

THE SCIENCE IN BETTER BRANDS™



2016

ANNUAL REPORT AND FORM 10K

DEAR FELLOW SHAREHOLDERS

In 2016, OMNOVA Solutions delivered its second consecutive year of significantly improved adjusted (Non-GAAP) earnings, a clear indication that recent actions to expand margins and accelerate profitable growth are taking hold. Adjusted earnings per diluted share rose to \$0.50 in 2016 from \$0.36 a year ago. *

Adjusted segment operating profit for the combined businesses increased to \$80.3 million, or 10.6% of net sales, up 170 basis points from 2015. Importantly, the Company's consolidated adjusted operating returns broke into double-digit territory, a major milestone on the way to achieving our long-term goal of adjusted segment operating profit margins in the mid-to-upper teens, led by a favorable mix of specialty products and by cost reductions.

^{*} Please refer to the tables following this letter for reconciliation of the GAAP to the Non-GAAP financial measures presented herein.

PERFORMANCE CHEMICALS



Performance Chemicals achieved a 19.5% improvement in adjusted segment operating profit year-over-year, a significant increase driven by robust actions taken over the past 12 to 18 months.

- We launched several
 differentiated new products
 that demonstrate OMNOVA's
 value to its markets and
 customers. These products
 reflect our strategy to focus
 innovation on specialty
 applications.
- We completed a global manufacturing footprint realignment that dramatically improved chemical capacity utilization and reduced operating costs by approximately \$14 million in 2016. The realignment, which was part of a broader new operational excellence model, contributed to strong margin expansion and increased cash flow for the segment.

This action drove styrene butadiene latex capacity utilization to greater than 90%, providing more cost competitive manufacturing options for paper and carpet chemicals. The manufacturing footprint realignment also better positions our specialty chemicals business line for future growth.

- Key specialty lines increased volumes. Specialty coatings, for example, had a strong year, particularly in Asia. Our newest chemical facility in Caojing, China recently completed a capacity expansion, which allows the Company to increase service in specialty coatings as well as other areas such as construction, tape and nonwovens. Our enhanced Performance Chemicals sales force in the region had a banner year.
- OMNOVA's specialty oil & gas business out-performed the weak market, thanks to geographical expansion, new products and effective key account management.
- Commercial initiatives
 gained traction across
 Performance Chemicals and
 are improving our speed of
 innovation, and marketing
 and sales execution.
 OMNOVA divested a
 distracting and break-even
 operation in India.



We completed a global manufacturing footprint realignment that dramatically improved chemical capacity utilization and reduced operating costs by approximately \$14 million in 2016.



OMNOVA's specialty oil & gas business out-performed the weak market, thanks to geographical expansion, new products and effective key account management.

ENGINEERED SURFACES



Engineered Surfaces is making progress on its specialization strategy, despite customer project delays and a slowing economy in China, which impacted adjusted segment operating profit in 2016.

- The laminates and performance films product line picked up important wins in retail store fixtures and food service, most of which will begin to ramp up production in 2017. We believe these two market segments offer significant growth potential for Engineered Surfaces, showcasing our functional and decorative laminates for solutions that provide high durability/cleanability, flexible design and excellent aesthetics versus traditional, less robust high pressure laminates.
- The laminates and performance films product line delivered significant year-over-year sales growth in two key longstanding market segments: recreational vehicles and kitchen & bath cabinetry.
- Engineered Surfaces is
 well-positioned with large
 flooring companies, which
 brought new capacity on line for U.S. domestic luxury
 vinyl tile products in 2016.
 Customers in this fastest
 growing segment of the
 hard flooring market use
 OMNOVA laminates and
 films for the design and/or
 protective wear layers.



The laminates and performance films product line delivered significant year-over-year sales growth in two key long-standing market segments: recreational vehicles and kitchen & bath cabinetry.



Engineered Surfaces is well-positioned with large flooring companies, which brought new capacity on-line for U.S. domestic luxury vinyl tile products in 2016.



While the Company experienced growth in several specialty lines in 2016, the continuing decline in the paper industry and the current market environment in oil & gas (which despite our above-market performance was still below last year) masked the improvement in other areas of Performance Chemicals. A sales decline in Engineered Surfaces was due primarily to weaker coated fabrics demand in China and customer project delays in laminates. Profitable growth is the most significant priority for OMNOVA as we move into fiscal 2017.

Cash generation continued to be a great story due to increased earnings and improved working capital management, resulting in \$23.8 million of net debt reduction. The net debt-to-EBITDA leverage ratio ended the year at 3.5x, down from 3.9x at the end of the previous year. Further, the refinancing of our long-term debt last summer, the redemption of our outstanding Senior Notes, and the cash provided from operations help provide flexibility as the Company evaluates future actions for growth.

NEW YEAR, NEW LEADERSHIP



Anne P. Noonan was named President and Chief Executive Officer of OMNOVA Solutions as of December 1, 2016. She joined OMNOVA two years earlier as President of its Performance Chemicals segment. Previously, she spent 27 years at Chemtura Corporation.

I am honored and excited to have been named President and Chief Executive Officer of OMNOVA Solutions as of December 1, 2016, the beginning of our new fiscal year. I want to thank Kevin McMullen for his 16 years leading the Company, and I look forward to working with our new Chairman of the Board and long-standing independent Director, William Seelbach, as OMNOVA begins a new chapter of sustained robust growth.

Looking forward, we see in OMNOVA a strong foundation of innovation, market diversity and customer focus that can be leveraged to drive value for our shareholders, customers and employees.

We also see global megatrends presenting tremendous opportunity for our Company. Trends include urbanization; the rise of the middle class in emerging economies, which will drive the need for increased transportation and advances in health care; and also energy conservation, with the protection of scarce resources. These trends favor those, like OMNOVA, who are agile, lean and willing to customize to deliver profitable, differentiated solutions. The construction, energy and transport sectors are areas in which OMNOVA has a strong technology base and established positions.

We will continue to focus on strategies to better leverage these areas of strength.

Additionally, we are fine tuning our high level vision and strategy toward concise, executable plans to consistently deliver on our growth agenda. As part of this work, we will develop greater balance between growth through organic means and finding creative ways to strategically partner with others through both acquisitions and alliances. A balanced portfolio will include a better blend of cyclical and non-cyclical businesses, reducing the impact of outside forces and allowing us to better control our destiny.

These are all things we will be working on in 2017 and beyond. Over the next few quarters, we will begin to lay out our vision of the future of OMNOVA as we continue to execute on our specialization strategy, always keeping in mind the need to remain agile, able to pivot quickly when things change. To paraphrase Charles Darwin,

"It is not the strongest of the species that survives, nor the most intelligent, but the one most responsive to change."

In OMNOVA's case, we will strive to be all three.

It is a privilege to lead OMNOVA Solutions at a time of significant opportunity. I want to thank our highly talented and dedicated global team for their achievements in 2016, and I look forward to working with them to drive consistent performance improvement and build OMNOVA into a leading, global, innovative, specialty solutions provider that returns value to its shareholders, customers and employees.

Thank you for your support.

anne P. Noonan

Anne P. NoonanPresident and
Chief Executive Officer





OMNOVA Solutions is in the business of improving brand experiences. We apply chemical and material

chemicals and functional and decorative surfaces that enhance the performance of our customers' products around the world. While we are exclusively a business-to-business provider, we understand that our customers look to us to help them gain meaningful and unique performance advantages that will build their branded products in the commercial and consumer marketplace. That's why we say we are "The Science in Better Brands."

OMNOVA SOLUTIONS INC. Non-GAAP and Other Financial Matters

Twelve Months Ended November 30, 2016

Table A - Reconciliation of Reported Segment Sales and Operating Profit to Net Sales and Net (Loss) Income

		Year Novem	Ended			
(Dollars in millions)		2016	i DC i	2015		
Net Sales						
Performance Chemicals						
Performance Materials	\$	284.1	\$	331.0		
Specialty Chemicals		264.7		277.1		
Total Performance Chemicals Engineered Surfaces	\$	548.8	\$	608.1		
Coated Fabrics	\$	71.5	\$	87.8		
Laminates and Performance Films		139.6		142.1		
Total Engineered Surfaces		211.1		229.9		
Total Net Sales	<u>\$</u>	759.9	\$	838.0		
Segment Operating Profit (Loss)						
Performance Chemicals	\$	55.9	\$	15.9		
Engineered Surfaces		12.4		18.9		
Interest expense		(24.7)		(28.3)		
Corporate expense		(25.8)		(23.7)		
Corporate severance		(4.9)		_		
Shareholder activist costs		_		(1.9)		
Operational improvement costs and other		.8		(.4)		
Asset impairment		_		(.6)		
Debt issuance costs write-off		(2.9)		(.6)		
Acquisition and integration related expenses		(.9)		(.4)		
(Loss) Income From Continuing Operations Before Income		0.0		(24.4)		
Taxes		9.9		(21.1)		
Income tax (expense) benefit		(10.3)	_	2.4		
(Loss) from continuing operations		(0.4)		(18.7)		
Discontinued operations, net of tax	-		_	.9		
Net (Loss)	<u>\$</u>	(0.4)	\$	(17.8)		
Income (Loss) Per Share - Basic and Diluted						
(Loss) income per share - continuing operations	\$	(.01)	\$	(.41)		
Income (loss) per share - discontinued operations	_		_	.02		
(Loss) income per share	<u>\$</u>	(.01)		(.39)		
Depreciation and amortization	\$	30.6	\$	34.0		
Capital expenditures	\$	25.6	\$	24.0		

This shareholders' letter includes Adjusted Segment Operating Profit, Adjusted Income From Continuing Operations, Adjusted Diluted Earnings Per Share, Adjusted EBIT, Net Debt and Adjusted EBITDA which are non-GAAP financial measures as defined by the Securities and Exchange Commission. Management reviews the adjusted financial measures in assessing the performance of the business segments and in making decisions regarding the allocation of resources to the business segments. Management also believes that the adjusted information is useful for providing investors with an understanding of the Company's business and operating performance. Management excludes the items shown in the accompanying tables because management does not consider them to be reflective of normal operations. These adjusted financial measurements are not measurements of financial performance under GAAP and such financial measures should not be considered as an alternative to Segment Operating Profit, Net Income, Diluted Earnings Per Share or other measures of financial performance determined in accordance with GAAP. These non-GAAP financial measures may not be comparable to similarly titled measures reported by other companies. Presented on Tables B and C is the Company's Net Leverage Ratio calculation (Net Debt / Adjusted EBITDA). Presented on Table D is the Company's Adjusted Return on Invested Capital calculation (Adjusted Net Operating Profit After Tax / Total Debt and Equity). The accompanying tables provide the reconciliation of these financial measures to the comparable GAAP financial measures.

Non-GAAP and other Financial Matters (Continued) Twelve Months Ended November 30, 2016

Table B - Reconciliation of Segment Sales and Operating Profit to Adjusted Segment Operating Profit and Adjusted Income from Continuing Operations

(Dollars in millions except per share data)		formance nemicals		Engineered Surfaces		-		ombined	С	orporate	Cor	solidated
Sales	\$	548.8	\$	211.1	\$	759.9	\$		\$	759.9		
Segment Operating Profit / Corporate Expense	\$	55.9	\$	12.4	\$	68.3	\$	(33.7)	\$	34.6		
Interest Expense		_		_		_	_	(24.7)		(24.7)		
Income (Loss) From Continuing Operations Before Income Taxes		55.9		12.4		68.3		(58.4)		9.9		
Management Excluded Items												
Restructuring and severance		2.9		.6		3.5		4.9		8.4		
Accelerated depreciation on production transfer		3.0		_		3.0		_		3.0		
Operational improvements costs		(.4)		_		(.4)		_		(.4)		
Acquisition and integration related expense		_		_		_		.9		.9		
Environmental costs		_		.3		.3		_		.3		
Debt issuance costs write-off and additional interest		_		_		_		4.9		4.9		
Corporate Headquarters relocation costs		_		_		_		(.2)		(.2)		
Asset impairment, facility closure costs and other		2.5		5.8		8.3		_		8.3		
Vacation policy change		(1.5)		(1.2)		(2.7)		(.7)		(3.4)		
Subtotal for Management Excluded Items		6.5	-	5.5		12.0		9.8		21.8		
Adjusted Segment Operating Profit / Corporate Expense from Continuing Operations before Income Taxes	\$	62.4	\$	17.9	\$	80.3	\$	(48.6)	\$	31.7		
Tax Expense (30% rate)*									\$	(9.5)		
Adjusted Income From Continuing Operations									\$	22.2		
Income from Continuing Operations *Tax rate is based on the Company's estimated normalized annual effe Adjusted segment operating profit from continuing	ctive tax	crate.							\$.50		
operations as a % of sales		11.4 %	•	8.5 %	,	10.6 %	6					
Segment / Corporate Capital Expenditures	\$	15.6	\$	8.2	\$	23.8	\$	1.8	\$	25.6		
Adjusted segment operating profit / corporate expense from continuing operations before income taxes	\$	62.4	\$	17.9	\$	80.3	\$	(48.6)	\$	31.7		
Unallocated Corporate Interest Expense excluding debt premium		_		_		_		22.7		22.7		
Segment / Consolidated Adjusted EBIT		62.4		17.9		80.3		(25.9)		54.4		
Depreciation and Amortization excluding accelerated depreciation		20.1		6.3		26.4		1.2		27.6		
Segment / Consolidated Adjusted EBITDA	\$	82.5	\$	24.2	\$	106.7	\$	(24.7)	\$	82.0		
Adjusted EBITDA as a % of sales		15.0 %)	11.5 %		14.0 %	6			10.8 %		
Net Leverage												
Total short and long-term debt (excluding original issue Less Cash	disco	unt)							\$	366.0 (78.0)		
Net Debt (Debt less Cash)									\$	288.0		
Net Debt (Debt less Cash) Net Leverage Ratio**									\$			

Non-GAAP and other Financial Matters (Continued) Twelve Months Ended November 30, 2015

Table C - Reconciliation of Segment Sales and Operating Profit to Adjusted Segment Operating Profit and Adjusted Income from Continuing Operations

(Dollars in millions except per share data)	Performance Chemicals		Engineered Surfaces		Combined		Corporate		Co	nsolidated
Sales	\$	608.1	\$	229.9	\$	838.0	\$	_	\$	838.0
Segment Operating Profit / Corporate Expense	\$	15.9	\$	18.9	\$	34.8	\$	(27.6)	\$	7.2
Interest Expense		_		_		_		(28.3)		(28.3)
Income (Loss) From Continuing Operations Before Income Taxes		15.9		18.9		34.8		(55.9)		(21.1)
Management Excluded Items										
Restructuring and severance		4.3		1.5		5.8		.1		5.9
Accelerated depreciation on production transfer		5.8		_		5.8		_		5.8
Operational improvements costs		5.0		_		5.0		.4		5.4
Acquisition and integration related expense		_		_		_		.4		.4
Environmental costs		2.8		.2		3.0		_		3.0
Debt issuance costs write-off		_		_		_		.6		.6
Other financing costs		_		_		_		1.0		1.0
Shareholder activist costs		_		_		_		1.9		1.9
Asset impairment, facility closure costs and other		18.4		1.6		20.0		.6		20.6
Subtotal for Management Excluded Items		36.3		3.3		39.6		5.0		44.6
Adjusted Segment Operating Profit / Corporate										
Expense from Continuing Operations before Income Taxes	\$	52.2	\$	22.2	\$	74.4	\$	(50.9)	\$	23.5
Tax Expense (30% rate)*	*	V	•		•	,	*	(33.3)	\$	(7.0)
Adjusted Income From Continuing Operations									\$	16.5
Adjusted Income from Continuing Operations *Tax rate is based on the Company's estimated normalized annual entertainty.	effective	tax rate.							\$.36
Adjusted segment operating profit from continuing operations as a % of sales		8.6 %	, 5	9.7 %	6	8.9 %	,			
Segment / Corporate Capital Expenditures	\$	12.6	\$	8.5	\$	21.1	\$	2.9	\$	24.0
Adjusted segment operating profit / corporate expense from continuing operations before income taxes	\$	52.2	\$	22.2	\$	74.4	\$	(50.9)	\$	23.5
Unallocated Corporate Interest Expense excluding debt premium		_		_		_		27.3		27.3
Segment / Consolidated Adjusted EBIT	-	52.2		22.2		74.4		(23.6)		50.8
Depreciation and Amortization excluding accelerated depreciation		21.1		6.0		27.1		1.1		28.2
Segment / Consolidated Adjusted EBITDA	\$	73.3	\$	28.2	- -	101.5	\$	(22.5)	\$	79.0
	Ψ						- 	(22.3)	Ψ	
Adjusted EBITDA as a % of sales Net Leverage		12.1 %	0	12.3 %	ó <u> </u>	12.1 %)			9.4 %
Total short and long-term debt (excluding original issued)	ue disc	count)							\$	356.7
Less Cash									~	(44.9)
Net Debt (Debt less Cash)									\$	311.8
,									<u> </u>	
Net Leverage Ratio**										3.9x

Non-GAAP and other Financial Matters (Continued) Twelve Months Ended November 30, 2016 and 2015

Table D - Adjusted Return on Invested Capital

Adjusted Net Operating Profit after Tax	2016			2015	
Adjusted Income from Continuing Operations	\$	22.2	\$	16.5	
Interest add back excluding debt premium		22.7		27.3	
Tax Effect of Interest add back*		(6.8)		(8.2)	
Total Adjusted Net Operating Profit after Tax	er Tax \$ 38.1 \$		\$	35.6	
		As of		As of	
Debt and Equity	November 30, 2016		November 30, 2015		
Short-term Debt	\$	4.2	\$	2.5	
Senior Notes		_		150.0	
Long-term Debt		358.4		204.2	
Total Shareholders' Equity		109.8		109.1	
Total Debt and Equity	\$	472.4	\$	465.8	
Adjusted Return on Invested Capital		8.1 %		7.6 %	
*Tax rate is based on the Company's estimated normalized annual effective tax rate.					

DIRECTORS & OFFICERS

BOARD OF DIRECTORS

DAVID J. D'ANTONI²

Retired Senior Vice President and Group Operating Officer, Ashland Inc.

JANET PLAUT GIESSELMAN 1

Retired President and General Manager, Dow Oil & Gas

JOSEPH M. GINGO 1

Chairman, President and Chief Executive Officer of A. Schulman, Inc.

MICHAEL J. MERRIMAN 2,3

Operating Advisor, Reliance Capital Partners LLC

JAMES A. MITAROTONDA 1

Chairman, President, and Chief Executive Officer of Barington Capital Group, L.P.; Chairman, President and Chief Executive Officer of Barington Companies Investors, LLC

OFFICERS

ANNE P. NOONAN

President and Chief Executive Officer

PAUL F. DESANTIS

Senior Vice President and Chief Financial Officer

MICHAEL A. QUINN

Senior Vice President and Chief Human Resources Officer

ANNE P. NOONAN

President and Chief Executive Officer, OMNOVA Solutions Inc.

STEVEN W. PERCY 1,3

Retired Chairman and Chief Executive Officer, BP America Inc.

LARRY B. PORCELLATO 2

Retired Chief Executive Officer, The Homax Group, Inc.

ALLAN R. ROTHWELL 1

Retired Executive Vice President, Eastman Chemical Company

WILLIAM R. SEELBACH 2,3

Chairman, OMNOVA Solutions Inc. Senior Advisor, The Riverside Company

JAMES C. LEMAY

Senior Vice President, Corporate Development; General Counsel

MARSHALL D. MOORE

Senior Vice President and Chief Technology Officer

CHESTER W. FOX

Vice President, Treasurer and Investor Relations

ROBERT A. STEFANKO²

Retired Chairman and Executive Vice President – Finance and Administration, A. Schulman, Inc.

COMMITTEES

- 1 Audit Committee Chairman: Steven W. Percy
- 2 Compensation and Corporate Governance Committee Chairman: Michael J. Merriman
- 3 Executive Committee Chairman: William R. Seelbach

JAY T. AUSTIN

Senior Vice President, Global Operations and Supply Chain

CORPORATE INFORMATION

SHAREHOLDER INFORMATION

NYSE ANNUAL CEO CERTIFICATION The annual CEO certification required by Section 303A.12(a) of the New York Stock Exchange Listed Company Manual was submitted by Kevin M. McMullen without qualification on April 4, 2016.

TRANSFER AGENT AND REGISTRAR Computershare 1-866-220-6360 1-201-680-6578 (outside U.S. and Canada) 1-800-952-9245 (hearing impaired)

Address shareholder inquiries to: OMNOVA Solutions Inc. c/o Computershare P.O. Box 30170 College Station, TX 77842-3170

or

211 Quality Circle, Suite 210 College Station, TX 77845 (overnight delivery/private couriers/ registered mail)

Questions and inquiries: www.computershare.com/investor BUYDIRECT BuyDIRECT is a direct purchase, sale and dividend reinvestment plan available to shareholders and interested first-time investors.

It offers a convenient method of increasing investment in the Company. Subject to terms and conditions of the plan, dividends (if any), together with optional cash investments of up to \$120,000 per year, are used to buy more shares of the Company's Common Stock.

