlottesville, VA 22902	3,740,902	5.1%
	2 52 4 622	5.00
The Vanguard Group, Inc.(6)	3,724,623	5.0%
100 Vanguard Blvd. Malvern, PA 19355		
	65	

Name and Address of Beneficial Owner(1)(2) J. F. Akers	Shares of Common Stock Beneficially Owned Percer 38,996 15,196(T) 54,192	nt(3) *
H. F. Baldwin	21,918	
	15,000(T)	
	36,918	*
R. C. Cambre	28,494	*
A. E. Festa	100,000 475,466(O)	
	575,466	*
M. A. Fox	55,346 8,942(T)	
	64,288	*
J. K. Henry	-0-	*
C. J. Steffen	10,000	*
M. E. Tomkins	12,000	*
T. A. Vanderslice	39,522 14,932(T)	
	54,454	*
D. A. Bonham	117,045(O)	*
H. La Force III	50,000 122,100(O)	
	172,100	*
G. E. Poling	176,208(O) 18,000(T)	
	194,208	*
M. A. Shelnitz	53,500 104,482(O) 9,421(T)	

		167,403	*
Directo	ors and executive officers as a group (14 persons)	409,776 1,037,409(O) 81,491(T)	
		1,528,676	2.0%
*			
	Indicates less than 1%		
(0)	Shares covered by stock options exercisable on or within 6	50 days after January 31, 2012	2.
(T)	Shares owned by trusts and other entities as to which the p	person has the power to direct	voting and/or i
		66	

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

John J. Murphy resigned from the Board of Directors effective February 23, 2012.

(3)

(1)

(2)

Based on 73,939,155 shares of Grace common stock outstanding on January 31, 2012.

(4)

The ownership information set forth is based in its entirety on material contained in a Schedule 13G/A filed with the SEC jointly by FMR LLC ("FMR"), Fidelity Management & Research Company ("Fidelity") and Edward C. Johnson 3d ("Mr. Johnson") on February 14, 2012. FMR and Mr. Johnson have sole voting power with respect to 39,505 shares and sole dispositive power with respect to all 9,194,298 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 is a wholly-owned subsidiary of FMR. Mr. Johnson and FMR, through its control of Fidelity, each has sole dispositive power over 9,155,093 shares owned by various investment companies for which Fidelity serves as investment advisor. 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. Mr. Johnson and FMR, through its control of ya, 205 shares owned by institutional accounts managed by PGATC.

(5)

The ownership information set forth is based in its entirety on material contained in a Schedule 13D/A report dated December 20, 2011 filed with the SEC.

(6)

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. on February 10, 2012. The Vanguard Group, Inc. has sole voting power with respect to 45,565 shares and sole dispositive power with respect to all 3,724,623 shares. Vanguard Fiduciary Trust Company ("VFTC"), a wholly-owned subsidiary of The Vanguard Group, Inc., is the beneficial owner of 45,565 shares as a result of its serving as investment manager of collective trust accounts. VFTC directs the voting of these shares.

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EQUITY COMPENSATION PLAN INFORMATION

The following table sets forth information as of December 31, 2011 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 and restricted stock.

Plan Category	Number of securities to be issued upon exercise of outstanding options	Weighted-average exercise price of outstanding options (\$)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities to be issued upon exercise of outstanding options)
Equity compensation plans approved by security holders*	4,937,420	25.0828	817,138

*

The 2000 Stock Incentive Plan was approved by stockholders at an annual meeting of Grace stockholders on May 10, 2000. Under the 2000 Plan, there are 3,654,558 shares of Grace common stock to be issued upon the exercise of outstanding options, the weighted-average exercise price of outstanding options is \$19.0807 and no shares of Grace common stock are available for future issuance (excluding shares to be issued upon exercise of outstanding options). The 2011 Stock Incentive Plan was 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. Under the 2011 Plan, there are 1,282,862 shares of Grace common stock to be issued upon the exercise of outstanding options, the weighted-average exercise price of outstanding options is \$42.1815 and 817,138 shares of Grace common stock are available for future issuance (excluding shares to be issued upon exercise of outstanding options).

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) 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.

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Only independent directors serve on our Audit, Nominating and Governance, Compensation and Corporate Responsibility Committees. Mr. Vanderslice has been appointed Lead Independent Director and, in this capacity, presides at executive sessions of independent directors. Interested parties may communicate with Mr. Vanderslice by writing him at the following address: Thomas A. Vanderslice Lead Independent Director, c/o W. R. Grace & Co., 7500 Grace Drive, Columbia, Maryland 21044.

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 2011. The following table sets forth the fees that we incurred for the services of PwC for the year ended December 31, 2010 and our estimate of the fees that we incurred for the year ended December 31, 2011:

2011*		2010
\$ 4,021,100	\$	4,417,200
24,800		94,100
472,800		44,600
9,000		53,000
\$ 4,527,700	\$	4,608,900
	\$ 4,021,100 24,800 472,800 9,000	\$ 4,021,100 \$ 24,800 472,800 9,000

*

For 2011, 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),

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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 advice with respect to internal controls over financial reporting.

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 for 2011 consisted of license fees for access to accounting, tax, and financial reporting literature and for 2010 consisted of advice regarding finance productivity initiatives and software license fees.

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 preapproval of certain audit-related, tax and other services provided by the independent accountants. Any other services must be specifically preapproved by 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 2011, no audit-related, tax, or other services were performed by PwC without specific or general approval as described above.



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.

For purposes of describing these exhibits, "Old Grace" means W. R. Grace & Co., a Delaware corporation (subsequently renamed Sealed Air Corporation), a predecessor to the company, and "Grace New York" means W. R. Grace & Co., a New York corporation (subsequently renamed Fresenius Medical Care Holdings, Inc.), a predecessor to Old Grace.

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	Form of Distribution Agreement, by and among Old Grace, W. R.	Annex B to the Joint Proxy
	Grace & CoConn. and Grace Specialty Chemicals, Inc. (now named W. R.	Statement/Prospectus dated
	Grace & Co.)	February 13, 1998 of Old Grace and
		Sealed Air Corporation included in
		Form S-4 (filed 2/13/98)
2.2	Proposed Joint Plan of Reorganization of W. R. Grace & Co. and its debtor subsidiaries dated February 27, 2009	Exhibit 2.2 to Form 10-K (filed 3/02/09)
3.1	Restated Certificate of Incorporation of W. R. Grace & Co.	Exhibit 3.1 to Form 8-K (filed 4/8/98)

Exhibit		
No. 3.2	Exhibit Amended and Restated By-laws of W. R. Grace & Co.	Location Exhibit 3.1 to Form 8-K (filed 2/27/09)
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)
4.2	Order of Delaware Bankruptcy Court limiting certain transfers of Grace equity securities	Exhibit 4.2 to Form 10-K (filed 3/02/09)
4.3	Credit Agreement dated as of May 14, 1998, among W. R. Grace & CoConn., W. R. Grace & Co., the several banks parties thereto; the co-agents signatories thereto; The Chase Manhattan Bank, as administrative agent for such banks; and Chase Securities Inc., as arranger	Exhibit 4.1 to Form 10-Q (filed 8/14/98)
4.4	364-Day Credit Agreement, dated as of May 5, 1999, among W. R. Grace & CoConn.; W. R. Grace & Co.; the several banks parties thereto; the co-agents signatories thereto; Bank of America National Trust and Savings Association, as documentation agent; The Chase Manhattan Bank, as administrative agent for such banks; and Chase Securities Inc., as book manager	Exhibit 4.1 to Form 10-Q (filed 8/13/99)
4.5	First Amendment to 364-Day Credit Agreement dated as of May 5, 1999 among W. R. Grace & CoConn.; W. R. Grace & Co.; the several banks parties thereto; Bank of America National Trust and Savings Association, as document agent; The Chase Manhattan Bank, as administrative agent for such banks; and Chase Securities, Inc., as bank manager	Exhibit 4 to Form 10-Q (filed 8/15/00)
4.6	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)
10.1	Form of Employee Benefits Allocation Agreement, by and among Old Grace, W. R. Grace & CoConn. and Grace Specialty Chemicals, Inc. (now named W. R. Grace & Co.)	Exhibit 10.1 to Form 10-K (filed 3/13/03)
10.2	Form of Tax Sharing Agreement, by and among Old Grace, W. R. Grace & CoConn. and Grace Specialty Chemicals, Inc. (now named W. R. Grace & Co.)	Exhibit 10.2 to Form 10-K (filed 3/13/03)
10.3	W. R. Grace & Co. 2000 Stock Incentive Plan, as amended	Exhibit 10 to Form 10-Q (filed 8/14/00)*
10.4	W. R. Grace & Co. 2011 Stock Incentive Plan	Exhibit 10.1 to Form 8-K (filed 4/13/11)*
10.5	Form of Stock Option Agreement	Exhibit 10.1 to Form 8-K (filed 4/13/11)*