For more information regarding the BuyDIRECT program, contact Computershare at 1-866-220-6360.

COMMON STOCK LISTING New York Stock Exchange Ticker Symbol: OMN

ANNUAL MEETING OF SHAREHOLDERS March 22, 2017 at 9:00 a.m. OMNOVA Solutions 25435 Harvard Road Beachwood, OH 44122-6201

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM Ernst & Young LLP Akron, OH SHAREHOLDERS SERVICES 1-800-735-5160

INVESTOR RELATIONS CONTACT Chester W. Fox Vice President, Treasurer and Investor Relations 216-682-7003

OMNOVA SOLUTIONS FOUNDATION 25435 Harvard Road Beachwood, OH 44122-6201 216-682-7067

COMMUNICATIONS General Inquires: Corporate Communications 216-682-7010 information@omnova.com

INTERNET WEBSITE www.omnova.com

OMNOVA Solutions is an equal opportunity employer.



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 year ended November 30, 2016

Commission File Number 1-15147

OMNOVA Solutions Inc.

(Exact name of registrant as specified in its charter)



Ohio

(State of Incorporation)

34-1897652

(I.R.S. Employer Identification No.)

44122-6201

25435 Harvard Road, Beachwood, Ohio

(Address of principal executive offices)

(Zip Code)

Registrant's telephone number, including area code (216) 682-7000

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

Title of each class

Name of each exchange on which registered

Common Stock, par value 10¢ per share

The New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None
Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities
Act. Yes No 🗸
Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes \square No \square
Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the
Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file
such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes 🗸 No 🗌
Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation 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. \square
Indicate by check mark whether the registrant has submitted electronically and posted on its corporate website, if any,
interactive data file required to be submitted and posted pursuant to Rule 405 of Regulation S-T (232.405 of this chapter) during
the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files.) Yes 🗸 No 🗌
Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See
definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act (check one):
Large accelerated filer ☐ Accelerated filer ☑ Non-accelerated filer ☐ Smaller reporting company ☐
(do not check if a smaller
reporting company)
Indicate by check mark whether the registrant is a shell company (as defined in Rule 12-b of the Exchange

The aggregate market value of the voting stock held by nonaffiliates of the registrant was \$297,575,104 based on the closing price per share of \$6.89 on May 31, 2016, the last business day of the registrant's most recently completed second quarter.

As of January 23, 2017, there were 44,935,050 outstanding shares of the Company's Common Stock, \$0.10 par value.

DOCUMENTS INCORPORATED BY REFERENCE

Act) Yes ☐ No ☑

Portions of the 2017 Proxy Statement of OMNOVA Solutions Inc. are incorporated into Part III of this Report.

Annual Report on Form 10-K For the Year Ended November 30, 2016

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Item 1. Business

Introduction

OMNOVA Solutions Inc. (referred to in this report as OMNOVA Solutions, OMNOVA, the Company, we or our) became an independent publicly-traded company on October 1, 1999, when it was spun off by GenCorp Inc., its former parent company. OMNOVA Solutions is incorporated under the laws of the State of Ohio, and its headquarters is located at 25435 Harvard Road, Beachwood, Ohio 44122-6201.

OMNOVA Solutions is an innovator of emulsion polymers, specialty chemicals and engineered surfaces for a variety of commercial, industrial and residential end uses. Our products provide a variety of important functional and aesthetic benefits to hundreds of products that people use daily. We hold leading positions in key market categories, which have been built through innovative products, customized product solutions, strong technical expertise, well-established distribution channels, recognized brands, and long-standing customer relationships. We have strategically located manufacturing, technical and other facilities in the U.S., Europe, China, and Thailand to service our broad customer base.

During fiscal 2016, OMNOVA operated two business segments: Performance Chemicals and Engineered Surfaces. Of our 2016 net sales, 72% were derived from the Performance Chemicals segment and 28% were derived from the Engineered Surfaces segment. Financial information relating to the Company's business segments is set forth in Note P to the Consolidated Financial Statements of this report.

Performance Chemicals

Background

Our Performance Chemicals segment began in 1952 as part of The General Tire & Rubber Company (later known as GenCorp). Initially, the business focused on the manufacture of styrene butadiene latex for the paper industry and styrene butadiene vinyl pyridine latex for tire cord adhesives in a single facility in Mogadore, Ohio. Since that time, the business has grown through internal development and acquisitions to include five U.S. and three international manufacturing sites with expanded capabilities, chemistries, and applications, as well as technology centers and sales offices in the U.S., Europe, and Asia.

Products

OMNOVA Solutions' Performance Chemicals segment produces a broad range of emulsion polymers and specialty chemicals based primarily on styrene butadiene (SB), styrene butadiene acrylonitrile (SBA), styrene butadiene vinyl pyridine, nitrile butadiene (NBR), polyvinyl acetate, acrylic, styrene acrylic, vinyl acrylic, glyoxal, fluorochemical, and bio-based chemistries. We are a leading supplier in a wide range of niche applications. We operate well maintained, strategically located, cost competitive production facilities in the U.S., Europe, and China. Our custom-formulated products include tailored latexes, resins, binders, adhesives, specialty rubbers, antioxidants, hollow plastic pigments and elastomeric modifiers which are used in numerous applications for coatings, carpet, paper, nonwovens, construction, oil & gas drilling and production, adhesives, tape, tire cord, floor care, textiles, graphic arts, polymer stabilization, industrial rubbers & thermoplastics and various other applications. Our products provide a variety of functional properties to enhance our customers' products, including greater strength, adhesion, dimensional stability, water resistance, flow and leveling, improved processibility and enhanced appearance. Our Performance Chemicals segment is recognized for its core capabilities in emulsion polymerization and emulsion polymer technology and for its ability to rapidly develop, manufacture, and deliver highly customized products that provide innovative and value-added solutions to customers across a broad array of end markets and applications.

The following table shows major Performance Chemicals products, end-use applications, and brand names:

Product Line	% of Performance Chemicals Fiscal 2016 Net Sales	Primary Products	End-use Applications	Brand Names
Performance Materials	52%	SB and SBA latex binders and crosslinkers, lubricants and hollow plastic pigments, styrene butadiene vinyl pyridine, VP latex, biobased polymers, antioxidants, reinforcing resins, phenolic antioxidants, NBR powders and dispersions	Paper, Paperboard, Packaging, Carpet, Tire Cord, Plastics, Synthetic Latex Gloves, and Rubber Products	SUNREZ, OMNAREZ, SUNKOTE, SEQUALFLOW, SUNKEM, GENCRYL,
Specialty Chemicals	48%	SB, SBA, acrylic, vinyl acrylic, and polyvinyl acetate emulsion polymers, hollow plastic pigments, solid & glyoxal resins, elastomeric modifiers, silicone emulsions, polyethylene resins, and fluorosurfactants, opacifiers, and biobased polymers	Nonwovens, Textiles, Graphic Arts, Automotive Thermoplastics, Oil & Gas, Specialty Coatings, Buildings & Construction, Home & Personal Care	PERMALOFT, OMNABOND, SUNSIZE, GENFLO, GENCRYL, OMNAPEL, SEQUABOND, SUNCRYL, ACRYGEN, SUNBOND, SEDGERES, PRYM, SEDGEGES, PRYM, SEDGESES, SEDGESAV, SEQUAWET, SEQUACLEAN, WARCOSET, WARCO, SEQUASOFT, SEDGELCLEAN, SEDGELCLEAN, SEDGEGERE, SEDGESKIL, SEDGELLE, SEDGEGERE, SEDGESWIL, SEDGESOFT, SUNKOTE, MYKON, PERMAFRESH, SEQUALINK, SEDGESCOUR, SEDGESOFT, SUNKOTE, MYKON, PERMAFRESH, SEQUAPEL, X-CAPE, MYKOSOFT, MYKOSIL, NORANE, IMPREGNOLE, MYKOWICK, NOVACRYL, SECOAT, SECRYL, SEQUABOND, CDP, UNIQ-PRINT, GENGLAZE, STYLECOAT, OMNAGLO, MORGLO, RWL, ML, MORFLO, MORSHINE, CONREZ, NM, NH, CONLEX, VERUS, VISCODRILL, GENCEAL, HYDROPLIOLITE, PLIOTONE, PLIOWAY, PLIOTEC, GENCEAL, POLYFOX, SUNIGUM, CHEMIGUM, LYTRON, PEXOSTART, PEXOSEAL, PEXOTHIN, PEXOGUARD, PEXOHIBE

Performance Materials. OMNOVA Solutions is a leading supplier of custom-formulated SB and SBA latex and hollow plastic pigments for paper and paperboard coatings. In addition, we produce a broad variety of specialty chemical additives and binder chemistries for coating applications in the paper, packaging, and paperboard industries. Our commitment to product innovation has enhanced our market position by creating products for the paper industry that improve the printability, strength, gloss, opacity, and moisture resistance of coated papers and paperboard. Applications for our products include paper and paperboard coatings used in magazines, catalogs, direct mail advertising, brochures, specialty papers, food cartons, and household and other consumer and industrial packaging.

OMNOVA is also a leading supplier of custom-formulated SB latex used as carpet backing binders. Our products for the carpet industry secure carpet fibers to the carpet backing and adhere the primary backing to the secondary backing, while meeting the stringent manufacturing, environmental, odor, flammability, and flexible installation requirements of our customers. Our strong historical position in residential carpeting has been enhanced by new products to serve that market, as well as innovations in commercial carpet backing binders that provide moisture barrier and other properties, enabling the replacement of higher cost polyurethane binders.

OMNOVA is also a leading global supplier of vinyl pyridine latex which is used in bonding fabric to rubber in tire and belting applications. In addition, the Company is the leading global supplier of antioxidants used in polymer stabilization and synthetic latex gloves.

Sales of our Performance Materials products represented 37.4% of our consolidated net sales for 2016, 39.4% for 2015, and 42.9% for 2014.

Specialty Chemicals. OMNOVA Solutions is a leading global supplier of polymers, waterborne and solvent borne dispersions, elastomers, and other specialty chemicals for a variety of product categories. Applications for our specialty polymers and chemicals include specialty coatings; nonwovens (such as disposable hygiene products, engine filters, roofing mat, scrub pads); construction; oil and gas drilling and production; adhesives; tape; floor care; textiles; graphic arts; home & personal care; and various other specialty applications. Our focus is on developing unique products for custom applications that address specific customer needs, including enhanced functionality, improved durability, high temperature, chemical and UV resistance, corrosion resistance, improved environmental performance, and improved processibility. Sales of our Specialty Chemicals products represented 34.8% of our consolidated net sales for 2016, 33.1% for 2015, and 32.7% for 2014.

Markets and Customers

The Performance Materials product line is highly competitive based on quality, customer service, product performance, supply chain, field technical support, and product innovations. The Specialty Chemicals product line includes many product categories that are performance driven where product innovation, technical service, application support and key account focus are key competitive differentiators.

Marketing and Distribution

Our Performance Chemicals segment primarily sells its products directly to manufacturers through dedicated internal marketing, sales, and technical service teams focused on providing highly responsive customized solutions. Distributors are used to help expand sales coverage geographically and with newer customers.

Competition

Performance Chemicals primarily competes with other global chemical companies, including Trinseo, BASF, Lanxess, Lubrizol, Wacker, Celanese, Dow, Arkema, Synthomer, Kumho, LG Chem, and Addivant, and with smaller regional companies such as Interpolymer, Rashig, Croslene, Yatai, and Jubilant. Depending on the products involved and markets served, the basis of competition varies and may include price, quality, customer and technical service, product performance, innovation, and industry reputation. Overall, our Performance Chemicals segment regards its products to be competitive in its major categories, and we believe that we are a leader in several categories, including SB and SBA latex paper coatings and carpet backing binders in North

America and a global leader in nonwoven SB binders, SB vinyl pyridine tire cord adhesives, floor care polymers, and polymers used in the manufacturing of masking and other tapes. In addition, we also retain strong, industry recognized brands in antioxidants, specialty coatings, and elastomeric modifiers.

Engineered Surfaces

Background

Our Engineered Surfaces segment began in 1945 when The General Tire & Rubber Company (later known as GenCorp) purchased a coated fabrics manufacturing facility located in Jeannette, Pennsylvania from the Pennsylvania Rubber Company. Since that time, the business has grown through internal development and acquisitions to include three U.S. and two international manufacturing sites; a distribution center in the U.S.; technology centers and sales offices in the U.S. and Asia; and a wide range of engineered surfacing products.

Products

Our Engineered Surfaces segment develops, designs, produces, and markets a broad line of engineered surfacing products, including coated fabrics; vinyl, paper, specialty laminates; and industrial films. These products are used in numerous applications, including commercial building refurbishment; new construction; residential cabinets; flooring; ceiling tile and furnishings; transportation markets including buses and mass transit vehicles; marine; automotive and motorcycle OEM seating and manufactured housing; recreational vehicles; health care patient and common area furniture; and a variety of industrial films applications. Our core competencies in innovative product development, design, compounding, calendering, casting, printing, coating, and embossing enable us to develop unique, aesthetically pleasing surfacing products that have strong functional properties, such as cleanability and durability, including scratch, stain, chip, and crack resistance that address specific customer needs. We have strong custom color and design capabilities; an extensive design library covering a broad range of patterns, textures and colors, product formulation, and coating and processing capabilities. Together these capabilities provide our products with the functionality and aesthetics that add value for our customers. In addition, our broad range of products, global presence, and end-use applications give us economies of scale in sourcing, manufacturing, design, sales and marketing, and product and process development.

The following table shows our Engineered Surfaces products, end use applications and brand names.

Product Line	% of Engineered Surfaces Fiscal 2016 Net Sales	Primary Products	End-use Applications	Brand Names
Coated Fabrics	34%	Vinyl and urethane coated fabrics	Upholstery and surfacing for transportation, marine, offices, hotels, hospitals and health care facilities, stores, schools, restaurants, public buildings, residences, and industrial applications	BOLTAFLEX, BOLTASOFT, QUANTUM, NAUTOLEX, PREFIXX, PREVAILL
Laminates and Performance Films	66%	Vinyl, paper, and specialty laminates; performance films	Decorative and protective surfacing for retail display and food service fixtures, kitchen and bath cabinets, manufactured housing and recreational vehicle interiors, flooring, commercial and residential furniture, home furnishings and consumer appliances, wall panel systems, decorative wall surfacing; industrial films for banners, tents, ceiling tiles, decking, health care furniture, and bath and spa surrounds	RADIANCE, SURF(X), DESIGN4, EFX, DURAMAX, HARMONY, VIEWNIQUE

Coated Fabrics. OMNOVA Solutions is a leading North American and Asian supplier of vinyl and urethane coated fabrics for transportation, marine, commercial, residential, and health care applications. Our durable coated fabrics are well-suited for demanding, high-use environments and offer a cost effective alternative to other surfacing materials, such as leather and textile fabrics. Applications for our coated fabrics include transportation seating (automotive OEM, bus and other mass transit, marine, and motorcycle), automotive aftermarket applications; contract and health care furniture; residential applications; stadium and arena seating; and healthcare equipment. A key differentiator for our coated fabrics products is our PreFixx® protective coating, long recognized for delivering the industry's best-in-class performance. Sales of our coated fabrics products represented 9.4% of our consolidated net sales for 2016, 10.5% for 2015, and 10.0% for 2014.

Laminates and Performance Films. OMNOVA Solutions is a leading supplier of vinyl, paper, and specialty laminates, and performance films. Our laminates are used as alternatives to wood, paint, stone, stainless steel, high pressure laminates, and thermally fused laminates in markets where durability, design, and cost are key requirements. We offer our customers a broad range of designs and textures, as well as proprietary coating technology that provides enhanced durability and scratch and stain resistance. Applications for our laminates include kitchen and bath cabinets; manufactured housing and recreational vehicle interiors; flooring; commercial and residential furniture; retail display fixtures, home furnishings; consumer appliances; bath and

spa surrounds; food service tables, wall protection; and architectural accents. Performance films applications include luxury vinyl tile (LVT), awnings, tents, flooring, promotional graphics, medical products, movie screens, decking, ceiling tile, and shower pan liners.

A key strength of our laminates business is our coating technology, including ultraviolet, melamine, urethane, and thermally cured coatings, which provides greater durability for high-wear applications. In addition, our laminates business has differentiated itself in the market as a single-source supplier through its harmony programTM of integrated vinyl and paper laminate designs for the furniture and cabinet industries by building a unique library of matched vinyl and paper laminate designs, with a variety of patterns and textures, and developing rapid make-to-order production capabilities. We also offer SURF(X)® 3D Laminates for multi-dimensional applications for the office and health care furniture and retail display fixture and food service markets. These laminates offer a cost effective alternative to high pressure laminates, thermally fused melamine and real wood veneers. They provide furniture makers with design flexibility in rounded surfaces, eliminating the need for unsightly and expensive edgebanding, and providing enhanced cleanability/disinfection and durability with increased chip and crack resistance. Sales of our Laminates and Performance Films products represented 18.4% of our consolidated net sales for 2016, 17.0% for 2015, and 14.5% for 2014.

Markets and Customers

We believe that our Engineered Surfaces segment is a leader in its targeted product categories. The coated fabrics, laminates, and performance films businesses are highly competitive based on functional performance, decorative content, price, quality, customer service, global capability, brand name recognition, distribution networks, and industry reputation. Engineered Surfaces markets its products under numerous brand names to different industries.

Marketing and Distribution

Our Engineered Surfaces segment distributes its products primarily through a direct sales force and agents to manufacturers of retail store fixtures, cabinets, furniture, seating, and health care components, and other products. Many of our Engineered Surfaces segment's products have strong, well-recognized brand names that are promoted through trade shows, industry periodicals, our website (www.omnova.com), and other media.

Competition

OMNOVA's Engineered Surfaces segment competes with numerous companies, including international companies. Many of these companies focus on only one product line and/or market and are smaller and privately-owned. Competitors include:

- Coated Fabrics—Morbern, Beneke, Uniroyal, Spradling International, and CGT
- Laminates and Performance Films—Wilsonart, Toppan Printing, Renolit Corporation, LG Chemical America, PolyOne Corporation, and I2M

International Operations

Net sales from our foreign operations were \$305.9 million in 2016, \$298.2 million in 2015, and \$350.5 million in 2014. These net sales represented 40.3% of our total net sales in 2016, 35.6% in 2015, and 35.5% in 2014. Long-lived assets primarily consist of net property, plant, and equipment. Long-lived assets of our foreign operations totaled \$80.5 million at November 30, 2016, \$85.6 million at November 30, 2015, and \$110.1 million at November 30, 2014. Our consolidated long-lived assets totaled \$205.8 million at November 30, 2016, \$215.6 million at November 30, 2015, and \$238.4 million at November 30, 2014.

Intellectual Property

We regard patents, trademarks, copyrights, and other intellectual property as important to our success, and we rely on them globally to protect our investments in products and technology. Our patents expire at various times, but we believe that the loss or

expiration of any individual patent would not materially affect our business. We, like other companies in the industries in which we operate, may be subject to claims of alleged infringement of the patents, trademarks, and other intellectual property rights of third parties from time to time.

Seasonal Factors

We historically experience stronger sales and income in our second, third, and fourth quarters, comprised of the three-month periods ending May 31, August 31, and November 30. Our performance in the first quarter (December through February) has historically been impacted by generally lower levels of customer manufacturing, construction, and refurbishment activities during the holidays and cold weather months.

Environmental Matters

Our business operations are subject to numerous federal, state, local, and foreign environmental laws and regulations. These laws and regulations not only affect our current operations, but also could impose liability on us for past operations that were conducted in compliance with then applicable laws and regulations. For further discussion of capital and noncapital expenditures for environmental compliance, please refer to "Management's Discussion and Analysis of Financial Condition and Results of Operations—Environmental Matters" of this report, which is incorporated herein by reference.

Employees

As of November 30, 2016, the Company employed approximately 2,100 employees globally. Approximately 9.9% of the Company's U.S. employees are covered by collective bargaining agreements.

Raw Materials

Our Performance Chemicals segment utilizes a variety of raw materials, primarily monomers, in the manufacture of our products. Most of these raw materials have been, and we expect will continue to be, generally available from multiple suppliers. Monomer costs are a major component of the emulsion polymers produced by this segment. Key monomers include butadiene, styrene, acrylates, acrylonitrile, vinyl acetate and vinyl pyridine. These monomers represented approximately 57% of Performance Chemicals' total raw materials purchased on a dollar basis in 2016 for this segment.

Our Engineered Surfaces segment utilizes a variety of raw materials that are generally available from multiple suppliers. Key raw materials include polyvinyl chloride (PVC) resins, textiles, plasticizers, paper, and titanium dioxide. PVC resins, plasticizers, and textiles represented approximately 57% of Engineered Surfaces' total raw materials purchased on a dollar basis in 2016 for this segment.

The cost of raw materials has a significant impact on our profitability. We generally attempt to respond to raw material cost increases through productivity programs and price increases to our customers. The success of attempted price increases depends on a variety of factors including the specific market application and competitive environment. Under certain circumstances, we are not able to pass along some or all of the increase. In addition, if accepted by customers, price increases generally lag the increase in raw material costs. Index pricing applies to approximately 42% of Performance Chemicals' sales.

Research and Development

The OMNOVA Solutions technology centers in Akron, Ohio; Chester, South Carolina; Villejust, France; Minhang, China; and Rayong, Thailand and the design centers in Monroe, North Carolina, New York, New York and Minhang, China support research and development efforts across our businesses and complement the resources focused on innovation in each of our segments. Our efforts are focused on developing new applications with our base technologies, enhancing the functionality of our products in existing applications, as well as developing new product and technology platforms.

Our research and development expenses were \$8.2 million in 2016, \$8.3 million in 2015, and \$9.7 million in 2014. Research and development expenses include the costs of technical activities that are useful in developing new products, services,

processes or techniques, as well as those expenses for technical activities that may improve existing products or processes. Information relating to research and development expense is set forth in Note A to the Consolidated Financial Statements of this report.

Available Information

Our website is located at www.omnova.com. We make available on our website all materials that we file electronically with the Securities and Exchange Commission, including our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to those reports, as soon as reasonably practicable after we electronically file or furnish such materials to the SEC. The OMNOVA Solutions Business Conduct Policies and Corporate Governance Guidelines and charters for the Audit Committee and Compensation and Corporate Governance Committee of the OMNOVA Solutions Board of Directors are also available on our website and in print to any shareholder who requests a copy. All requests must be made in writing and addressed to OMNOVA Solutions Inc., Attn: Corporate Secretary, 25435 Harvard Road, Beachwood, Ohio 44122-6201.

Item 1A. Risk Factors

This Annual Report includes descriptions of our current business, operations, assets and other matters affecting the Company, as well as "forward-looking statements" as defined by federal securities laws. All forward-looking statements by the Company, including verbal statements, are intended to qualify for the protections afforded forward-looking statements under the Private Securities Litigation Reform Act of 1995. Forward-looking statements reflect management's current expectation, judgment, belief, assumption, estimate or forecast about future events, circumstances or results and may address business conditions and prospects, strategy, capital structure, debt and cash levels, sales, profits, earnings, markets, products, technology, operations, customers, raw materials, claims and litigation, financial condition, and accounting policies among other matters. Words such as, but not limited to, "will," "may," "should," "projects," "forecasts," "seeks," "believes," "expects," "anticipates," "estimates," "intends," "plans," "targets," "optimistic," "likely," "would," "could," "committed," and similar expressions or phrases identify forward-looking statements.

All descriptions of our current business, operations and assets, as well as all forward-looking statements, involve risks and uncertainties. Many risks and uncertainties are inherent in business generally. Other risks and uncertainties are more specific to the Company's businesses and strategy, or to any new businesses which the Company may enter into or acquire. There also may be risks and uncertainties not currently known to us. The occurrence of any of such risks and uncertainties and the impact of such occurrences is often not predictable or within the Company's control. Such impacts could adversely affect the Company's business, operations or assets as well as the Company's actual results and the value of your investment in the Company. In some cases, such effect could be material. Certain risks and uncertainties facing the Company are described below or elsewhere in this Annual Report.

All written and verbal descriptions of our business, operations and assets and all forward-looking statements attributable to the Company or any person acting on the Company's behalf are expressly qualified in their entirety by the risks, uncertainties, and cautionary statements contained and referenced herein. All such descriptions and any forward-looking statement speak only as of the date on which such description or statement is made, and the Company undertakes no obligation, and specifically declines any obligation, other than that imposed by law, to publicly update or revise any such description or forward-looking statements whether as a result of new information, future events or otherwise.

Market and Economic Risks

Our business is sensitive to general economic, business, and industry conditions.

We are exposed to general economic, business and industry conditions, both in the United States and internationally. Adverse global economic and financial conditions are difficult to predict and mitigate against, and therefore the potential impact is difficult to estimate. The end markets that we serve can be sensitive to changes in general economic conditions and can be volatile, with significant, rapid, and unpredictable reductions in demand. Adverse general economic conditions may cause, among other things, significant reductions in available capital and liquidity from banks and other credit providers, substantial volatility in equity and

currency values worldwide, and/or a prolonged recessionary or slow growth period, each of which may adversely affect our customers' access to capital or ability or desire to acquire or pay for our products. In addition, downturns in our customers' particular industries, even when overall economic conditions are favorable, could adversely affect our sales, profitability, operating results, and cash flows.

Our suppliers may be similarly affected by general economic conditions which may affect their access to capital and liquidity, and which may in turn cause them to raise prices or reduce or eliminate production.

We are subject to the risks of doing business in foreign countries and markets.

We conduct a significant portion of our business in countries outside of the United States. Accordingly, our business is subject to risks related to the differing legal, political, social, regulatory, and economic requirements and conditions. Risks associated with international operations, include, but are not limited to:

- fluctuations in currency exchange rates;
- region to region fluctuations in key raw material costs;
- transportation delays and interruptions;
- political and economic instability and disruptions;
- failure to have or obtain, delays in obtaining, or the revocation of governmental licenses and permits;
- the imposition of duties and tariffs;
- import and export controls;
- government control of capital transactions, including the borrowing of funds for operations or the expatriation of cash;
- difficulties in staffing and managing operations;
- limitations on our ability to enforce legal rights and remedies;
- more stringent environmental, health and safety laws and regulations;
- potentially adverse tax consequences; and
- government expropriation of a business or assets.

Raw material prices and availability have a significant impact on results.

The cost of raw materials has a significant impact on results. The principal raw materials that we use in our business are derived from petrochemicals and chemical feedstocks. The prices of many of these raw materials are cyclical and volatile and are affected by supply and demand factors beyond our control. While we generally attempt to pass along higher raw material costs to our customers in the form of price increases, there historically has been a time delay between an increase in raw material costs and our ability to increase the prices of our products. Additionally, we may not be able to increase the prices of our products due to competitive pricing pressure and other factors.

We generally have multiple global sources of supply for our raw materials. However, in some cases there are a limited number of suppliers that are capable of delivering raw materials that meet our standards and these suppliers generally have greater pricing and supply leverage. Various factors, including feedstock shortages, production disruptions, natural disasters, the financial stability of our suppliers, supplier commitments to others, and internal raw material use by suppliers have reduced and eliminated, and in the future may reduce or eliminate, the availability of certain raw materials. Additionally, disruptions in transportation could delay receipt of raw materials. As a result, higher prices and shortages could occur in the future.

Furthermore, increases in raw material prices or supply uncertainty may result in customers switching to substitutes for our products.

Our industry is highly competitive.

Many of the markets in which we operate are highly competitive. The bases of competition may include product performance and quality, price, product availability, and security of supply and customer service. Some of our competitors are larger and have more financial resources than us. We may also experience increased competition from companies that offer alternative products based on technologies and processes that have superior performance or better pricing, which could cause a decline in the market acceptance of our products. The increasing pressure from our competitors to keep pace and develop new technologies and products requires us to incur substantial expense.

Mergers and acquisitions in various industries continue to create individual customers with greater purchasing power and competitors with greater financial and other resources. Customers in established markets like the United States and Europe face their own competitive pressures, particularly from businesses in regions with lower overhead costs. These competitive pressures may require us to reduce prices and attempt to offset such price reductions with improved operating efficiencies and reduced expenditures, which options may be limited or unavailable. Additionally, larger competitors may be better positioned to weather prolonged periods of reduced prices, which may incentivize them to reduce prices even when not dictated by market and competitive conditions.

The occurrence or threat of extraordinary events, including natural disasters, political disruptions, terrorist attacks, and acts of war, could significantly disrupt production and decrease market demand for our products.

Extraordinary events, including natural disasters, political disruptions, terrorist attacks, public health issues, and acts of war could adversely affect the economy generally, and disrupt our business and operations resulting in a loss of sales and customers. In addition, in many cases we do not have redundant manufacturing or transportation capability and thus, any disruption of production or transportation may result in loss of sales and customers.

Legal, Regulatory, and Compliance Risks

We are subject to extensive and increasing governmental regulation.

Our business is subject to numerous foreign, federal, state and local regulations which govern and restrict numerous aspects of our business and involve significant compliance cost. We expect regulations, and the costs associated with compliance, to continue to increase.

Among these regulations are increasingly stringent environmental and health and safety regulations. The cost of compliance with these regulations is significant and increasing, and violating these regulations can result in substantial costs, including fines, damages, criminal or civil sanctions, remediation costs, and interruptions in our operations. These regulations may also restrict or prohibit our ability to use certain raw materials key to our products or prohibit the sale of our products altogether.

Certain environmental requirements provide for strict, and under certain circumstances joint and several, liability for investigation and remediation of releases of regulated materials into the environment at or from properties owned or operated by us or our predecessors or at or from properties where substances were sent for off-site treatment or disposal.

We may be unable to effectively protect our intellectual property or may be subject to intellectual property claims.

For certain products we rely on trademark, trade secret, patent, and copyright laws to protect our intellectual property. We cannot be sure that these intellectual property rights will be successfully asserted in the future or that they will not be invalidated or circumvented. In addition, the laws of some foreign countries in which our products are or may be sold do not protect our intellectual property rights to the same extent as the laws of the United States. The failure or inability of us to protect our proprietary information could make us less competitive.

From time to time, we may be subject to claims or allegations that we infringe upon or have misappropriated the intellectual property of third parties. Defending against such claims is costly and intellectual property litigation often involves complex questions of fact and law, with unpredictable results. We may be forced to acquire rights to such third-party intellectual property on unfavorable terms (if rights are made available at all), pay damages, modify accused products to be non-infringing, or stop selling the applicable product altogether. Any of the foregoing could have a negative effect on our competitiveness.

We are subject to claims and litigation.

From time to time, we are subject to various claims, proceedings, and lawsuits related to products, services, contracts, employment, environmental, safety, intellectual property, and other matters arising out of our business operations or the business operations of our predecessors. Whether founded or unfounded, if any such claims, proceedings, or lawsuits are not resolved in our favor, they may result in significant financial liability, place significant restrictions on or require significant changes to our business operations, and harm the reputation of the Company and our products. The costs of investigating and defending against claims can be substantial. We may not have applicable insurance coverage, and any such insurance coverage that we do have may be inadequate to cover the full cost of a particular claim.

Resolutions of claims, proceedings, and lawsuits can be unpredictable and can often take years. As a result, any estimates of liability that we may have made could be materially over or understated.

Changes in accounting policies, standards, and interpretations could materially affect how we report our financial condition and results of operations.

The Financial Accounting Standard Board ("FASB"), regulatory agencies, and other bodies that establish accounting standards periodically change the financial accounting and reporting standards governing the preparation of the Company's financial statements. Additionally, those bodies that establish and interpret the accounting standards (such as the FASB and the SEC) may change prior interpretations or positions on how these standards should be applied. These changes can be difficult to predict and can materially affect how the Company records and reports its financial condition and results of operations. In unusual circumstances, the Company could be required to retroactively apply a new or revised standard, resulting in changes to previously reported financial results.

We may be subject to the actions of activist shareholders.

We have been the subject of activity by activist shareholders, and shareholder activism generally is increasing. Responding to shareholder activism can be costly and time-consuming, disrupt our operations, and divert the attention of management and our employees from our strategic initiatives. Activist campaigns can create perceived uncertainties as to our future direction, strategy, or leadership and may result in the loss of potential business opportunities, harm our ability to attract new employees, investors, customers, and joint venture partners, and cause our stock price to experience periods of volatility or stagnation.

Business and Strategic Risks

We may be unable to achieve, or may be delayed in achieving, the objectives and benefits of our cost reduction initiatives.

We have and are undertaking operational excellence improvements using LEAN SixSigma, manufacturing footprint optimization, global supply chain management, Enterprise Resource Planning (ERP) and other initiatives in an effort to improve efficiencies and lower our cost structure. There may be unanticipated difficulties in implementing one or more of these initiatives, and we may not ultimately realize the full benefits of, or be able to sustain the benefits anticipated by, these initiatives. Additionally, even if we achieve these goals, the cost of implementing these initiatives could ultimately exceed their benefits. In addition, certain of these initiatives have resulted in us streamlining and consolidating our manufacturing capacity, increasing the risk of business interruption if a consolidated manufacturing site experiences operational or other difficulties.

Our sales and profitability depend on our ability to develop and commercialize new products at competitive prices.

The highly competitive nature of many of our markets requires that we develop, introduce, sell, and support cost effective new products and technologies on a timely basis and that we make significant investments in research and development to do so. We may be unsuccessful in developing or introducing new products, modifying our existing products, achieving market acceptance of new products, or offering new products at competitive prices.

A significant portion of Performance Chemicals sales is concentrated among several large customers.

Our Performance Chemicals segment has several large customers who account for a significant portion of Performance Chemicals' total sales. The loss of, or a significant reduction in purchases by, any one of these large customers could adversely affect our results.

We are exposed to credit risk from our customers.

We extend credit on most of our sales, which exposes us to the risk of customer nonpayment. In deciding whether to extend credit or enter into other transactions, we may rely on information furnished by or on behalf of customers, including financial statements, credit reports, and other information. We may also rely on representations of these customers or third-parties as to the accuracy and completeness of credit risk related information. The inaccuracy of that information or those representations would affect our ability to accurately evaluate the default risk of a customer. Even with accurate information, negative changes in economic, business, or industry conditions may increase the credit risk of customers who are initially determined to have acceptable credit risk.

We may participate in joint ventures, the success of which depend, in part, on the performance of our joint venture partners.

From time to time, we may participate in joint ventures. In a joint venture, we share business oversight and control with unaffiliated third parties. If our joint venture partners do not fulfill their obligations, the affected joint venture may not be able to operate according to its business plan, requiring us to increase our level of commitment to the joint venture. Differences in views among joint venture participants could result in delayed decisions, failures to agree on major issues, or deviations from established business plans.

We may not be able to identify or complete transactions with attractive acquisition candidates.

As part of our business strategy, we have pursued, and may continue to pursue, targeted acquisition opportunities. Implementing this business strategy requires management to identify and evaluate acquisition candidates (including potential synergies, business opportunities, and growth prospects), and to successfully negotiate the acquisition with the target company and its stakeholders. There are a limited number of attractive acquisition candidates. Even if we identify attractive acquisition candidates we may not be able to pay the required acquisition price. If we complete an acquisition, we may not achieve the anticipated benefits, such as reduced cost or increased revenue.

We may not be able to successfully integrate acquisitions into our operations.

The integration of acquisitions into our operations involves a number of risks, including:

- difficulty integrating operations and personnel at different locations;
- diversion of management attention;
- potential disruption of ongoing business because of the unknown reactions to the combination of OMNOVA and the
 acquisition by customers, suppliers, and other key constituencies;
- difficulties in assimilating the technologies and products of the acquisition;
- · inability to retain key personnel;
- inability to successfully incorporate acquired business components with our existing operational and accounting infrastructure;
- difficulty in expanding product manufacturing to new sites; and
- inability to maintain uniform standards, controls, procedures and policies.

If we are unable to effectively integrate operations and personnel in a timely and efficient manner after an acquisition is completed, we may not realize the projected benefits expected from the acquisition.

We could have unanticipated capital expenditures.

Unanticipated maintenance issues, changes in government regulations, environmental compliance, or significant technology shifts could result in higher than anticipated capital expenditures.

Our business is subject to the risks associated with the use, production, storage, and transportation of chemicals.

Our manufacturing operations are subject to the potential hazards and risks associated with chemical production and the related storage and transportation of products, inventories and wastes, including explosions, fires, inclement weather, natural disasters, mechanical failure, unscheduled downtime, transportation interruptions, releases of hazardous substances and other risks. These hazards can cause personal injury and loss of life, severe damage to, or destruction of, property and equipment and environmental contamination. In addition, the occurrence of material operating problems at our facilities due to any of these hazards may diminish or eliminate our ability to produce product.

Our information systems may experience an interruption or breach in security.

We rely heavily on electronic communications, information systems (both internal and provided by third parties) and the internet to operate our factories, sell our products, fulfill orders, manage inventory, and bill, collect, and make payments. Our systems are vulnerable to damage or interruption from natural disasters, power loss, telecommunication failures, computer viruses, computer denial-of-service attacks, unauthorized intrusion, and other events, any of which could interrupt our business operations. Our business is also subject to break-ins, sabotage, and intentional acts of vandalism.

Cybersecurity attacks can originate from a wide variety of sources, including persons who are linked to terrorist organizations or hostile foreign governments. Those same parties may also attempt to fraudulently induce employees, customers, or other users of our systems to disclose sensitive information in order to gain access to our data or that of our customers.

Our security systems may not be able to protect our systems from attacks or other disruptions due to the rapid evolution and sophistication of cyberattack methods. Any significant disruption or slowdown of our current or future information systems as a result of a system security failure could disrupt the flow of operational information, cause orders to be lost or delayed, damage our reputation with our customers, or cause our customers to cancel orders. Additionally, the theft of sensitive data and our inability to protect trade secrets and personal identifiable information of our employees, customers, or suppliers could have an adverse effect on our business, customers, suppliers, and employees. These risks may increase in the future as we increase our usage of mobile platforms and expand our internal usage of third-party, web-based products and applications.

Employee healthcare costs continue to increase.

We maintain a self-insured healthcare plan under which we generally share the cost of health care with certain of our employees and retirees. Employee healthcare is a significant operating cost for us, and these costs have been escalating well in excess of other inflationary trends over the past decade. If healthcare costs continue to increase, we may not be willing or able to pass those costs on to employees.

We may be unable to retain or attract key employees.

Many parts of our business are highly technical and specialized. Global competition for skilled employees meeting our specialized needs is intense and our business success is dependent on our ability to retain our key employees and to attract highly-qualified new employees. The unanticipated departure of any key member of management or any key employee, or our inability to attract necessary talent, could adversely affect our ability to implement strategic initiatives and effectively operate our business.

We are subject to collective bargaining agreements with certain employees.

Approximately 9.9% of our employees located in the United States are covered by collective bargaining agreements. In addition, certain employees of our foreign operations are also covered by collective bargaining agreements. We may not be able to renew our collective bargaining agreements on terms similar to current terms, or renegotiate collective bargaining agreements on terms acceptable to us. The prolonged failure to renew or renegotiate a collective bargaining agreement could result in work stoppages. Additionally, in foreign jurisdictions where we operate, national unions and foreign governments may be unable to reach agreements, which could result in work stoppages that are out of the Company's control. In addition, if a collective bargaining agreement is negotiated at higher-than-anticipated cost, absorbing those costs or passing them through to customers may make us less competitive.

Our U.S. pension plan is underfunded, requiring the Company to make significant cash contributions to the plan.

The Company's U.S. pension plan is underfunded, and we are required to make significant cash contributions to it to comply with minimum funding requirements imposed by benefit and tax laws. Contribution amounts are based on plan performance, interest rates, and pension funding legislation, among other factors. We currently anticipate that we will make a contribution of \$7.2 million to our U.S. pension plan during 2017, in part to satisfy our requirements under the Pension Protection Act of 2006. We cannot predict whether changing conditions including interest rates, pension assets performance, discount rates, government regulation, or other factors will require us to make future contributions in excess of current expectations, or whether we will have the funds necessary to make minimum pension contributions at the times that they may be required.

We maintain cash balances in foreign financial institutions.

We maintain cash balances in foreign financial institutions. While we monitor the financial institutions that we maintain accounts with, we may not be able to recover our funds in the event that the financial institution would fail. In addition, we may be limited by foreign governments in the amount and timing of funds to be repatriated from foreign financial institutions.

We carry a significant amount of goodwill on our balance sheet.

As of November 30, 2016, we had goodwill of \$80.2 million. The future occurrence of a potential indicator of impairment, such as a significant adverse change in legal factors or business climate, an adverse action or assessment by a regulator, unanticipated competition, a material negative change in relationships with significant customers, strategic decisions made in response to economic or competitive conditions, loss of key personnel or a more-likely-than-not expectation that a reporting unit or a significant portion of a reporting unit will be sold or disposed of, could result in goodwill impairment charges. We have recorded goodwill impairment charges in the past, and such charges materially affected our historical results of operations. For additional information, see Note A, Goodwill and Intangible Assets, to the accompanying consolidated financial statements.

The market price for our common shares is particularly volatile.

The market for our common shares is characterized by significant price volatility, and we expect that our share price will continue to be volatile. The trading of relatively small quantities of our common shares by our stockholders may cause disproportionate movements upwards and downwards in our stock price due to our small market capitalization and low trading volume, and the cyclical nature of our business may create prolonged periods of higher or lower stock prices not correlated to Company performance or to general economic or market conditions.

Debt Risks

Our substantial debt could adversely affect our financial health and prevent us from fulfilling our obligations.

We have substantial debt and, as a result, significant debt service obligations. Our substantial debt could:

- make it more difficult for us to satisfy our obligations with respect to our term loan and our revolving credit facility;
- increase our vulnerability to general adverse economic and industry conditions, including interest rate fluctuations, because a portion of our borrowings, including those under our term loan and our revolving credit facility, are at variable rates of interest;
- require us to dedicate a substantial portion of our cash flow from operations to payments on our debt, thereby reducing the
 availability of our cash flow to fund working capital, capital expenditures, acquisitions, joint ventures, pension contributions
 and investments, and other general corporate purposes;
- limit our flexibility in planning for, or reacting to, changes in our business and the product categories in which we participate;
- limit our ability to obtain additional debt or equity financing due to applicable financial and restrictive covenants in our debt agreements, and;
- place us at a competitive disadvantage compared to our competitors that have less debt.