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Exhibit No.	Exhibit	Location
	W. R. Grace & Co. Supplemental Executive Retirement Plan, as amended	Exhibit 10.7 to Form 10-K (filed 3/28/02)*
10.7	W. R. Grace & Co. Executive Salary Protection Plan, as amended	Exhibit 10.8 to Form 10-K (filed 3/28/02)*
10.8	Long-Term Incentive Program Administrative Practices	Exhibit 10.4 to Form 8-K (filed 5/11/10)*
10.9	Form of 2009-2011 Long-Term Incentive Program Cash Award	Exhibit 10.1 to Form 8-K (filed 4/28/09)*
10.10	Form of 2010-2012 Long-Term Incentive Program Cash Award	Exhibit 10.3 to Form 8-K (filed 5/11/10)*
10.11	Form of Executive Severance Agreement between Grace and certain officers	Exhibit 10.17 to Form 10-K (filed 3/13/03)*
10.12	Severance Pay Plan for Salaried Employees	Exhibit 10.17 to Form 10-K (filed 3/02/07)*
10.13	Form of Retention Agreement between Grace and certain officers (includes enhanced severance provision)	Exhibit 10.28 to Form 10-K (filed 4/16/01)*
10.14	Annual Incentive Compensation Program	Exhibit 10.1 to Form 8-K (filed 2/28/11)*
10.15	Form of 2011 Annual Incentive Compensation Program Award Letter	Exhibit 10.1 to Form 8-K (filed 2/28/11)*
10.16	Letter Agreement dated May 27, 2009 between John F. Akers, on behalf of Grace, and Fred Festa	Exhibit 10.1 to Form 8-K (filed 5/29/09)*
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)*
12	Computation of Ratio of Earnings to Fixed Charges and Combined Fixed Charges and Preferred Stock Dividends	Filed herewith
18	PricewaterhouseCoopers LLP letter dated February 24, 2012 re change in accounting principle	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 Filed herewith Officer under Section 906 of the Sarbanes-Oxley Act of 2002

95 Mine Safety Disclosure Exhibit Filed herewith 73

Exhibit

No.	Exhibit	Location
101.INS	XBRL Instance Document	**
101.SCH	XBRL Taxonomy Extension Schema	**
101.CAL	XBRL Taxonomy Extension Calculation Linkbase	**
101.DEF	XBRL Taxonomy Extension Definition Linkbase	**
101.LAB	XBRL Taxonomy Extension Label Linkbase	**
101.PRE	XBRL Taxonomy Extension Presentation Linkbase	**

*

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

**

These interactive data files shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as shall be expressly set forth by specific reference in such a filing.

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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, thereto duly authorized.

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 24, 2012

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 24, 2012.

Signature J. F. Akers* H. F. Baldwin* R. C. Cambre* M. A. Fox* J. K. Henry* C. J. Steffen* M. E. Tomkins* T. A. Vanderslice*	Title	s
/s/ ALFRED E. FESTA		Chairman, Chief Executive Officer and Director (Principal Executive
(Alfred E. Festa)		Officer)
/s/ HUDSON LA FORCE III		Senior Vice President and Chief Financial Officer (Principal
(Hudson La Force III)		Financial Officer) 75

*

/s/ WILLIAM C. DOCKMAN

Vice President and Controller (Principal Accounting Officer)

(William C. Dockman)

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, 2011

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SIGNATURES	

The financial data listed above appearing in this Financial Supplement are incorporated by reference herein. 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.

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 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 comprised 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. Grace's financial management, internal auditors and independent registered public accounting firm. Grace's financial management, internal auditors and independent registered public accounting firm. Grace

Report On Internal Control Over Financial Reporting We and our management have evaluated Grace's internal control over financial reporting as of December 31, 2011. This evaluation was based on criteria for effective internal control over financial reporting set forth in *Internal Control Integrated Framework* 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, 2011. 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, 2011, as stated in their report, which appears on the following page.