Our ability to make scheduled payments on or to refinance our debt obligations and to fund planned capital expenditures and expansion efforts and any acquisitions we may make in the future depends on our ability to generate cash in the future and our financial condition and operating performance, which are subject to prevailing economic and competitive conditions and to certain financial, business and other factors beyond our control. We could be required to obtain the consent of the lenders under our term loan and our revolving credit facility to refinance material portions of our debt. We may not be able to maintain a level of cash flows from operating activities sufficient to permit us to pay the principal, premium, if any, and interest on our debt.

If our cash flows and capital resources are insufficient to fund our debt service obligations, we may be forced to reduce or delay investments and capital expenditures, sell assets, seek additional capital, or restructure or refinance our debt. These alternative measures may not be successful and may not permit us to meet our scheduled debt service obligations. If our operating results and available cash are insufficient to meet our debt service obligations, we could face substantial liquidity problems and might be required to dispose of material assets or operations to meet our debt service and other obligations. We may not be able to consummate those dispositions or to obtain the proceeds that we could realize from them, and these proceeds may not be adequate to meet any debt service obligations then due. Additionally, the agreements governing our term loan and our revolving credit facility will limit the use of the proceeds from any disposition; as a result, we may not be allowed, under these documents, to use proceeds from such dispositions to satisfy all current debt service obligations. Further, we may need to refinance all or a portion of our debt on or before maturity, and we cannot assure that we will be able to refinance any of our debt on commercially reasonable terms or at all.

Despite ongoing actions to reduce our debt, we may still be required to incur significant additional debt.

We may be able to incur substantial additional debt, including additional secured debt, in the future. The terms of the agreements governing our term loan and revolving credit facility restrict but do not completely prohibit us from incurring substantial additional debt. If new debt or other liabilities are added to our current debt levels, the related risks that we and our subsidiaries now face could intensify.

The agreements governing our term loan and our revolving credit facility imposes significant operating and financial restrictions on us, which may prevent us from capitalizing on business opportunities.

The agreements governing our term loan and our revolving credit facility impose significant operating and financial restrictions on us. These restrictions limit our ability, among other things, to:

- incur additional debt or issue certain disqualified stock and preferred stock;
- pay dividends or certain other distributions on our capital stock or repurchase our capital stock;
- make certain investments or other restricted payments;
- place restrictions on the ability of our restricted subsidiaries to pay dividends or make other payments to us;
- engage in transactions with affiliates;
- sell certain assets or merge with or into other companies;
- enter into sale and leaseback transactions;
- guarantee debt;
- create liens; and
- enter into unrelated businesses.

Our term loan and revolving credit facility require us to meet certain financial covenants, including covenants relating to senior net debt leverage, minimum excess availability and a springing minimum fixed charge coverage ratio if average excess availability falls below a certain level.

As a result of these covenants and restrictions, we may be limited in how we conduct our business and may be unable to raise additional debt or equity financing to compete effectively or to take advantage of new business opportunities. The terms of any future debt we may incur could include more restrictive covenants. We may not be able maintain compliance with these covenants in the future and, if we fail to do so, we may be unable to obtain waivers from the lenders and/or amend the covenants.

Moreover, our revolving credit facility provides the lenders considerable discretion to impose reserves, which could materially impair the amount of borrowings that would otherwise be available to us. There can be no assurance that the lenders under our revolving credit facility will not impose such actions during the term of our revolving credit facility and further, were they to do so, the resulting impact of this action could materially and adversely impair our ability to make interest payments on our debt.

If we default under our term loan or our revolving credit facility, we may not be able to service our debt obligations.

In the event of a default under our term loan or our revolving credit facility, the lenders under each of these facilities could elect to declare all amounts borrowed, together with accrued and unpaid interest and other fees, to be due and payable. If such acceleration occurs, we may not be able to repay the amounts due under our term loan, or our revolving credit facility. This could have serious consequences to our financial condition and results of operations, and could cause us to become bankrupt or insolvent.

We may not be able to generate sufficient cash to service all of our debt and may be forced to take other actions to satisfy our obligations under our debt, which may not be successful.

Our ability to make scheduled payments on or to refinance our debt obligations and to fund planned capital expenditures and expansion efforts and any strategic alliances or acquisitions we may make in the future depends on our ability to generate cash in the future and our financial condition and operating performance, which are subject to prevailing economic and competitive conditions and to certain financial, business and other factors beyond our control. We will also be required to obtain the consent of the lenders under our term loan and our revolving credit facility to refinance material portions of our debt. We cannot assure that we will maintain a level of cash flows from operating activities sufficient to permit us to pay the principal, premium, if any, and interest on our debt.

If our cash flows and capital resources are insufficient to fund our debt service obligations, we may be forced to reduce or delay investments and capital expenditures, or to sell assets, seek additional capital or restructure or refinance our debt. These alternative measures may not be successful and may not permit us to meet our scheduled debt service obligations. If our operating results and available cash are insufficient to meet our debt service obligations, we could face substantial liquidity problems and might be required to dispose of material assets or operations to meet our debt service and other obligations. We may not be able to consummate those dispositions or to obtain the proceeds that we could realize from them, and these proceeds may not be adequate to meet any debt service obligations then due. Additionally, the agreements governing our term loan and our revolving credit facility will limit the use of the proceeds from any disposition; as a result, we may not be allowed, under these documents, to use proceeds from such dispositions to satisfy all current debt service obligations. Further, we may need to refinance all or a portion of our debt on or before maturity, and may not be able to refinance any of the debt on commercially reasonable terms or at all.

Our subsidiaries may incur obligations that will constrain the ability of our subsidiaries to provide us with cash, which may affect our ability to make payments on our debt.

Our cash flows and our ability to service our debt, including our ability to make interest and principal payments when due, will be dependent upon cash dividends and other distributions or other transfers from our subsidiaries. Dividends, loans, and advances to us from our subsidiaries may be restricted by covenants in certain debt agreements. If our subsidiaries incur obligations with these restrictive covenants, it will constrain the ability of our subsidiaries to provide us with cash, which may affect our ability to make payments on our debt.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

The Company's significant operating, manufacturing, distribution, research, design and/or sales, and marketing facilities are set forth below:

Corporate Headquarters:

OMNOVA Solutions Inc.

25435 Harvard Road

Beachwood, OH

OMNOVA Solutions

Global Technology Center

2990 Gilchrist Road

Akron, OH

Performance Chemicals:

Headquarters: Manufacturing/Technical/ Sales/Marketing: 25435 Harvard Road Distribution Facilities: *Beachwood, OH Beachwood, OH Akron, OH *Mumbai, India Calhoun, GA *Shanahai, China Caojing, China *Singapore Chester, SC Villejust, France Fitchburg, MA Green Bay, WI Le Havre, France

Mogadore, OH Ningbo, China Stafford, TX

Engineered Surfaces:

Headquarters: Manufacturing/Technical/ Sales/Marketing/Design: 25435 Harvard Road Distribution Facilities: Akron, OH *Beachwood, OH Beachwood, OH Auburn, PA *Columbus, MS *Bangkok, Thailand Jeannette, PA *Rayong, Thailand Minhang, China *Shanghai, China Monroe, NC

* Leased property.

For further discussion of our leased properties, please refer to Note N to the Consolidated Financial Statements of this report.

*Rayong, Thailand

Item 3. Legal Proceedings

From time to time, the Company is subject to various claims, proceedings and lawsuits related to products, services, contracts, employment, environmental, safety, intellectual property, and other matters. The ultimate resolution of such claims, proceedings, and lawsuits is inherently unpredictable and, as a result, the Company's estimates of liability, if any, are subject to change. Actual results may materially differ from the Company's estimates and an unfavorable resolution of any matter could have a material adverse effect on the financial condition, results of operations, and/or cash flows of the Company. However, subject to the above and taking into account such amounts, if any, as are accrued from time to time on the Company's balance sheet, the Company does not believe, based on the information currently available to it, that the ultimate resolution of these matters will have a material effect on the consolidated financial condition, results of operations, or cash flows of the Company.

Item 4. Mine Safety Disclosures

None.

PART II

Item 5. Market for Registrant's Common Equity, Related Shareholder Matters and Issuer Purchases of Equity Securities

The Company's common shares are listed on the New York Stock Exchange and trade under the symbol OMN. At November 30, 2016, there were 5,773 holders of record of the Company's common shares. Information regarding the high and low quarterly sales prices of the Company's common share is contained in the Quarterly Financial Data (Unaudited) and is incorporated herein by reference. The Company has not declared a dividend on its common shares since 2001.

The following table summarizes the Company's repurchases of its common shares for the three months ended November 30, 2016.

Month	Total Number of shares Average price repurchased ^(a) share		Total number of shares purchased as part of publicly announced plans or programs	Maximum dollar value of shares that may yet be purchased under the plans or programs
September 1—30	750	\$9.66	_	_
October 1—31	750	\$7.09	_	_
November 1—30	8,863	\$7.83	_	_
Total	10,363	\$8.58		

⁽a) During 2014, the Company's Board of Directors authorized the repurchase of up to \$20.0 million of the Company's common stock, which expired on October 31, 2015. Subsequent share repurchases resulted from common shares deemed surrendered by employees in connection with the Company's stock compensation and benefit plans to satisfy tax obligations.

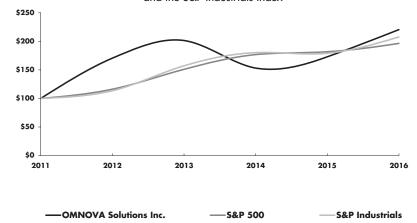
Information concerning long-term debt appears in Note L to the Consolidated Financial Statements and is incorporated herein by reference.

Information concerning securities authorized for issuance under the Company's equity compensation plans is set forth in Equity Compensation Plan Information of Item 12 in this Annual Report is incorporated herein by reference.

The graph below matches OMNOVA Solutions Inc.'s cumulative 5-Year total shareholder return on common stock with the cumulative total returns of the S&P 500 index and the S&P Industrials index. The graph tracks the performance of a \$100 investment in our common stock and in each index (with the reinvestment of all dividends) from 11/30/2011 to 11/30/2016.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*

Among OMNOVA Solutions Inc., the S&P 500 Index and the S&P Industrials Index



^{*\$100} invested on 11/30/11 in stock or index, including reinvesment of dividends. Fiscal year ending November 30.

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	November 30,									
	2011	2012	2013	2014	2015	2016				
OMNOVA Solutions Inc.	\$100.00	\$170.57	\$201.38	\$153.56	\$172.87	\$220.69				
S&P 500	\$100.00	\$116.13	\$151.32	\$176.83	\$181.69	\$196.33				
S&P Industrials	\$100.00	\$113.80	\$1.57.47	\$180.55	\$179.33	\$207.82				

Item 6. Selected Financial Data

The following table sets forth the Company's selected historical financial data for all periods presented. The selected historical financial data as of November 30, 2016, 2015, 2014, 2013, 2012, and for each of the five years in the period ended November 30, 2016 are derived from the Company's audited consolidated financial statements.

	2016		2015		2014		4 2013			2012
			(Dollars in milli		nillions, except p		except per share data)			
Statement of operations data:					_				4.	1055
Net Sales	\$	759.9	\$	838.0	\$	987.4	\$1	,018.1	\$1	,125.5
Cost of goods sold (exclusive of depreciation)		556.0	_	644.1	_	788.0		805.4	_	898.3
Gross profit		203.9		193.9		199.4		212.7		227.2
Selling, general, and administrative		118.5		119.3		120.2		118.1		121.2
Depreciation and amortization		30.6		34.0		34.8		33.6		32.0
Asset impairment(1)		5.7		19.4		_		.2		1.0
Loss (gain) on asset sales ⁽²⁾		.3		.2		.5		(4.9)		_
Restructuring and severance ⁽³⁾		11.1		5.9		.9		7.1		1.0
Interest expense		24.7		28.3		32.9		31.9		36.5
Acquisition and integration related expense		.9 2.9		.4		.8		1.5		_
Debt issuance costs write-off ⁽⁶⁾ Other (income) expense, net ⁽⁴⁾		2.9 (.7)		.6 6.9		.8 (2.4)		(1.3)		(1.4)
Office (income) expense, fiel							_		_	<u> </u>
	_	194.0		215.0	_	187.7	_	186.2	_	190.3
Income (loss) from continuing operations before income taxes		9.9		(21.1)		11.7		26.5		36.9
Income tax (expense) benefit ⁽⁵⁾		(10.3)	_	2.4	_	.4	_	(6.0)	_	(11.2)
Income (loss) from continuing operations		(.4)		(18.7)		12.1		20.5		25.7
Gain (loss) from operations		_		.9		(.6)		(.9)		(4.1)
Gain on sale		_		_		_		_		6.0
Income (loss) from discontinued operations				.9	_	(.6)		(.9)		1.9
Net income (loss)	\$	(.4)	\$	(17.8)	\$	11.5	\$	19.6	\$	27.6
Basic income (loss) per share:					=		_		=	
Income (loss) from continuing operations	\$	(.01)	\$	(.41)	\$.26	\$.44	\$.56
Income (loss) from discontinued operations	Ψ	(.01)	Ψ	.02	Ψ	(.01)	Ψ	(.02)	Ψ	.05
Net income (loss) per share	\$	(.01)	\$	(.39)	\$.25	\$.42	\$.61
	<u> </u>		Ψ	(.57)	=		Ψ	.42	=	
Diluted income (loss) per share:										
Income (loss) from continuing operations	\$	(.01)	\$	(.41)	\$.26	\$.44	\$.56
Income (loss) from discontinued operations			_	.02	_	(.01)	_	(.02)	_	.04
Net income (loss) per share	\$	(.01)	\$	(.39)	\$.25	\$.42	\$.60
General:				_		_				
Capital expenditures	\$	25.6	\$	24.0	\$	29.8	\$	28.9	\$	32.8
Total assets	\$	693.2	\$	687.2	\$	829.2	\$	854.7	\$	873.7
Long-term debt ⁽⁶⁾	\$	366.0	\$	357.2	\$	409.2	\$	447.0	\$	442.6
<u>Cash</u>	\$	78.0	\$	44.9	\$	99.5	\$	164.9	\$	148.5

⁽¹⁾ During 2016, the Company recognized asset impairment charges of \$5.7 million, primarily related to a write-down of the assets of its Engineered Surfaces China Coated Fabrics Business. During 2015, the Company recognized asset impairment charges of \$19.4 million, primarily related to the write-down of the assets of its India business (see Management's Discussion and Analysis of Financial Condition and Results of Operations), a \$0.6 million impairment on Corporate facilities, and \$0.5 million impairment on certain assets no longer used. During 2013, the Company recognized intangible asset impairment charges of \$0.2 million to write down the value of one of its trademarks to fair value. During 2012, the Company recognized asset impairment charges of \$1.0 million to write down the value of its Columbus, Mississippi facility and to write off other assets no longer used.

- (2) During 2013, (gain) loss on asset sales primarily relates to the sale of equipment and plants in Columbus, Mississippi and Taicang, China.
- (3) Restructuring and severance consisted primarily of severance costs of \$8.4 million and facility closure costs of \$2.7 million in 2016, severance expense of \$5.9 million in 2015, and severance and closure costs of \$0.9 million in 2014, and facility closure costs of \$2.6 million and severance costs of \$4.5 million in 2013, and \$1.0 million in 2012.
- (4) Included in 2015 are operational development costs of \$5.4 million, environmental remediation costs of \$3.0 million, and shareholder activist costs of \$1.9 million, which was partially offset by gains on foreign currency transactions of \$1.5 million, sales of scrap material of \$1.1 million, and net other income items of \$0.8 million.
- (5) As of November 30, 2016, the Company's income tax expense was \$10.3 million or a 104.0% effective tax rate. During the fourth quarter of 2016, the Company recorded \$2.2 million tax expense related to the payment of an intercompany dividend, \$1.6 million tax expense related to a newly enacted French deemed distribution tax, and \$1.9 million tax expense for foreign valuation allowance on deferred tax assets in which no benefit can be realized. During 2014, the Company reversed a valuation allowance of \$6.9 million related to capital loss carryforwards in the U.S.
- (6) Included in 2016, 2015, and 2014 is \$16.8 million, \$17.2 million, and \$17.6 million, respectively, for capital leases. During 2016, the Company refinanced U.S. debt facilities, issuing a \$350 million Term Loan B and redeeming all of its outstanding Senior Notes for which it wrote-off \$2.9 million of related deferred financing fees. During 2015, the Company prepaid \$50.0 million of its Senior Notes for which it incurred \$1.0 million in premium fees which is included in interest expense and wrote-off \$0.6 million of related deferred financing fees. Also, during 2014, the Company prepaid \$50.0 million of its Senior Notes for which it incurred \$2.0 million in premium fees which is included in interest expense and wrote-off \$0.8 million of related deferred financing fees.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

Overview

The Company is an innovator of performance-enhancing chemistries and surfaces for a variety of commercial, industrial, and residential end uses. As discussed in Item 1. Business, during fiscal 2016, the Company operated in two reportable business segments: Performance Chemicals and Engineered Surfaces. The Performance Chemicals segment produces a broad range of emulsion polymers and specialty chemicals based primarily on styrene butadiene (SB), styrene butadiene acrylonitrile (SBA), styrene butadiene vinyl pyridine, nitrile butadiene (NBR), polyvinyl acetate, acrylic, styrene acrylic, vinyl acrylic, glyoxal, fluorochemical and bio-based chemistries. Performance Chemicals' custom-formulated products include latices, hollow plastic pigments, resins, binders, adhesives, specialty rubbers, antioxidants and elastomeric modifiers which are used in oil and gas drilling and production, specialty coatings, carpet, paper and packaging, nonwovens, construction, adhesives, tape, tires, floor care, textiles, graphic arts, polymer stabilization, industrial rubbers & thermoplastics, synthetic gloves and various other specialty applications. The Engineered Surfaces segment develops, designs, produces, and markets a broad line of functional and decorative surfacing products, including coated fabrics, vinyl, paper, and specialty laminates, and industrial films. These products are used in numerous applications, including commercial building refurbishment, remodeling and new construction, kitchen and bath cabinets, transportation including automotive, truck, bus and other mass transit, marine and motorcycle, recreational vehicles and manufactured housing, flooring, commercial and residential furniture, retail display fixtures, home furnishings and commercial appliances, and industrial films for flooring, banners, tents, and ceiling tiles. Refer to Item 1. Business, of this Annual Report on Form 10-K for further description of and background on the Company's operating segments.

The Company primarily sells its products directly to manufacturers and has manufacturing facilities strategically located in the United States, France, China, and Thailand.

The Company has historically experienced stronger sales and income in its second, third, and fourth quarters, comprised of the three-month periods ending May 31, August 31, and November 30. The Company's performance in the first quarter (December through February) has historically been impacted due to generally lower levels of customer manufacturing, construction, and refurbishment activities during the holidays and cold weather months.

The Company's Chief Operating Decision Maker ("CODM"), its Chief Executive Officer ("CEO"), evaluates performance and allocates resources by operating segment. Segment information has been prepared in accordance with authoritative guidance promulgated by the FASB. The Company's two operating segments were determined based on products and services provided. Accounting policies of the segments are the same as those described in Note A—Description of Business and Significant Accounting Policies of the Company's Consolidated Financial Statements. For a reconciliation of the Company's segment operating performance information, refer to Note P of the Company's Consolidated Financial Statements.

Effective December 1, 2016, the Company announced the appointment of a new Chief Executive Officer, who also is the Company's CODM. On January 20, 2017, the Company announced that it is currently evaluating how it expects to make

decisions, assess performance and allocate resources prospectively. Going forward, the Company expects to have two operating segments: one focused on its specialty businesses and one focused on the Company's more mature businesses. Accordingly, during the first quarter of fiscal 2017, the Company will be assessing its segment reporting, as defined under Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 280, Segment Reporting, and expects any changes to its reportable segments to be disclosed and reflected in the Company's consolidated financial statements for the second quarter of fiscal 2017.

A majority of the Company's raw materials are derived from petrochemicals and chemical feedstocks where prices are cyclical and volatile. Generally, the Company attempts to pass along increased raw material prices to customers in the form of price increases of its products. However, due to sales contracts with certain customers, there may be a time delay between increased raw material prices and the Company's ability to increase the prices of its products. Additionally, the Company may also experience, from time to time, competitive price pressures and other factors which may not allow it to increase the prices of its products.

OMNOVA's Performance Chemicals segment had sales price index contracts related to approximately 42% of its sales in 2016 and approximately 40% of its sales in 2015. Customers with sales price index contracts are primarily in the Performance Materials product line. The index is generally comprised of a negotiated, fixed amount per pound and the market price of key raw materials (i.e. styrene and butadiene). The contract mechanisms generally allow for the pass-through of the changes, either increases or decreases, in the prices of key raw materials within a 30 to 60 day period. Contracts vary in length from 12 to 36 months.

The remainder of Performance Chemicals' sales are not indexed. OMNOVA periodically negotiates with each customer regarding pricing changes based on the raw material components and the value-added and performance attributes of OMNOVA's product. OMNOVA's pricing objective, which may or may not be met, is to recover raw material price increases within a 30 to 60 day period.

Styrene, a key raw material component, is generally available worldwide, and OMNOVA has supply contracts with several producers. OMNOVA believes there is adequate global capacity to serve demand. OMNOVA's styrene purchases for 2013 through 2016 and the range of market prices are as follows:

	Pounds Purchased (in millions)	Market Price Range Per Pound
2016	144	\$0.39 - \$0.54
2015	166	\$0.41 - \$0.68
2014	1 <i>77</i>	\$0.69 - \$0.84
2013	172	\$0.71 - \$0.93

Butadiene, a key raw material component, is generally available worldwide, but its price is volatile. OMNOVA has supply contracts with several producers. At times, when the demand for butadiene exceeds supply, it is sold on an allocated basis. OMNOVA's butadiene purchases for 2013 through 2016 and the range of market prices are as follows:

	Pounds Purchased (in millions)	Market Price Range Per Pound
2016	111	\$0.24 - \$0.71
2015	132	\$0.29 - \$0.65
2014	142	\$0.55 - \$0.82
2013	139	\$0.44 - \$1.01

OMNOVA's Engineered Surfaces segment does not generally utilize sales price index contracts with its customers; rather, it negotiates pricing with each customer. OMNOVA's pricing objective, which may or may not be met, is to recover raw material price increases within a 90 day period. Key raw materials utilized by the Engineered Surfaces segment include polyvinyl chloride (PVC) resins, textiles, and plasticizers. These raw materials are generally readily available worldwide from multiple suppliers.

Key Indicators

Key economic measures relevant to the Company include global economic growth rates, discretionary spending for durable goods, print advertising, oil and gas consumption and drilling levels, U.S. commercial real estate occupancy rates, U.S. office furniture sales, manufactured housing shipments, housing starts and sales of existing homes, and forecasts of raw material pricing for certain petrochemical feed stocks. Key Original Equipment Manufacturer ("OEM") industries, which provide a general indication of demand drivers to the Company, include paper, commercial and residential construction and refurbishment, automotive and tire production, furniture, flooring, and ABS manufacturing. These measures provide general information on trends relevant to the demand for the Company's products, but the trend information does not necessarily directly correlate with demand levels in the markets which ultimately use the Company's products in part because the Company's market share is relatively small in a number of specialty markets.

Key operating measures utilized by the business segments include: orders; sales and pricing; working capital days; inventory; productivity; plant utilization; new product vitality; cost of quality; order fill-rates, which provide key indicators of business trends; and safety and other internal metrics. These measures are reported on various cycles including daily, weekly and monthly, depending on the needs established by operating management.

Key financial measures utilized by management to evaluate the results of its businesses and to understand the key variables impacting the current and future results of the Company include sales and pricing; gross profit; selling, general, and administrative expenses; adjusted operating profit; adjusted net income; consolidated earnings before interest, taxes, depreciation, and amortization ("EBITDA") as set forth in the Net Leverage Ratio in the Company's \$350,000,000 Term Loan Credit Agreement; Adjusted EBITDA, working capital; operating cash flows; capital expenditures; cash interest expense; adjusted earnings per share; and applicable ratios, such as inventory turnover; working capital turnover; return on sales and assets; and leverage ratios. These measures, as well as objectives established by the Board of Directors of the Company, are reviewed at monthly, quarterly, and annual intervals and compared with historical periods.

Results of Operations of 2016 Compared to 2015

The Company's net sales in 2016 were \$759.9 million, compared to \$838.0 million in 2015. Excluding year-over-year non-comparable sales of \$24.3 million from the divested India business in the first quarter of 2016, sales decreased \$53.8 million or 6.4%. The Performance Chemicals business segment revenue decreased by 9.8% and the Engineered Surfaces business segment revenue decreased by 8.2%. Contributing to the net sales decrease in 2016 were sales volumes that were lower by \$30.0 million, or 3.6%, a reduction in customer pricing of \$15.4 million, and unfavorable currency exchange translation effects of \$8.4 million. The pricing decline was primarily due to lower raw material costs and their related impact on pricing index formulas in certain markets of Performance Materials. The lower volume was driven primarily by market weakness in paper, carpet, coated fabrics, nonwovens and India, which were only partially offset by improved volumes in specialty coatings, oil and gas, industrial rubber, laminates, food service and tire cord.

Gross profit and gross profit margin in 2016 were \$203.9 million and 26.8%, compared to \$193.9 million and 23.1% in 2015. The higher gross profit margin was primarily due to favorable product mix, and lower manufacturing costs as a result of manufacturing footprint initiatives, which were partially offset by unfavorable volumes and unfavorable currency effects. Also, included in gross profit is favorable year-over-year inventory valuation adjustments of \$2.9 million.

Selling, general, and administrative expense in 2016 decreased \$0.8 million to \$118.5 million, compared to \$119.3 million in 2015. The decrease in 2016 reflects savings from cost reduction programs implemented during the year, partially offset by higher employee incentive compensation expense.

Interest expense was \$24.7 million and \$28.3 million for 2016 and 2015, respectively. Included in 2015 is \$1.0 million of premiums paid on the early redemption of \$50.0 million of the \$250.0 million Senior Notes in each of 2015 and 2014.

Income tax expense was \$10.3 million in 2016, or a 104.0% effective income tax rate, compared to an income tax benefit of \$2.4 million, or an 11.4% effective tax rate, for 2015. The 2016 effective tax rate was higher than the statutory income tax rate of 35% primarily as a result of a 22.2% tax expense related to the payment of an intercompany dividend and a 16.1% tax expense

related to a newly enacted French deemed distribution tax. The intercompany dividend and the enactment of the French deemed distribution tax were both fourth quarter events. Neither item had a current year cash tax impact. It is also expected that the \$1.6 million tax expense related to the French deemed distribution tax legislation will reverse in the first quarter of 2017 as the law was repealed in late December of 2016. An 18.8% tax expense was also recorded for foreign valuation allowances on deferred tax assets in which no benefit can be realized. In addition, the Company realized a 10.5% tax benefit related to foreign taxes in jurisdictions in which the tax rate is lower than the US federal statutory rate. The 2015 effective tax rate was lower than the statutory income tax rate of 35% primarily related to a tax benefit of 29.3% related to an impairment which is permanently non-deductible for tax purposes. This was partially offset by a 14.8% tax expense related to foreign taxes in jurisdictions in which the tax rate is lower than the statutory rate of 35%.

Cash tax payments in the U.S. are expected to be minimal for the foreseeable future as the Company has \$92.0 million of U.S. federal net operating loss carryforwards ("NOLC's"), \$108.7 million of state and local NOLC's, \$0.1 million of foreign tax credit carryforwards, and \$0.7 million of AMT credit carryforwards. The \$108.7 million of state and local NOLC's have a realizable deferred tax asset value of \$3.8 million. The Company utilized approximately \$15.5 million and \$7.8 million of federal net operating loss carryforwards for the years ended November 30, 2016 and 2015, respectively. The majority of the federal, state, and local net operating loss carryforwards have expirations between tax years 2021 and 2034.

The Company has not provided for U.S. income taxes on certain of its non-U.S. subsidiaries' undistributed earnings as such amounts are considered permanently reinvested outside the U.S. To the extent that foreign earnings previously treated as permanently reinvested are repatriated, the related U.S. tax liability may be reduced by any foreign income taxes paid on these earnings. However, based on the Company's policy of permanent reinvestment, it is not practicable to determine the U.S. federal income tax liability, if any, which would be payable if such earnings were not permanently reinvested. As of November 30, 2016, the non-U.S. subsidiaries have a cumulative unremitted foreign income position of \$46.1 million.

The Company incurred a loss from continuing operations of \$0.4 million, or \$0.01 per diluted share, in 2016, compared to a loss from continuing operations of \$18.7 million, or \$0.41 per diluted share, in 2015. Included in 2016 are restructuring and severance charges of \$8.4 million, asset impairment charges of \$5.7 million related to the Coated Fabrics China facility, debt issuance cost write-off of \$4.9 million, accelerated depreciation expense of \$3.0 million and facility closure costs of \$2.7 million, which were partially offset by favorable adjustments of \$2.9 million related to operational and other improvement items. Included in 2015 are restructuring and severance charges of \$5.9 million, accelerated depreciation expense of \$5.8 million, asset impairments of \$19.4 million, operational improvement and shareholder activist costs of \$7.3 million, environmental reserve costs of \$3.0 million, premium fees and debt issuance cost write-off of \$1.6 million and acquisition expense and other items of \$1.6 million.

Segment Discussion

The following Segment Discussion presents information used by the Company in assessing the results of operations by business segment. The Company believes that this presentation is useful for providing the investor with an understanding of the Company's business and operating performance because these measures are used by the CODM, its CEO, in evaluating performance and allocating resources.

	Year Ended November 30,	
	2016	2015
	(Dollars in	millions)
Segment Sales:		
Performance Chemicals	* 00 / 1	* 001.0
Performance Materials	\$284.1	\$331.0
Specialty Chemicals	264.7	277.1
Total Performance Chemicals	\$548.8	\$608.1
Engineered Surfaces		
Coated Fabrics	\$ 71.5	\$ 87.8
Laminates and Performance Films	139.6	142.1
Total Engineered Surfaces	211.1	229.9
Consolidated Net Sales	\$759.9	\$838.0
Segment Gross Profit:		
Performance Chemicals	\$145.6	\$133.4
Engineered Surfaces	58.3	60.5
Consolidated Gross Profit	\$203.9	\$193.9
	Ψ203.7 =====	Ψ173.7
Segment Operating Profit:	A 550	* 150
Performance Chemicals	\$ 55.9	\$ 15.9
Engineered Surfaces	12.4 (24.7)	18.9 (28.3)
Interest expense	(25.8)	(23.7)
Corporate severance	(4.9)	(20.7)
Shareholder activist costs	_	(1.9)
Operational improvement costs	.8	(.4)
Asset impairment	_	(.6)
Debt issuance costs	(2.9)	(.6)
Acquisition and integration related expenses	(.9)	(.4)
Consolidated income (loss) from continuing operations before income taxes	\$ 9.9	<u>\$ (21.1)</u>

Performance Chemicals

Performance Chemicals' net sales decreased \$59.3 million, to \$548.8 million in 2016, compared to \$608.1 million in 2015. The divestiture of the India operations in February 2016 resulted in a reduction of net sales of \$24.3 million. Also contributing to the decrease were reduced customer pricing of \$13.0 million, or 2.1%, driven by lower contract-based index prices as a result of lower raw material costs, lower volumes that were unfavorable by \$16.3 million, and unfavorable foreign currency translation effects of \$5.7 million. Lower volumes, driven primarily by market weakness in paper, carpet and nonwovens, were partially offset by improved volumes in specialty coatings, antioxidants, construction materials, industrial rubber, and tire cord. Net sales for the Performance Materials product line decreased \$46.9 million, to \$284.1 million in 2016, compared to \$331.0 million in 2015. Net sales for the Specialty Chemicals product line decreased \$12.4 million, to \$264.7 million in 2016, compared to \$277.1 million in 2015.

Performance Chemicals' gross profit and gross profit margin were \$145.6 million and 26.5% in 2016, compared to \$133.4 million and 21.9% in 2015. The increase in gross profit margin was due primarily to growth in higher margin specialty products, lower costs realized from previously implemented cost reduction initiatives, and lower raw material costs. Included in gross profit is a favorable net inventory revaluation adjustment of \$0.3 million for 2016, compared to an unfavorable adjustment of \$0.9 million for 2015.

This segment generated an operating profit of \$55.9 million in 2016, compared to \$15.9 million in 2015. The increase in segment operating profit was due in part to effective cost reductions and lower raw material costs, which offset volume declines. In 2015, the segment's operating profit was impacted primarily by the segment wide restructuring initiative and the asset impairment charge recorded for the segment's India operation. Management excludes these and other items when evaluating segment performance. Those items for 2016 were \$6.5 million and included \$3.0 million of accelerated depreciation expense, \$2.9 million of severance charges, and facility closure costs of \$2.5 million, partially offset by favorable adjustments of \$1.9 million related to operational and other improvement items. Those items for 2015 included an asset impairment charge of \$18.4 million primarily related to the sale of the Company's India business, \$5.8 million of accelerated depreciation expense, \$5.0 million of operational improvement costs related to manufacturing footprint improvements, \$4.3 million of severance charges and environmental remediation charges of \$2.8 million. The segment operating profit was also impacted by volume declines and pricing declines which were offset by margin expansion, favorable mix and improvements in manufacturing operations.

Engineered Surfaces

Engineered Surfaces' net sales decreased \$18.8 million, to \$211.1 million in 2016, compared to \$229.9 million in 2015. The decrease was due primarily to lower volumes of \$13.6 million, unfavorable foreign currency translation effects of \$2.7 million, and unfavorable pricing of \$2.5 million. Coated Fabrics' net sales decreased \$16.3 million to \$71.5 million in 2016 compared to \$87.8 million in 2015, primarily due to lower volume in the China automotive market. Net sales for the Laminates and Performance Films product lines decreased, \$2.5 million, to \$139.6 million in 2016, compared to \$142.1 million in 2015, as sales improvements in recreational vehicles and food services were offset by weakness in other markets.

Engineered Surfaces' gross profit and gross margin were \$58.3 million and 27.6% in 2016, compared to \$60.5 million and 26.3% in 2015. The decrease in 2016 was primarily due to the lower volumes primarily in the China Coated Fabrics market, and lower pricing as a result of lower raw material costs. Included in gross profit is a favorable net inventory revaluation adjustment of \$1.5 million for 2016, compared to an unfavorable adjustment of \$0.2 million for 2015.

Segment operating profit was \$12.4 million for 2016, compared to \$18.9 million for 2015. The decrease in segment operating profit was due primarily to the lower volume. Segment operating profit includes items which management excludes when evaluating the results of the Company's segments. Those items for 2016 include asset impairment charges of \$5.7 million related to the China Coated Fabrics plant, workforce reduction actions of \$0.6 million, environmental costs of \$0.3 million, and favorable adjustments of \$1.2 million related to operational and other improvement items. Those items for 2015 include workforce reduction actions of \$1.5 million, European restructuring and inventory write-down charges of \$1.6 million, and environmental remediation charges of \$0.2 million.

Interest and Corporate

Interest expense was \$24.7 million and \$28.3 million for 2016 and 2015, respectively. In connection with the Company's refinancing of its term loan credit facility in August of 2016, the Company placed \$156.0 million of the proceeds of the term loan into trust, with the funds irrevocably committed to the redemption of all of the Company's outstanding Senior Notes on November 1, 2016. The funds placed into trust reflected the \$150.0 million of outstanding principal of the Senior Notes, and the accrued but unpaid interest for the Senior Notes through November 1, 2016. Although the Company incurred \$1.9 million of additional interest expense between August and November 2016, the amount of additional interest expense was less than the cost of the early redemption premium that the Company would have incurred by redeeming the Senior Notes in August 2016. Included in 2015 was \$1.0 million of premiums paid on the early redemption of \$50.0 million of the \$250.0 million outstanding Senior Notes.

Corporate expenses were \$25.8 million in 2016 compared to \$23.7 million in 2015. The increase is due primarily to higher employee incentive compensation costs.

Results of Operations of 2015 Compared to 2014

The Company's net sales in 2015 were \$838.0 million, compared to \$987.4 million in 2014. The Performance Chemicals business segment revenue decreased by 18.5% and the Engineered Surfaces business segment revenue decreased by 4.6%. Contributing to the net sales decrease in 2015 were sales volumes that were lower by \$52.5 million, or 5.3%, a reduction in customer pricing of \$71.6 million, and unfavorable currency exchange translation effects of \$25.5 million. The pricing decline was primarily due to lower raw material costs and their related impact on pricing index formulas in certain markets of Performance Chemicals. The lower volume was driven primarily by market weakness in paper, carpet, coated fabrics, and oil and gas, which were only partially offset by improved volumes in specialty coatings, nonwovens, industrial rubber, laminates and tire cord.

Gross profit and gross profit margin in 2015 were \$193.9 million and 23.1%, compared to \$199.4 million and 20.2% in 2014. The higher gross profit margin was primarily due to expanding margins, partially offset by unfavorable volumes and unfavorable year-over-year inventory valuation adjustments of \$3.5 million and unfavorable currency effects.

Selling, general, and administrative expense in 2015 decreased \$0.9 million, to \$119.3 million, compared to \$120.2 million in 2014. The decrease in 2015 reflects savings from cost reduction programs implemented during the year.

Interest expense was \$28.3 million and \$32.9 million for 2015 and 2014, respectively. Included in 2015 and 2014 is \$1.0 million and \$2.0 million, respectively, of premiums paid on the early redemption of \$100.0 million of the \$250.0 million outstanding Senior Notes (\$50.0 million redeemed in November 2015 and \$50.0 million redeemed in November 2014).

Income tax benefit was \$2.4 million in 2015, or a 11.4% effective income tax rate, compared to an income tax benefit of \$0.4 million, or a 3.4% effective tax rate, for 2014. The higher tax rate in 2015 was primarily due to increased jurisdictional losses in 2015. These losses were primarily related to the Company's restructuring expenses and debt prepayment costs which were partially offset by permanently non-deductible impairment charges. Cash tax payments in the U.S. are expected to be minimal for the next few years as the Company has \$107.4 million of U.S. federal NOLCs, \$112.4 million of state and local net operating loss carryforwards, \$0.2 million of foreign tax credit carryforwards, and \$0.4 million of AMT credit carryforwards. The \$112.4 million of state and local NOLCs have a related realizable deferred tax asset value of \$4.4 million. During the year ended November 30, 2015, the Company utilized approximately \$8.2 million of federal net operating loss carryforwards. The majority of the federal, state, and local net operating loss carryforwards have expirations between tax years 2021 and 2034.

The Company has not provided for U.S. income taxes on certain of its non-U.S. subsidiaries' undistributed earnings as such amounts are considered permanently reinvested outside the U.S. To the extent that foreign earnings previously treated as permanently reinvested are repatriated, the related U.S. tax liability may be reduced by any foreign income taxes paid on these earnings. However, based on the Company's policy of permanent reinvestment, it is not practicable to determine the U.S. federal income tax liability, if any, which would be payable if such earnings were not permanently reinvested. As of November 30, 2015, the non-U.S. subsidiaries have a cumulative unremitted foreign loss position of \$6.4 million.

The Company incurred losses from continuing operations of \$18.7 million, or \$0.41 per diluted share, in 2015, compared to income of \$12.1 million, or \$0.26 per diluted share, in 2014. Included in 2015 are restructuring and severance charges of \$5.9 million, accelerated depreciation expense of \$5.8 million, asset impairments of \$19.4 million, operational improvement and shareholder activist costs of \$7.3 million, environmental reserve costs of \$3.0 million, premium fees and debt issuance cost write-off \$1.6 million and acquisition expense and other items of \$1.6 million. Included in 2014 are premium fees and deferred financing costs write-offs of \$3.2 million, environmental reserve charges of \$1.0 million, corporate headquarters relocation expense of \$0.6 million, and a gain on the settlement of notes receivable of \$1.1 million.

Seament Discussion

The following Segment Discussion presents information used by the Company in assessing the results of operations by business segment. The Company believes that this presentation is useful for providing the investor with an understanding of the Company's business and operating performance because these measures are used by the CODM, its CEO, in evaluating performance and allocating resources.

The following table reconciles segment sales to consolidated net sales and segment operating profit (loss) to consolidated income before income taxes. During the second quarter of 2015, the Performance Chemicals segment realigned certain product

groupings to better optimize and integrate cross-functional business team structures in order to support business growth. This resulted in an increase in sales of \$107.4 million and \$115.6 million to the Performance Materials product line for 2014 and 2013, respectively, with a corresponding decrease to the Specialty Chemicals product line. All prior period amounts have been recast to conform with current presentation.