Report On Disclosure Controls And Procedures As of December 31, 2011, we 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 under the Exchange Act is accumulated and communicated to us 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*

February 24, 2012

/s/ HUDSON LA FORCE III

Hudson La Force III Senior Vice President and Chief Financial Officer

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, comprehensive income, equity (deficit), and cash flows present fairly, in all material respects, the financial position of W.R. Grace & Co. and its subsidiaries (the "Company") at December 31, 2011 and December 31, 2010 and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2011 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the accompanying index presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2011 based on criteria established in Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements and financial statement schedule, 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, on the financial statement schedule, 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.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the consolidated financial statements, on April 2, 2001, the Company and substantially all of its domestic subsidiaries voluntarily filed for protection under Chapter 11 of the United States Bankruptcy Code, which raises substantial doubt about the Company's ability to continue as a going concern in its present form. Management's intentions with respect to this matter are described in Note 2. The accompanying consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

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

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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.

PricewaterhouseCoopers LLP McLean, Virginia February 24, 2012

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Consent of Independent Registered Public Accounting Firm

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (No. 333-37024 and 333-173785) of W. R. Grace & Co. of our report dated February 24, 2012 relating to the financial statements, financial statement schedule and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP PricewaterhouseCoopers LLP McLean, Virginia February 24, 2012

W. R. Grace & Co. and Subsidiaries

Consolidated Statements of Operations

	Year Ended December 31,			
(In millions, except per share amounts)	2011		2010	2009
Net sales	\$ 3,211.9	\$	2,675.0	\$ 2,825.0
Cost of goods sold	2,053.4		1,729.6	1,900.5
Gross profit	1,158.5		945.4	924.5
Selling, general and administrative expenses	565.2		511.2	574.6
Restructuring expenses and related asset impairments	6.9		11.2	33.4
Loss (gains) on sales of product lines and (gain) related to the sale of interest in an				
unconsolidated affiliate	0.4			(33.9)
Research and development expenses	68.5		60.3	70.1
Defined benefit pension expense	63.4		77.1	85.6
Interest expense and related financing costs	43.3		41.3	38.3
Provision for environmental remediation	17.8		4.5	4.4
Chapter 11 expenses, net of interest income	20.0		17.7	48.0
Equity in earnings of unconsolidated affiliates	(15.2)		(17.8)	(1.7)
Other expense, net	4.7			13.0
Total costs and expenses	775.0		705.5	831.8
Income before income taxes	383.5		239.9	92.7
Provision for income taxes	(114.7)		(32.5)	(11.5)
			. ,	
Net income	268.8		207.4	81.2
Less: Net loss (income) attributable to noncontrolling interests	0.6		(0.3)	(10.0)
Net income attributable to W. R. Grace & Co. shareholders	\$ 269.4	\$	207.1	\$ 71.2
Earnings Per Share Attributable to W. R. Grace & Co. Shareholders				
Basic earnings per share:				
Net income attributable to W. R. Grace & Co. shareholders	\$ 3.66	\$	2.85	\$ 0.99
Weighted average number of basic shares	73.6		72.7	72.2
Diluted earnings per share:				
Net income attributable to W. R. Grace & Co. shareholders	\$ 3.57	\$	2.78	\$ 0.98
Weighted average number of diluted shares	75.5		74.4	72.6

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

W. R. Grace & Co. and Subsidiaries

Consolidated Statements of Comprehensive Income

	Year Ended December 31,					
(In millions)	2011 20			2010	10 2009	
Net income	\$	268.8	\$	207.4	\$	81.2
Other comprehensive income (loss):						
Defined benefit pension and other postretirement plans, net of income taxes		(46.7)		(14.8)		1.0
Currency translation adjustments		(11.6)		12.2		38.1
Gain (loss) from hedging activities, net of income taxes		(2.1)		(1.0)		7.5
Unrealized loss on investment						(0.8)
Total other comprehensive income (loss) attributable to						
W. R. Grace & Co. shareholders		(60.4)		(3.6)		45.8
Total other comprehensive income (loss) attributable to noncontrolling interests		1.8		(2.1)		1.6
Total other comprehensive income (loss)		(58.6)		(5.7)		47.4
				()		
Comprehensive income	\$	210.2	\$	201.7	\$	128.6
	Ψ	-10.2	Ψ	201.7	Ψ	120.0

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

W. R. Grace & Co. and Subsidiaries

Consolidated Statements of Cash Flows

(In millions)	Year Ended December 31,							
	-	2011	2010	2009				
OPERATING ACTIVITIES								
Net income	\$	268.8	\$					