	Year Ended November 30,		
	2015	2014	
	(Dollars in	n millions)	
Segment Sales: Performance Chemicals			
Performance Materials	\$331.0	\$423.9	
Specialty Chemicals	277.1	322.6	
Total Performance Chemicals Engineered Surfaces	\$608.1	\$746.5	
Coated Fabrics	\$ 87.8	\$ 98.4	
Laminates and Performance Films	142.1	142.7	
Total Engineered Surfaces	229.9	241.1	
Inter-segment sales		(.2)	
Consolidated Net Sales	\$838.0	\$987.4	
Segment Gross Profit:			
Performance Chemicals	\$133.4	\$141.1	
Engineered Surfaces	60.5	58.3	
Consolidated Gross Profit	\$193.9	\$199.4	
Segment Operating Profit:			
Performance Chemicals	\$ 15.9	\$ 46.2	
Engineered Surfaces	18.9	19.2	
Interest expense	(28.3)	(32.9)	
Corporate expense	(23.7)	(20.0)	
Shareholder activist costs	(1.9)	_	
Operational improvement costs	(0.4)	_	
Asset impairment	(0.6)		
Debt issuance costs	(0.6)	(8.0)	
Acquisition and integration related expenses	(0.4)		
Consolidated (loss) income from continuing operations before income taxes	\$(21.1)	\$ 11.7	

Performance Chemicals

Performance Chemicals' net sales decreased \$138.4 million, to \$608.1 million in 2015, compared to \$746.5 million in 2014. The decrease was due primarily to reduced customer pricing of \$72.2 million, or 9.7%, which was driven by contract-based index pricing in certain markets and other price declines related to lower raw material costs, lower volumes that were unfavorable by \$42.9 million and unfavorable foreign currency translation effects of \$23.3 million. Lower volumes, driven primarily by market weakness in paper, carpet and oil and gas, were only partially offset by improved volumes in specialty coatings, nonwovens, elastomeric modifiers, home and personal care, construction materials, industrial rubber and tire cord. Net sales for the Performance Materials product line decreased \$92.9 million, to \$331.0 million in 2015, compared to \$423.9 million in 2014. Net sales for the Specialty Chemicals product line decreased \$45.5 million, to \$277.1 million in 2015, compared to \$322.6 million in 2014.

Performance Chemicals' gross profit and gross profit margin were \$133.4 million and 21.9% in 2015, compared to \$141.1 million and 18.9% in 2014. The increase in gross profit margin was due primarily to expanding margins, partially offset by unfavorable volumes and unfavorable year-over-year inventory valuation adjustments of \$1.6 million, and unfavorable currency translation effects.

This segment generated an operating profit of \$15.9 million in 2015, compared to \$46.2 million in 2014. The segment's operating profit was impacted primarily by the segment wide restructuring initiative and the asset impairment charge recorded for the segment's India operation. Management excludes these and other items when evaluating segment performance. Those items for 2015 included an asset impairment charge of \$18.4 million primarily related to the Company's India business, \$5.8 million of accelerated depreciation expense related to assets for which production will be transferred to another Performance Chemicals facility, \$5.0 million of operational improvement costs related to manufacturing footprint improvements, \$4.3 million of severance charges and environmental remediation charges of \$2.8 million. The asset impairment charge was due to the Company approving a plan to sell the assets of the Company's non-core India business which resulted in the Company writing-down the value of that asset group to its expected sales value. The segment operating profit was also impacted by volume declines and pricing declines which were offset by margin expansion, favorable mix and improvements in manufacturing operations. Special items in 2014 which management excluded for business evaluation purposes included environmental remediation charges of \$1.0 million, \$2.2 million of accelerated depreciation expense related to assets for which production was transferred to another Performance Chemicals facility, and \$0.5 million of severance charges.

Engineered Surfaces

Engineered Surfaces' net sales decreased \$11.2 million, to \$229.9 million in 2015, compared to \$241.1 million in 2014. The decrease was due primarily to lower volumes of \$9.6 million and unfavorable foreign currency translation effects of \$2.2 million, which were partially offset by favorable pricing of \$0.6 million. Coated Fabrics' net sales decreased \$10.6 million, to \$87.8 million in 2015, compared to \$98.4 million in 2014, primarily due to lower volume in the Asia automotive market. Net sales for the Laminates and Performance Films product lines decreased, \$0.6 million, to \$142.1 million in 2015, compared to \$142.7 million in 2014, as sales improvements in recreational vehicles and retail display were offset by weakness in other markets.

Engineered Surfaces' gross profit and gross margin were \$60.5 million and 26.3% in 2015, compared to \$58.3 million and 24.2% in 2014. The improvement in 2015 was due primarily to favorable product mix, positive pricing actions, and lower raw material costs.

Segment operating profit was \$18.9 million for 2015, compared to \$19.2 million for 2014. The decrease in segment operating profit was due primarily to charges for restructuring and severance, which was partially offset by improved sales mix, lower raw material costs and pricing. Segment operating profit includes items which management excludes when evaluating the results of the Company's segments. Those items for 2015 include workforce reduction actions of \$1.5 million, European restructuring and inventory write-down charges of \$1.6 million, and environmental remediation charges of \$0.2 million. Those items for 2014 include workforce reduction actions of \$0.4 million and other items of \$0.2 million, offset by a gain on the settlement of notes receivable of \$1.1 million.

Interest and Corporate

Interest expense was \$28.3 million and \$32.9 million for 2015 and 2014, respectively. Included in 2015 and 2014 was \$1.0 million and \$2.0 million, respectively, of premiums paid on the early redemption of \$50.0 million of the \$250.0 million Senior Notes in each of 2015 and 2014.

Corporate expenses were \$23.7 million in 2015, compared to \$20.0 million in 2014. The increase is due primarily to higher employee compensation related costs and higher costs for outside professional services.

Financial Resources and Capital Spending

The following table reflects key cash flow measures from continuing operations:

	2010	2013	2014	
	(Dollars in millions)			
Cash provided by operating activities	\$ 50.7	\$ 43.7	\$ 15.0	
Cash used in investing activities	\$(20.3)	\$(29.0)	\$(25.0)	
Cash provided by (used in) financing activities	\$ 0.8	\$(72.7)	\$(52.5)	
Increase (decrease) in cash and cash equivalents	\$ 33.1	\$(54.6)	\$(65.4)	

2015

Cash provided by operating activities was \$50.7 million in 2016, compared to \$43.7 million in 2015 and \$15.0 million in 2014. The increase in 2016 was due to improved working capital and profitability. The increase in 2015 was due was due to improved working capital. Days sales outstanding was 47.9 days in 2016 compared to 47.4 days in 2015. The increase in 2016 was due to a higher mix of receivables in foreign countries where terms are longer.

Cash used in investing activities was \$20.3 million in 2016, compared to \$29.0 million in 2015 and \$25.0 million in 2014. Included in 2016 are capital expenditures of \$25.6 million, primarily related to manufacturing equipment, partially offset by \$5.2 million of proceeds from the sale of the India operation. Included in 2015 were capital expenditures of \$24.0 million and \$5.0 million for the acquisition of New Fluid Solutions. Included in 2014 were capital expenditures of \$29.8 million, which were partially offset by cash received on the settlement of notes receivable of \$2.3 million and insurance proceeds of \$2.4 million. The Company expects capital expenditures of approximately \$30.0 million to \$35.0 million during 2017.

Cash provided by financing activities was \$0.8 million in 2016, and was due primarily to payments for fees on the Company's debt refinancing of \$4.3 million, and \$0.5 million used in the buyback of the Company's common shares, offset by additional borrowings as a result of refinancing our Term Loan. Cash used in financing activities in 2015 was \$72.7 million and was due primarily to a \$50.0 million debt prepayment on the Company's Senior Notes and \$18.6 million used in the buyback of the Company's common shares. Cash used in financing activities in 2014 of \$52.5 million was due primarily to a \$50.0 million debt prepayment on the Company's Senior Notes and \$1.4 million used in the buyback of the Company's common shares. Long-term debt was \$366.0 million as of November 30, 2016, which includes \$349.2 million for the term loan and capital lease obligations of \$16.8 million, compared to \$357.2 million as of November 30, 2015. OMNOVA's cash balance of \$78.0 million at November 30, 2016 consists of \$30.7 million in the U.S., \$28.9 million in Europe, and \$18.4 million in Asia. As of November 30, 2016, the Company is not aware of any restrictions regarding the repatriation of its non-U.S. cash.

The Company believes that its cash flows from operations, together with existing credit facilities and cash on hand will be adequate to fund its cash requirements for at least the next twelve months.

Debt

Information regarding the Company's debt is disclosed in Note L to the Company's consolidated financial statements.

Contractual Obligations

	Payments Due By Period				
	Total	Less Than 1 Year	2—3 Years	4—5 Years	More Than 5 Years
		(Dol	lars in milli	ons)	
Long-term debt and amounts due banks	\$349.2	\$ 3.5	\$ 7.0	\$ 7.0	\$331.7
Capital lease obligations(1)	24.7	1.4	2.8	2.8	1 <i>7.7</i>
Interest payments on long-term debt ⁽²⁾	116.9	18.5	36.4	35.7	26.3
Operating and financing leases	32.8	4.7	6.6	4.2	17.3
Purchase obligations	24.5	24.5	_	_	_
Pension and post-retirement funding obligations ⁽³⁾	69.4	6.9	13.6	21.3	27.6
Total	\$617.5	\$59.5	\$66.4	\$71.0	\$420.6

⁽¹⁾ Includes principal and effective interest payments.

Significant Accounting Estimates and Management Judgments

The Company's discussion and analysis of its results of operations, financial condition, and liquidity are based upon the Company's consolidated financial statements as of November 30, 2016, which have been prepared in accordance with U.S.

Based on outstanding debt balances as of November 30, 2016 and estimated interest rates. As those are based on estimates, actual future payments may be different.

⁽³⁾ Payments are based on Company estimates and current funding laws. Actual results may be different.

generally accepted accounting principles. The preparation of these financial statements requires the Company to make estimates and judgments that affect the reported amounts of assets and liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities as of the date of the financial statements. Periodically, the Company reviews its estimates and judgments including those related to product returns, accounts receivable, inventories, litigation, environmental reserves, pensions, and income taxes. The Company bases its estimates and judgments on historical experience and on various assumptions that it believes to be reasonable under the circumstances. Actual results may materially differ from these estimates under different assumptions or conditions.

Management believes the following critical accounting policies affect its more significant estimates and assumptions used in the preparation of its consolidated financial statements:

A) Revenue Recognition

The Company recognizes revenue when the following criteria are met: 1) persuasive evidence of an arrangement exists; 2) delivery has occurred; 3) an established sales price has been set with the customer; 4) collection of the sale revenue from the customer is reasonably assured; and 5) no contingencies exist. Delivery is considered to have occurred when the customer assumes the risk and rewards of ownership. The Company estimates and records provisions for customer quantity rebates and sales returns and allowances as reduction in revenue in the same period the related revenue is recognized, based upon its historical experience.

B) Allowance For Doubtful Accounts

The Company's policy is to identify customers that are considered doubtful of collection based upon the customer's financial condition, payment history, credit rating and other relevant factors; and reserves the portion of such accounts receivable for which collection does not appear likely. The allowance for doubtful accounts was \$1.4 million and \$1.3 million at November 30, 2016 and 2015, respectively.

C) Allowance For Inventory Obsolescence

The Company's policy is to maintain an inventory obsolescence reserve based upon specifically identified, discontinued, or obsolete items and a percentage of quantities on hand compared with historical and forecasted usage and sales levels. A sudden and unexpected change in design trends and/or material preferences could impact the carrying value of the Company's inventory and require the Company to increase its reserve for obsolescence. The reserve for inventory obsolescence, which applies primarily to our Engineered Surfaces segment, was \$7.1 million at November 30, 2016 and \$7.3 million at November 30, 2015.

D) Litigation and Environmental Reserves

From time to time, the Company is subject to claims, lawsuits, and proceedings related to product liability, product warranty, contract, employment, environmental, and other matters. The Company provides a reserve for such matters when it concludes a material loss is probable and the amount can be estimated. Costs related to environmental compliance are also accrued when it is probable a loss has been incurred and the amount of loss can be estimated.

E) Pensions and Other Post-retirement Plans

The Company accounts for its pension and other post-retirement plans by recognizing in its balance sheet the overfunded or underfunded status of defined benefit post-retirement plans, measured as the difference between the fair value of plan assets and the benefit obligation (the projected benefit obligation for pension plans and the accumulated post-retirement benefit obligation for other post-retirement plans). The Company recognizes the change in the funded status of the plan in the year in which the change occurs through Accumulated Other Comprehensive (Loss) Income. As of May 2007, the Company's U.S. defined benefit pension plan have been closed to all new hires and since December 1, 2011, future service benefits were frozen for all participants.

The most significant elements in determining the Company's pension expense are the expected return on plan assets and the discount rate. The assumed long-term rate of return on assets is applied to a calculated value of plan assets, which recognizes

changes in the fair value of plan assets in a systematic manner over five years. This produces the expected return on plan assets that is included in pension (expense) income. For our U.S. plan, the difference between this expected return and the actual return on plan assets is deferred and amortized over the estimated remaining life expectancy of plan participants. The net deferral of past asset gains (losses) affects the calculated value of plan assets and, ultimately, future pension (expense) income.

The Company recorded pension expense of \$0.6 million in 2016 and \$3.6 million 2015. Pension expense is calculated using the discount rate to discount plan liabilities at the prior year measurement date. Discount rates of 4.29% and 4.01% were used to calculate the pension expense in 2016 and 2015, respectively. The Company anticipates 2017 expense to be approximately \$1.6 million based on a discount rate range of 3.88%—4.22% discussed further below. An increase or decrease of 25 basis points in the discount rate would decrease or increase expense on an annual basis by less than \$0.1 million. Cash contributions to the pension plans were \$6.2 million in 2016 and \$5.7 million in 2015. Future pension benefits for U.S. plan members are frozen and fully vested. Therefore, there is no future service benefit accrual for the Company's U.S. defined benefit plans.

The Company, in consultation with its actuary, determined the discount rate used to discount the U.S. plan liabilities at the plan's measurement date, which was November 30, 2016. The discount rate reflects the current rate at which the pension liabilities could be effectively settled at the end of the year. In determining the discount rate, we used spot rates on a yield curve matching benefit payments to determine the weighted average discount rate that would be applied in determining the benefit obligation at November 30, 2016. Changes in discount rates, as well as the net effect of other changes in actuarial assumptions and experience, have been recognized in Accumulated Other Comprehensive Income (Loss). The Company, in consultation with its actuary, determined the discount rate used to measure defined benefit pension plan obligations as of November 30, 2016 should be 4.12%, compared to 4.29% in 2015. A 25 basis point change in the discount rate would increase or decrease the projected benefit obligation by approximately \$8.0 million.

Prior to 2016, the Company had used a single weighted-average discount rate approach to develop the interest and service cost components of the net periodic benefit costs for its U.S. benefit plans. This method represented the constant annual rate that would be required to discount all future benefit payments related to past service from the date of expected future payment to the measurement date such that the aggregate present value equals the obligation. During the fourth quarter of 2015, the Company adopted certain amendments to change the method previously used, which was effective in determining 2016 benefit expense for its U.S. plans. The Company utilizes an approach that discounts the individual expected cash flows underlying interest and service costs using the applicable spot rates derived from the yield curve used to determine the benefit obligation to the relevant projected cash flows. The change in method resulted in a decrease in the service and interest components for benefit cost in 2016 of \$2.3 million. The spot rates used to determine service and interest costs ranged from 1.14% to 5.07%. The ultimate spot rate used to discount cash flows beyond 30 years was 4.68% for 2016.

The use of disaggregated discount rates results in a different amount of Interest Cost compared to the traditional single weighted-average discount rate approach because of different weightings given to each subset of payments. The use of disaggregated discount rates affects the amount of Service Cost because the benefit payments associated with new service credits for active employees tend to be of longer duration than the overall benefit payments associated with the plan's benefit obligation. As a result, the payments would be associated with longer-term spot rates on the yield curve, resulting in lower present values than the calculations using the traditional single weighted-average discount rate.

During 2016, the Company continued to use the Mercer modified version (MRP—2007) of the Society of Actuaries' (SOA) RP-2014 mortality table for the pre-retirement mortality base table. The Company also continued to use the Mercer Industry Longevity Experience Study (MILES) table for the Chemical, Oil & Gas and Utilities industry for Performance Chemical plan participants and the Consumer Goods and Food & Drink industry for Engineered Surfaces plan participants for the post-retirement morality base table. The Company chose to update the projection scale (used for both pre and post retirement) with an updated modified generational projection scale of MMP-2016. The MMP-2016 scale takes into account the historical grade-down of mortality improvements and relies on the Social Security Administration improvement data through 2013 (published in 2016) and reflects long-term rate of improvement based on historical experience and the Company's view of those trends. Due to the change in the mortality projection scale in 2016, the Company recognized an actuarial gain of approximately \$1.6 million and a decrease in its projected benefit obligation. Due to the change in the mortality tables in 2015, the Company recognized an actuarial gain of approximately \$18.0 million and a decrease in its projected benefit obligation in 2015.

To develop the expected long-term rate of return on assets assumption, the Company, in consultation with its actuary, considered the historical returns and the future expectations for returns for each asset class, as well as the target allocation of the pension portfolio. This resulted in the selection of a long-term rate of return on assets assumption of 7.7% for plan year 2016 and 7.75% for 2015. The measurement dates of November 30, 2016 and 2015 were used to determine these rates. A 25 basis point change in the assumed rate of return for assets would increase or decrease pension expense by approximately \$0.5 million. Pension plan assets are measured at fair value or at NAV for certain alternative investments on the measurement date.

Based on current estimates of pension asset performance, interest and discount rate assumptions, the Company anticipates it will be required under the Pension Protection Act of 2006 ("PPA-2006"), to make a cash contribution to its U.S. pension plan of \$7.2 million in 2017. The Company, under rules of the PPA-2006, has elected the fifteen year amortization schedule for the period beginning with the 2009 plan year. Total global pension plan contributions for 2017 are expected to be \$7.4 million.

Factors that could impact future cash requirements and timing of any such cash equivalents are:

- Investment returns which differ materially from the Company's 7.7% return assumption for 2017;
- Significant changes in interest rates, affecting the discount rate; and
- Opportunities to reduce future cash requirements by accelerating contributions ahead of the minimum required schedule.
 Voluntary contributions in excess of minimally required amounts may prevent the need for larger contributions in the future.

F) Income Taxes

The Company follows the liability method of accounting for income taxes. Under this method, deferred tax assets and liabilities are determined based on the difference between the financial reporting and tax bases of assets and liabilities using the enacted tax rates that will be in effect in the period the differences are expected to reverse. Changes in tax laws and rates may affect recorded deferred tax assets and liabilities along with our effective tax rate in the future. A meaningful change to the U.S. corporate tax rate in the future would lead to a contemporaneous charge upon enactment to adjust the financial position of the deferred tax assets and liabilities at the newly enacted tax rate. The effect on deferred taxes of a change in tax rates is recognized in income in the period that includes the enactment date. In addition, we expect that the expense related to the French deemed distribution tax legislation will reverse in the first quarter of 2017 as the law was repealed in late December of 2016. We estimate that a benefit of approximately \$1.6 million will be recorded as a discrete item in our tax provision for the first quarter of 2017.

The Company records a valuation allowance to offset deferred tax assets if, based on the weight of available evidence, it is more-likely-than-not that some portion, or all, of the deferred tax assets will not be realized. As of November 30, 2016, the Company had approximately \$88.9 million of deferred tax assets primarily related to pension and federal and state domestic loss carryforwards and \$33.6 million of deferred tax liabilities primarily related to intangible assets and fixed asset depreciation timing differences.

As of November 30, 2016, the Company had approximately \$66.0 million in U.S. net deferred tax assets. These net deferred tax assets include approximately \$36.8 million related to U.S. net operating loss carryforwards ("NOLCs") that can be used to offset taxable income in future periods and reduce our income taxes payable in those future periods. Many of these NOLCs will expire if they are not used within certain periods. The majority of federal, state, and local net operating loss carryforwards have expirations between tax years 2021 and 2034. Due to the existence of these net operating loss carryforwards, the Company does not expect to incur significant cash payments for U.S. taxes over the next several years. At this time, it is more likely than not that the Company will have sufficient U.S. taxable income in the future to realize these deferred tax assets. However, it is possible that some or all of these NOLCs could ultimately expire unused. Therefore, to the extent the Company is not able to generate sufficient U.S. taxable income from operations, a substantial valuation allowance to reduce the U.S. deferred tax assets would be required, which would materially increase tax expense in the period the valuation allowance is recognized and materially adversely affect results of operations and the statement of financial position.

For the year ended November 30, 2016, the Company considered the positive and negative evidence as required by ASC 740, "Income Taxes" weighing the four sources of taxable income and concluded that it is more likely than not that the Company will realize the benefit from the U.S. deferred tax assets due to a preponderance of positive evidence, which includes taxable

income from the reversal of deferred tax assets and liabilities in future years, predictability of future taxable income, and a recent history of utilizing net operating loss carryforwards, including \$15.5 million and \$7.8 million of net operating loss carryforwards utilized in 2016 and 2015, respectively.

The Company has not provided deferred tax liabilities on certain of its non-U.S. subsidiaries' undistributed earnings as these undistributed earnings are treated by the Company as being permanently reinvested. To the extent that foreign earnings previously treated as permanently reinvested were to be repatriated, the related U.S. tax liability may be reduced by any foreign income taxes paid on these earnings. However, based on the Company's policy of permanent reinvestment, it is not practicable to determine the U.S. federal income tax liability, if any, which would be payable if such earnings were not permanently reinvested. Determination of the amount of unrecognized deferred tax liabilities and related foreign withholding taxes are not practicable due to the complexities associated with this hypothetical calculation and the Company's permanent reinvestment policy. As of November 30, 2016, the non-U.S. subsidiaries have a cumulative unremitted foreign income position of \$46.1 million, for which no deferred tax liability has been provided.

The Company utilizes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. For those benefits to be recognized, a tax position must be more-likely-than-not to be sustained upon examination by taxing authorities. The amount recognized is measured as the largest amount of benefit that is more-likely-than- not of being realized upon ultimate settlement.

The Company's accounting policy for interest and/or penalties related to underpayments of income taxes is to include interest and penalties in tax expense. For 2016, the Company recognized minimal tax expense related to interest and penalties.

G) Share-Based Employee Compensation

The Company uses the fair value method of accounting to record share-based compensation based on the grant date fair value.

While the Company regularly evaluates the use of share-based compensation, its practice has been to issue restricted shares, which are required to be expensed using the fair value method. Refer to Note O to the Company's Consolidated Financial Statements for further discussion of share-based compensation.

H) Long-Lived Assets

Long-lived assets, such as property, plant, and equipment, and finite-lived intangibles are stated at historical cost less accumulated depreciation and amortization.

Construction in process ("CIP") is not depreciated until the asset is placed in service. Refurbishment costs that extend the useful life of the asset are capitalized, whereas ordinary maintenance and repair costs are expensed as incurred. Interest expense incurred during the construction phase is capitalized as part of construction in process until the relevant projects are completed and placed into service.

Long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by comparing the carrying amount of an asset to the estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated future cash flows, an impairment charge is recognized in the amount by which the carrying amount of the asset exceeds the estimated fair value of the asset. Assets to be disposed of are reported at the lower of the carrying amount or the estimated disposal price less costs to sell. Depreciation ceases for assets meeting the held-for-sale criteria.

During the fourth quarter of 2016, due to changes in markets and expected lower capacity utilization at the Engineered Surfaces Minhang, China facility, the Company performed an impairment analysis of this asset group. Based on this analysis, it was determined that the fair value of the asset group was less than book value, and accordingly, the Company recognized an impairment charge of \$5.4 million and reduced Property, Plant, and Equipment by \$5.2 million and intangible assets by \$0.2 million. The Engineered Surfaces Minhang facility also recognized \$0.3 million of impairment charges during the first quarter of 2016 related to equipment.

During 2015, the Company recognized impairment charges of \$19.4 million, of which \$18.3 million was related to the Company's India business due to an approved plan to sell this non-core business. Due to the plan to sell the assets of this business, the Company recognized an impairment charge to write-down the disposal group to to its expected sales price after considering costs to sell. Additionally, the assets and liabilities of this business are considered as held for sale with these assets and liabilities included in Other Current Assets and Other Current Liabilities, respectively. The Company also recognized additional impairment charges on land at its former corporate headquarters and for other assets that were idled.

I) Goodwill and Intangible Assets

Goodwill represents the excess of the purchase price over the fair value of assets acquired and liabilities assumed in a business combination. Goodwill and other indefinite lived intangible assets are tested for impairment at least annually as of September 1, and whenever events or circumstances indicate that the carrying amount may not be recoverable. The Company performs the impairment analysis at the reporting unit level using a two-step impairment test. The first step identifies potential impairments by comparing the estimated fair value of a reporting unit with its carrying value. Fair value is typically estimated using a market approach method or a discounted cash flow analysis, which requires the Company to estimate future cash flows anticipated to be generated by the reporting unit, as well as a discount rate to measure the present value of the anticipated cash flows. If the estimated fair value of a reporting unit exceeds its carrying value, goodwill is not considered impaired and the second step is not necessary. If the carrying value of a reporting unit exceeds the estimated fair value, the second step calculates the possible impairment by comparing the implied fair value of goodwill with the carrying value. If the implied fair value of goodwill is less than the carrying value, an impairment charge is recognized. During the fourth quarter of 2016, the Company performed its annual impairment test for goodwill and determined that there were no impairments.

The impairment test for indefinite lived intangible assets consists of comparing the fair value of the asset with its carrying value. The Company estimates the fair value of its indefinite lived intangible assets using a fair value model based on a market approach method or discounted future cash flows. If the carrying amounts exceed the estimated fair value, an impairment loss would be recognized in the amount of the excess. Key inputs used in determining the fair value of the trademarks/tradenames were expected future revenues and royalty rates, and accordingly, their fair value is impacted by selling prices, which for the Company is based in part on raw material costs. During the fourth quarter of 2016, the Company performed its annual impairment test for indefinite lived intangible assets and determined that there were no impairments of its indefinite lived intangible assets. If the carrying value of these assets exceeds the current estimated fair value, the asset is considered impaired and this could result in a charge to earnings. The estimated fair value of our trademarks/tradenames increased by approximately \$6.6 million, or 17.2%, during 2016. A sensitivity analysis was performed on the Company's trademarks/tradenames assuming a hypothetical 100 basis-point increase in the present value factor, which yielded an estimated fair value slightly below book value for one of the Company's indefinite-lived trademarks/tradenames, which has a total carrying value of \$9.3 million. The trademarks/tradenames continue to be important to the Company, and we continue to focus on long-term growth, however, if recent trends continue, the long-term assumptions relative to growth rates and profitability of the trademarks/tradenames may not be attained, which could result in an impairment to one or more of the Company's trademarks/tradenames.

Estimating future cash flows requires significant judgments and assumptions by management including sales, operating margins, royalty rates, discount rates, and future economic conditions. To the extent that the reporting unit is unable to achieve these assumptions, impairment losses may occur.

Finite-lived intangible assets, such as customer lists, patents, trademarks/tradenames, and licenses are recorded at cost or at estimated fair value when acquired as part of a business combination. Intangible assets with finite lives are amortized over their estimated useful lives with periods ranging from 3 to 30 years. Accumulated amortization of finite-lived intangible assets at November 30, 2016 and 2015 was \$48.2 million and \$44.5 million, respectively.

J) Foreign Currency Translation

The financial position and results of operations of the Company's foreign subsidiaries are measured using the local currency as the functional currency. Assets and liabilities of operations denominated in foreign currencies are translated into U.S. dollars at exchange rates in effect at the balance sheet date, while revenues and expenses are translated at the weighted average exchange

rates each month during the year. The resulting translation gains and losses on assets and liabilities are recorded in Accumulated Other Comprehensive (Loss) Income, and are excluded from net income until realized through a sale or liquidation of the investment.

K) Leasing Arrangements

Operating leases—Lease expense is recorded on a straight-line basis over the non-cancelable lease term, including any optional renewal terms that are reasonably expected to be exercised. Leasehold improvements related to these operating leases are amortized over the estimated useful life or the non-cancelable lease term, whichever is shorter.

Capital leases—Capital leases are recorded at the lower of fair market value or the present value of future minimum lease payments with a corresponding amount recorded in property, plant, and equipment. Current portions of capital lease payments are included in Amounts due banks and non-current capital lease obligations are included in Long-term debt in our Consolidated Balance Sheets.

Environmental Matters

The Company's policy is to conduct its businesses with due regard for the preservation and protection of the environment. The Company devotes significant resources and management attention to comply with environmental laws and regulations. The Company's Consolidated Balance Sheets as of November 30, 2016 and 2015 reflects reserves for environmental remediation efforts of \$3.9 million and \$4.1 million, respectively. During 2015, the Company recognized environmental remediation expense of \$3.0 million.

Capital expenditures for projects related to environmental matters were \$1.1 million in 2016, \$0.6 million in 2015, and \$1.0 million in 2014. During 2016, non-capital expenditures for environmental compliance and protection totaled \$6.5 million, all of which were for recurring costs associated with managing hazardous substances and pollution abatement in ongoing operations. Similar non-capital expenditures were \$5.2 million and \$7.8 million in years 2015 and 2014, respectively. The Company anticipates that non-capital environmental expenditures for the next several years will be consistent with 2016 expenditure levels.

New Accounting Pronouncements

New accounting pronouncements impacting the Company are disclosed in Note A to the Company's consolidated financial statements

Forward Looking Statements

This Annual Report includes forward looking statements as defined by federal securities laws. Please refer to Item 1A. Risk Factors of this Report, which is incorporated herein by reference.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

The Company is exposed to market risk from changes in interest rates on its long-term debt obligations. As described in Note L to the Consolidated Financial Statements, the Company's Term Loan Facility and non-U.S. borrowings bear interest at various rates. Borrowings under the Term Loan and the Facility were \$349.2 million as of November 30, 2016. There were no non-U.S. borrowings with banks as of November 30, 2016. The weighted average effective interest rate of the Company's outstanding debt was 5.78% as of November 30, 2016. A hypothetical increase or decrease of 100 basis points would impact the Company's interest expense on its variable rate debt by approximately \$3.5 million annually.

The Company is subject to foreign currency exchange rate risk. The Company has accumulated currency translation losses of \$29.6 million as of November 30, 2016, which is included in accumulated other comprehensive income (loss).

The Company does not enter into derivatives or other financial instruments for trading or speculative purposes.

Management's Assessment of Internal Control Over Financial Reporting

Management of OMNOVA Solutions Inc. is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f). In evaluating the Company's internal control over financial reporting, management has adopted the framework in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework).

Under the supervision and with the participation of the Company's Management, including the Chief Executive Officer and Chief Financial Officer, the Company conducted an assessment of the effectiveness of the Company's internal control over financial reporting. Management has determined that the Company's internal control over financial reporting is effective as of November 30, 2016.

The effectiveness of the Company's internal control over financial reporting as of November 30, 2016 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in its report, which is included herein.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Shareholders of OMNOVA Solutions Inc.:

We have audited OMNOVA Solutions Inc.'s internal control over financial reporting as of November 30, 2016, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). OMNOVA Solutions Inc.'s management is responsible 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 report titled "Management's Assessment of Internal Control Over Financial Reporting." Our responsibility is to express an opinion on the company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

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 (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) 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.

In our opinion, OMNOVA Solutions Inc. maintained, in all material respects, effective internal control over financial reporting as of November 30, 2016, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of OMNOVA Solutions Inc. as of November 30, 2016 and 2015, and the related consolidated statements of operations, comprehensive income (loss), shareholders' equity and cash flows for each of the three years in the period ended November 30, 2016 and our report dated February 1, 2017 expressed an unqualified opinion thereon.

Akron, Ohio February 1, 2017

Ernst + Young LLP

Item 8. Consolidated Financial Statements and Supplementary Data

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REPORT OF MANAGEMENT

To the Shareholders of OMNOVA Solutions Inc.:

Management of OMNOVA Solutions Inc. is responsible for preparing the accompanying consolidated financial statements and for assuring their integrity and objectivity. These financial statements were prepared in accordance with U.S. generally accepted accounting principles and fairly represent the transactions and financial condition of the Company in all material respects. The financial statements include amounts that are based on management's best estimates and judgments. The Company's financial statements have been audited by Ernst & Young LLP, an independent registered public accounting firm that has been selected by the Audit Committee of the Board of Directors and approved by the shareholders. Management has made available to Ernst & Young LLP all of the Company's financial records and related data, internal audit reports, as well as the minutes of shareholders' and directors' meetings.

Management of the Company has established and maintains a system of internal controls over financial reporting that is designed to provide reasonable assurance that assets are safeguarded, transactions are properly recorded and executed in accordance with management's authorization and the books and records accurately reflect the disposition of assets. The system of internal controls includes appropriate division of responsibility. The Company maintains an internal audit department that independently assesses the effectiveness of the internal controls through a program of internal audits.

The Audit Committee is composed of directors who are not officers or employees of the Company. It meets regularly with members of management, the internal auditors and representatives of the independent registered public accounting firm to discuss the adequacy of the Company's internal control over financial reporting, financial statements and the nature, extent and results of the audit effort. Management reviews with the Audit Committee all of the Company's significant accounting policies and assumptions affecting the results of operations. Both the independent registered public accounting firm and internal auditors have access to the Audit Committee without the presence of management.

Anne P. Noonan

President and Chief Executive Officer

Paul F. DeSantis

Senior Vice President and Chief Financial Officer

February 1, 2017

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Shareholders of OMNOVA Solutions Inc.:

We have audited the accompanying consolidated balance sheets of OMNOVA Solutions Inc. as of November 30, 2016 and 2015, and the related consolidated statements of operations, comprehensive income (loss), shareholders' equity and cash flows for each of the three years in the period ended November 30, 2016. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our 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 audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of OMNOVA Solutions Inc. at November 30, 2016 and 2015, and the consolidated results of its operations and its cash flows for each of the three years in the period ended November 30, 2016, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), OMNOVA Solutions Inc.'s internal control over financial reporting as of November 30, 2016, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 1, 2017 expressed an unqualified opinion thereon.

Akron, Ohio

February 1, 2017

Ernst + Young LLP

Consolidated Statements of Operations

	Years Ended November 30,		
	2016	2015	2014
	(Dollars in mil	lions, except pe	er share data)
Net Sales	\$759.9	\$838.0	\$987.4
Cost of goods sold (exclusive of depreciation)	556.0	644.1	788.0
Gross profit Other Costs and Expenses:	203.9	193.9	199.4
Selling, general, and administrative	118.5	119.3	120.2
Depreciation and amortization	30.6	34.0	34.8
Asset impairment	5.7	19.4	_
Loss on asset sales	.3	.2	.5
Restructuring and severance	11.1	5.9	.9
Interest expense	24.7	28.3	32.9
Debt issuance costs write-off	2.9	.6	.8
Acquisition and integration related expense	.9	.4	_
Other (income) expense, net	(.7)	6.9	(2.4)
Total Other Costs and Expenses	194.0	215.0	187.7
Income (loss) from continuing operations before income taxes	9.9	(21.1)	11. <i>7</i>
Income tax (expense) benefit	(10.3)	2.4	.4
(Loss) income from continuing operations	(.4)	(18.7)	12.1
Gain (loss) from discontinued operations (net of tax expense (benefit) of \$0.6 million,			
and \$(0.4) million in 2015 and 2014, respectively)		9	(.6)
Net (loss) income	\$ (.4)	\$ (17.8)	\$ 11.5
Income (Loss) Per Share—Basic and Diluted			
(Loss) income per share—continuing operations	\$ (.01)	\$ (.41)	\$.26
Income (loss) per share—discontinued operations		.02	(.01)
(Loss) income per share	\$ (.01)	\$ (.39)	\$.25
Weighted average shares outstanding—Basic	44.0	45.3	46.3
Weighted average shares outstanding—Diluted	44.0	45.7	47.1

Consolidated Statements of Comprehensive Income (Loss)

	Years Ended November 30,		
	2016	2015	2014
	(Do	ollars in million	ns)
Net (Loss) Income	\$ (.4)	\$(17.8)	\$ 11.5
Components of other comprehensive (loss) income:			
Foreign currency translations			
Realized net change during the period	(5.9)	_	_
Unrealized net change during the period	6.3	(11.2)	(5.4)
Unrealized net change on intercompany foreign debt during the period	.4	(12.2)	(7.5)
Tax effect	(.2)	3.5	2.4
Foreign currency translations, net of tax	.6	(19.9)	(10.5)
Post-retirement benefit plans:			
Actuarial net gain (loss):			
Net (loss) gain arising during period	(8.9)	16.5	(50.7)
Amortization of net loss included in net periodic benefit cost	3.6	4.4	2.5
Prior service credit:			
Prior service credit arising during period	_	.1	_
Amortization of prior service credits included in net periodic benefit cost	_	(.1)	(.3)
Tax effect	2.1	(8.1)	18.8
Defined benefit plans, net of tax	(3.2)	12.8	(29.7)
Other comprehensive loss, net of tax	(2.6)	(7.1)	(40.2)
Comprehensive loss	\$(3.0)	\$(24.9)	\$(28.7)

Consolidated Balance Sheets

	Novem	ber 30,
	2016	2015
ACCETC	•	illions, except amounts)
ASSETS:		
Current Assets Cash and cash equivalents	\$ 78.0	\$ 44.9
Accounts receivable, net	99.5	105.3
Inventories	77.0	81.9
Prepaid expenses and other	19.4	18.8
Total Current Assets	273.9	250.9
Property, plant, and equipment, net	205.8	214.9
Intangible assets, net	56.7	60.9
Goodwill	80.2	80.8
Deferred income taxes	66.7	67.8
Debt issuance costs	5.9	4.7
Other non-current assets	4.0	7.2
Total Assets	\$ 693.2	\$ 687.2
LIABILITIES AND SHAREHOLDERS' EQUITY:		
Current Liabilities		
Amounts due banks	\$ 4.2	\$ 2.5
Accounts payable	73.3	72.0
Accrued payroll and personal property taxes	24.1	25.0
Employee benefit obligations	4.5	3.2
Accrued interest	.1	1.1
Other current liabilities	7.1	8.7
Total Current Liabilities	113.3	112.5
Senior notes		150.0
Long-term debt	358.4	204.2
Post-retirement benefits other than pensions	6.3	6.9
Pension liabilities	82.3	84.9
Deferred income taxes	11.4	9.5
Other non-current liabilities	11.7	10.1
Total Liabilities	583.4	<i>57</i> 8.1
Preference stock—\$1.00 par value; 15 million shares authorized; none outstanding	_	_
November 30, 2016 and 2015	4.8	4.8
Additional contributed capital	341.0	339.7
Retained deficit	(74.3)	(73.9)
Treasury stock at cost- 3.2 million and 3.5 million shares at November 30, 2016 and 2015, respectively	(23.2)	(25.6)
Accumulated other comprehensive loss	(138.5)	(135.9)
Total Shareholders' Equity	109.8	109.1
• •		
Total Liabilities and Shareholders' Equity	\$ 693.2	\$ 687.2

Consolidated Statements of Shareholders' Equity for the Years Ended November 30, 2016, 2015, and 2014

	Number of Common Shares						Total sive Shareholders'
(Dollars and shares in millions)	Outstanding	Stock	Capital	Deficit	Stock	(Loss) Incor	,
Balance	47.2	\$4.8	\$334.6	\$(67.6)	\$ (5.2)	\$ (88.6	5) \$178.0
Net income				11.5			11.5
\$2.4 million)						(10.5	5) (10.5)
Prior service credits (net of tax benefit of \$0.1							
million)						(.2	
million)	.3		3.9		(1.3)	(29.5	5) (29.5) 2.6
Repurchase of treasury shares	(.2)		0.7		(1.4)		(1.4)
Balance November 30, 2014	47.3	\$4.8	\$338.5	\$(56.1)	\$ (7.9)	\$(128.8	3) \$150.5
Net loss				(17.8)			(17.8)
Cumulative translation adjustment (net of tax benefit of \$3.5 million)						(19.8	3) (19.8)
Defined benefit plans:						(17.0	, (17.0)
Prior service credits						(.1	(.1)
Net actuarial gain (net of tax expense of \$8.1 million)						12.8	3 12.8
Common stock issuance	.1		1.2		.9		2.1
Repurchase of treasury shares	(2.6)				(18.6)		(18.6)
Balance November 30, 2015	44.8	\$4.8	\$339.7	\$(73.9)	\$(25.6)	\$(135.9	?) \$109.1
Net loss				(.4)			(.4)
Cumulative translation adjustment (net of tax liability of \$0.2 million)						.6	5 .6
Defined benefit plans:						.0	0.0
Net actuarial loss (net of tax expense of \$2.1						10.1	
million)	.3	_	1.3		2.4	(3.2	2) (3.2) 3.7
Repurchase of treasury shares	_		1.0				_
Balance November 30, 2016	45.1	\$4.8	\$341.0	\$(74.3)	\$(23.2)	\$(138.5	\$109.8

Consolidated Statements of Cash Flows

	Years E	nded Novem	ber 30,
	2016	2015	2014
	(Do	llars in millio	ns)
Operating Activities	,		•
Net (loss) income	\$ (0.4)	\$(17.8)	\$ 11.5
Adjustments to reconcile net (loss) income to net cash provided by operating activities:			
Loss on disposal of fixed assets	.3	.2	.5
Depreciation and amortization	30.6	34.0	34.8
Amortization & write-off of debt issuance costs	4.7	2.8	3.3
Impairment of long-lived assets	5.7	19.4	_
Non-cash stock compensation expense	3.5	2.4	2.7
Provision for uncollectible accounts	.3	.2	.3
Provision for obsolete inventories	_	_	.2
Deferred income taxes	5.2	(5.9)	(5.1)
Other	(8.)	_	_
Changes in operating assets and liabilities, net of effect from business acquisition:			
Accounts receivable	4.1	11.6	(12.3)
Inventories	4.4	2.5	(6.8)
Other current assets	(10.3)	9.4	(8.1)
Current liabilities	11.4	(3.6)	.2
Other non-current assets	(12.9)	11.6	(17.3)
Other non-current liabilities	11.1	(18.4)	15.2
Contribution to defined benefit plan	(6.2)	(4.7)	(4.1)
Net Cash Provided By Operating Activities	50.7	43.7	15.0
Investing Activities	30.7	43.7	13.0
Capital expenditures	(25.6)	(24.0)	(29.8)
Proceeds from note receivable	(23.0)	(24.0)	2.3
Proceeds from sale of business	5.2	_	2.3
Acquisition of business, net of cash acquired	3.2	(5.0)	
Proceeds from insurance settlements	.1	(3.0)	2.4
Proceeds from asset sales	.1		.1
Net Cash Used In Investing Activities	(20.3)	(29.0)	(25.0)
Financing Activities			
Proceeds from borrowings	346.5		
Repayment of debt obligations	(340.9)	(52.5)	(52.0)
Short-term debt borrowings	_	25.2	23.3
Short-term debt payments		(26.8)	(22.7)
Payments for debt refinancing	(4.3)		
Purchase of treasury shares	(.5)	(18.6)	(1.4)
Cash received from exercise of stock options			3
Net Cash Provided By (Used In) Financing Activities	.8	(72.7)	(52.5)
Effect of exchange rate changes on cash	1.9	3.4	(2.9)
Net Increase (Decrease) in Cash and Cash Equivalents	33.1	(54.6)	(65.4)
Cash and cash equivalents at beginning of period	44.9	99.5	164.9
Cash and Cash Equivalents at End of Period	\$ 78.0	\$ 44.9	\$ 99.5
Supplemental Cash Flow Information			
Capital lease obligations incurred	\$ —	\$ —	\$ 14.5
Cash paid for:	T	7	Ţ .
Interest	\$ 23.2	\$ 24.9	\$ 30.9
Income taxes	\$ 4.2	\$ 3.8	\$ 3.9

See notes to consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note A—Description of Business and Significant Accounting Policies

Description of Business—The Company is an innovator of emulsion polymers, specialty chemicals and engineered surfaces for a variety of commercial, industrial and residential end uses. The Company's products provide a variety of important functional and aesthetic benefits to hundreds of products that people use daily. The Company holds leading positions in key market categories, which have been built through innovative products, customized product solutions, strong technical expertise, well-established distribution channels, recognized brands, and long-standing customer relationships. The Company utilizes strategically located manufacturing, technical and other facilities in North America, Europe, China, and Thailand to service the broad customer base. OMNOVA operates two business segments: Performance Chemicals and Engineered Surfaces.

Performance Chemicals—The Performance Chemicals segment produces a broad range of emulsion polymers and specialty chemicals based primarily on styrene butadiene (SB), styrene butadiene acrylonitrile (SBA), styrene butadiene vinyl pyridine, nitrile butadiene (NBR), polyvinyl acetate, acrylic, styrene acrylic, vinyl acrylic, glyoxal, fluorochemicals and bio-based chemistries. Performance Chemicals' custom-formulated products are tailored latexes, resins, binders, adhesives, specialty rubbers, antioxidants, hollow plastic pigment and elastomeric modifiers which are used in specialty coatings, carpet, paper, nonwovens, construction, oil & gas drilling and production, adhesives, tape, tire cord, floor care, textiles, graphic arts, polymer stabilization, industrial rubbers & thermoplastics and various other specialty applications. Its products provide a variety of functional properties to enhance the Company's customers' products, including greater strength, adhesion, dimensional stability, water resistance, flow and leveling, improved processibility, and enhanced appearance.

The Performance Chemicals segment consists of two product lines. The Performance Materials product line encompasses products that have applications in the paper, paperboard, carpet, polymer stabilization, industrial rubbers & thermoplastics, and tire cord industries. Paper and paperboard coatings are used in magazines, catalogs, direct mail advertising, brochures, printed reports, food cartons, household, and other consumer and industrial packaging. Carpet binders are used to secure carpet fibers to carpet backing and meet the stringent manufacturing, environmental, odor, flammability, and flexible installation requirements. Tire cord is used in automotive tires. The Specialty Chemicals product line encompasses products that have applications for specialty coatings, nonwovens (such as disposable hygiene products, engine filters, roofing mat, and scrub pads), construction, oil & gas drilling and production, adhesives, tape, floor care, textiles, graphic arts, and various other specialty applications.

Engineered Surfaces—The Engineered Surfaces segment develops, designs, produces, and markets a broad line of engineered surfacing products, including coated fabrics; vinyl, paper and specialty laminates; and industrial films. These products are used in numerous applications, including commercial building refurbishment, new construction, residential cabinets, flooring, ceiling tile and furnishings, transportation markets including buses and mass transit vehicles, marine, automotive and motorcycle OEM seating and manufactured housing, recreational vehicles, health care patient and common area furniture, and a variety of industrial films applications.

The Engineered Surfaces segment consists of two product lines. The Coated Fabrics product line applications include upholstery used in refurbishment and new construction for the commercial office, hospitality, health care, retail, education and restaurant markets, marine and transportation seating, commercial and residential furniture, automotive soft tops, and automotive after-market applications. The Laminates and Performance Films product line applications include kitchen and bath cabinets, wall surfacing, manufactured housing and recreational vehicle interiors, flooring, commercial and residential furniture, retail display fixtures, home furnishings, commercial appliances, and a variety of industrial film applications.

Basis of Presentation—The consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles and include the accounts of the Company and its wholly owned subsidiaries. All intercompany balances have been eliminated.

Use of Estimates—The preparation of the consolidated financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Actual results could differ from those estimates.

Note A—Description of Business and Significant Accounting Policies (Continued)

Revenue Recognition—The Company recognizes revenue when the following criteria are met: 1) persuasive evidence of an arrangement exists; 2) delivery has occurred; 3) an established sales price has been set with the customer; 4) collection of the sale revenue from the customer is reasonably assured; and 5) no contingencies exist. Delivery is considered to have occurred when the customer assumes the risk and rewards of ownership. The Company estimates and records provisions for customer quantity rebates and sales returns and allowances as reduction in revenue in the same period the related revenue is recognized, based upon its historical experience.

Freight Costs—The Company reflects the cost of shipping its products to customers as cost of products sold.

Environmental Costs—The Company recognizes costs associated with managing hazardous substances and pollution in ongoing operations as incurred. The Company accrues for costs associated with environmental remediation when it becomes probable that a liability has been incurred and the amount is estimable.

Research and Development Expense—Research and development costs, which were \$8.2 million in 2016, \$8.3 million in 2015, and \$9.7 million in 2014, are charged to expense as incurred.

Cash and Cash Equivalents—The Company considers all highly liquid instruments with maturities of 90 days or less as cash equivalents.

Restricted Cash—Cash that is restricted as to withdrawal or usage is recognized as restricted cash.

Financial Instruments and Fair Value Measurements—Financial assets and financial liabilities carried on the balance sheet include cash and deposits at financial institutions, trade receivables and payables, capital lease obligations, other receivables and payables, borrowings, and derivative instruments. The accounting policies on recognition and measurement of these items are disclosed elsewhere in these financial statements. Fair value is the price that would be received to sell an asset or the price paid to transfer a liability in an orderly transaction between market participants at the measurement date.

The Company measures financial assets and liabilities at fair value in one of three levels of inputs as follows:

- Level 1—Quoted prices in active markets for identical assets or liabilities.
- Level 2—Observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets or liabilities in an active market, quoted prices in markets that are not active, and model-derived valuations in which all significant inputs are observable or can be corroborated by observable market data.
- Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. This includes certain pricing models, discounted cash flow methodologies and similar techniques that use significant unobservable inputs.

Financial Risk—The Company is mainly exposed to credit, interest rate, and currency exchange rate risks which arise in the normal course of business.

Concentrations of Credit Risk—Credit risk is the potential financial loss resulting from the failure of a customer or counterparty to settle its financial and contractual obligations to the Company as and when they become due. The primary credit risk for the Company is its accounts and notes receivable, which are generally unsecured. The Company has established credit limits for customers and monitors their balances to mitigate its risk of loss. Concentrations of credit risk with respect to accounts receivable are generally limited due to the wide variety of customers and markets using the Company's products. There was one customer who represented more than 10% of the Company's net sales in 2016. There was no single customer who represented more than 10% of the Company's net sales in 2014 or net trade receivables outstanding at November 30, 2016 or 2015.

Note A—Description of Business and Significant Accounting Policies (Continued)

Foreign Currency Risk—The Company incurs foreign currency risk on sales and purchases denominated in other currencies. The currencies giving rise to this risk are primarily the GB Pound Sterling, the Euro, the Thai Baht, the Chinese Renminbi and the Singapore Dollar. Foreign currency exchange contracts are used by the Company to manage risks from the change in exchange rate of the sales denominated in U.S. dollars. Risk to the Euro is partially limited due to natural cash flows netting.

Derivative Instruments—The Company uses, from time to time, certain derivative instruments to mitigate its exposure to volatility in interest rates and foreign currency exchange rates. The Company recognizes derivative instruments as either an asset or a liability at their respective fair value. On the date a derivative contract is entered into, the Company may elect to designate the derivative as a fair value hedge, a cash flow hedge, or a hedge of a net investment in a foreign operation. The Company does not use fair value or net investment hedges. For a cash flow hedge, the fair value of the effective portion of the derivative is recognized as an asset or liability with a corresponding amount in Accumulated Other Comprehensive Income (Loss). Amounts in Accumulated Other Comprehensive Income (Loss) are recognized in earnings when the underlying hedged transaction affects earnings. Ineffectiveness is measured by comparing the present value of the cumulative change in the expected future cash flows of the derivative and the present value of the cumulative change in the expected future cash flows of the related instrument. Any ineffective portion of a cash flow hedge is recognized in earnings immediately. For derivative instruments not designated as hedges, the change in fair value of the derivative is recognized in earnings each reporting period.

The Company discontinues hedge accounting prospectively when it is determined that the derivative is no longer effective in offsetting changes in the cash flows of the hedged item or management determines that designation of the derivative as a hedging instrument is no longer appropriate. Any prospective gains or losses in this scenario on the derivative would be recognized in earnings.

Foreign currency exchange contracts are used by the Company to manage risks from the change in exchange rates on cash payments between the Company's foreign subsidiaries. These forward contracts are used on a continuing basis for periods of less than one year, consistent with the underlying hedged transactions. The hedging limits the impact of foreign exchange rate movements on the Company's operating results. As of November 30, 2016, the notional amount of outstanding forward contracts was \$7.6 million with a fair value of less than \$0.3 million. As of November 30, 2015, the notional amount of outstanding forward contracts was \$9.3 million with a fair value of less than \$0.1 million.

The Company does not enter into derivative instruments for trading or speculative purposes.

Accounts Receivable Allowance—The Company's policy is to identify customers that are considered doubtful of collection based upon the customer's financial condition, payment history, credit rating and other relevant factors; and reserves the portion of such accounts receivable for which collection does not appear likely. The allowance for doubtful accounts was approximately \$1.4 million and \$1.3 million at November 30, 2016 and 2015, respectively.

The Company does not charge interest to its customers on past due accounts receivable.

Inventories—Inventories are stated at the lower of cost or market on a consistent basis. All U.S. based inventory, which represents 47.9% of total inventory, is valued using the last-in, first-out ("LIFO") method. The Company believes the LIFO method results in a better matching of costs and revenues. The remaining portions of inventories, which are located outside of the U.S., are valued using the first-in, first-out ("FIFO") or an average cost method. Inventory costs include direct overhead, freight, and duty.

The Company's policy is to maintain an inventory obsolescence reserve based upon specifically identified, discontinued, or obsolete items and a percentage of quantities on hand compared with historical and forecasted usage and sales levels. The policy has been applied on a consistent basis for all years presented. A sudden and unexpected change in design trends and/or material preferences could impact the carrying value of the Company's inventory and require the Company to increase its reserve for obsolescence. The reserve for inventory obsolescence, which applies primarily to our Engineered Surfaces segment, was \$7.1 million and \$7.3 million at November 30, 2016 and 2015, respectively.

Note A—Description of Business and Significant Accounting Policies (Continued)

Notes Receivable—Notes receivable accepted by the Company are initially recognized at fair value. The Company does not subsequently adjust the fair value of these notes receivable unless it is determined that the note receivable is impaired. As with its accounts receivable allowance, the Company considers the issuer's financial condition, payment history, credit rating, and other relevant factors when assessing the collectability of the note and to reserve the portion of such note for which collection does not appear likely. Interest income is recognized as earned.

Litigation—From time to time, the Company is subject to claims, lawsuits, and proceedings related to product liability, product warranty, contract, employment, environmental, and other matters. The Company provides a reserve for such matters when it concludes a material loss is probable and the amount can be estimated. Costs related to environmental compliance are also accrued, on an undiscounted basis, when it is probable a loss has been incurred and the amount of loss can be estimated.

Deferred Financing Fees—Debt issuance costs are capitalized and amortized over the life of the related debt. Deferred financing fee amortization is included in interest expense in the consolidated statements of operations.

Property, Plant, and Equipment—Property, plant, and equipment are recorded at cost. Construction in process is not depreciated until the asset is ready for its intended use and is placed into service. Refurbishment costs that extend the useful life of the asset are capitalized, whereas ordinary maintenance and repair costs are expensed as incurred. Interest expense incurred during the construction phase is capitalized as part of construction in process until the relevant projects are completed and placed into service.

Depreciation is computed principally using the straight-line method using depreciable lives as follows:

	Years
Buildings and improvements	 25 – 40
Machinery and equipment	 5 – 15
Furniture and fixtures	 3 – 10
Software	 3 – 5

Leasehold improvements are depreciated over the shorter of the lease term, including any expected renewal periods that are probable to occur, or the estimated useful life of the improvement.

All of the Company's long-lived assets are reviewed for impairment whenever events or circumstances indicate that the carrying amount may not be recoverable. If the sum of undiscounted expected future cash flows is less than the carrying amount of the asset or asset group, an impairment loss is recognized based on the difference between the estimated fair value of the asset or asset group and its carrying value.

When specific actions to dispose of an asset or group of assets meet certain criteria, the underlying assets and liabilities are adjusted to the lesser of carrying value or fair value and, if material, they are reclassified into a "held for sale" category in the consolidated balance sheet or they are condensed and reported in other assets and liabilities.

Goodwill and Intangible Assets—Goodwill represents the excess of the purchase price over the fair value of assets acquired and liabilities assumed in a business combination. Goodwill and other indefinite lived intangible assets are tested for impairment at least annually as of September 1 and whenever events or circumstances indicate that the carrying amount may not be recoverable. The Company performs the impairment analysis at the reporting unit level using a two-step impairment test. The first step identifies potential impairments by comparing the estimated fair value of a reporting unit with its carrying value, including goodwill and intangible assets. Fair value is typically estimated using a market approach method or a discounted cash flow analysis, which requires the Company to estimate future cash flows anticipated to be generated by the reporting unit, as well as a discount rate to measure the present value of the anticipated cash flows. If the estimated fair value of a reporting unit exceeds its carrying value, goodwill is not considered impaired and the second step is not necessary. If the carrying value of a reporting unit

Note A—Description of Business and Significant Accounting Policies (Continued)

exceeds the fair value, the second step calculates the possible impairment by comparing the implied fair value of goodwill with the carrying value. If the implied fair value of goodwill is less than the carrying value, an impairment charge is recognized. As of September 1, 2016, the estimated fair value of the Company's goodwill exceeds the carrying value. As of November 30, 2016, all of the Company's goodwill is associated with its Performance Chemicals segment.

The impairment test for indefinite lived intangible assets consists of comparing the estimated fair value of the asset with its carrying value. The Company estimates the fair value of its indefinite lived intangible assets using a fair value model based on a market approach method or discounted future cash flows. If the carrying amounts exceed the estimated fair value, an impairment loss would be recognized in the amount of the excess. Key inputs used in determining the fair value of the trademarks/tradenames were expected future revenues and royalty rates, and accordingly, their fair value is impacted by selling prices, which for the Company is based in part on raw material costs. During the fourth quarter of 2016, the Company performed its annual impairment test for indefinite lived intangible assets and determined that there were no impairments of its indefinite lived intangible assets. The estimated fair value of our trademarks/tradenames increased approximately \$6.6 million, or 17.2%, during 2016 and decreased by approximately \$4.9 million, or 11.3%, during 2015. A sensitivity analysis was performed on the Company's trademarks/tradenames assuming a hypothetical 100 basis-point increase in the present value factor, which yielded an estimated fair value slightly below book value for one of the Company's indefinite-lived trademarks/tradenames, which has a total carrying value of \$9.3 million. The trademarks/tradenames continue to be important to the Company, and we continue to focus on long-term growth, however, if recent trends continue, the long-term assumptions relative to growth rates and profitability of the trademarks/tradenames may not be attained, which could result in an impairment to one or more of the Company's trademarks/tradenames.

Estimating future cash flows requires significant judgments and assumptions by management including sales, operating margins, royalty rates, discount rates, and future economic conditions. To the extent that the reporting unit is unable to achieve these assumptions, impairment losses may occur.

Finite lived intangible assets, such as customer lists, patents, certain trademarks/tradenames, and licenses, are initially recorded at cost or estimated fair value when acquired as part of a business combination and amortized over their estimated useful lives with periods ranging from 3 to 53 years.

Pension and Other Post-retirement Plans—The Company accounts for its pensions and other post-retirement benefits by (1) recognizing the funded status of the benefit plans in our statement of financial position, (2) recognizing, as a component of other comprehensive income or net periodic benefit cost, the gains or losses and prior service costs or credits that arise during the period, (3) measuring defined benefit plan assets and obligations as of the date of the Company's fiscal year end statement of financial position and (4) disclosing additional information in the notes to the financial statements about certain effects on net periodic benefit costs for the next fiscal year that arise from delayed recognition of prior service costs or credits and transition assets or obligations.

Asset Retirement Obligations—The fair value of an asset retirement obligation is recorded when the Company has an unconditional legal obligation to perform an asset retirement activity and the amount of the obligation can be reasonably estimated. In assessing asset retirement obligations, the Company reviews the expected settlement dates or a range of estimated settlement dates, the expected method of settlement of the obligation, and other factors pertinent to the obligations. Asset retirement obligations are not material.

Foreign Currency Translation—The financial position and results of operations of the Company's foreign subsidiaries are measured using the local currency as the functional currency. Assets and liabilities of operations denominated in foreign currencies are translated into U.S. dollars at exchange rates in effect at the balance sheet date, while revenues and expenses are translated at the average exchange rates each month during the year. The resulting translation gains and losses on assets and liabilities are recorded in Accumulated Other Comprehensive Income (Loss), and are excluded from net income until realized through sale or liquidation of the investment.

Note A—Description of Business and Significant Accounting Policies (Continued)

Gains or losses relating to foreign currency transactions are included in Other (income) expense, net in the consolidated statement of operations and consisted of gains of \$0.1 million in 2016 and \$1.5 million in 2015, and expense of \$1.1 million in 2014.

Income Taxes—The Company follows the liability method of accounting for income taxes. Under this method, deferred tax assets and liabilities are determined based on the difference between the financial reporting and tax basis of assets and liabilities using the enacted tax rates that will be in effect in the period in which the differences are expected to reverse. The Company records a valuation allowance to offset deferred tax assets, if based on the weight of available evidence, it is more-likely-than-not that some portion, or all, of the deferred tax assets will not be realized.

The Company has not provided deferred tax liabilities on certain of its non-U.S. subsidiaries' undistributed earnings as these undistributed earnings are treated by the Company as being permanently reinvested. To the extent that foreign earnings previously treated as permanently reinvested were to be repatriated, the related U.S. tax liability may be reduced by any foreign income taxes paid on these earnings. However, based on the Company's policy of permanent reinvestment, it is not practicable to determine the U.S. federal income tax liability, if any, which would be payable if such earnings were not permanently reinvested. Determination of the amount of unrecognized deferred tax liabilities and related foreign withholding taxes are not practicable due to the complexities associated with this hypothetical calculation and the Company's permanent reinvestment policy. As of November 30, 2016, the non-U.S. subsidiaries have a cumulative unremitted foreign income position of \$46.1 million, for which no deferred tax liability has been provided.

The Company utilizes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. For those benefits to be recognized, a tax position must be more-likely-than-not to be sustained upon examination by taxing authorities. The amount recognized is measured as the largest amount of benefit that is more-likely-than-not of being realized upon ultimate settlement.

The Company's accounting policy for interest and/or penalties related to underpayments of income taxes is to include interest and penalties in tax expenses.

Operating Leases—Lease expense is recognized on a straight-line basis over the non-cancelable lease term, including any optional renewal terms that are reasonably expected to be exercised. Leasehold improvements related to these operating leases are amortized over the estimated useful life, or the non-cancelable lease term, whichever is shorter.

Capital Leases—Capital leases are recognized at the lower of fair market value or the present value of future minimum lease payments with a corresponding amount recognized in property, plant, and equipment. Depreciation on assets under capital leases is included in depreciation expense. Current portions of capital lease payments are included in Amounts due banks and non-current capital lease obligations are included in Long-term debt in our Consolidated Balance Sheets. The Company has two leased assets, land and the building for its corporate headquarters, which are classified as capital leases with a present value of minimum lease payments of \$16.8 million as of November 30, 2016. The lease for the land commenced in November 2013 and expires in 20 years at which time the Company can acquire the land for a nominal amount. The lease for the building commenced in November 2014 and expires in 22 years at which time the Company receives the building at no cost.

Share-Based Compensation—Share-based compensation is measured at the grant date, based on the calculated fair value of the award, and is recognized as an expense over the requisite service period (generally the vesting period). Share-based expense includes expense related to restricted stock and options issued, as well as share units deferred into the Company's Deferred Compensation Plan for Non-Employee Directors and performance shares awarded under the Company's Long-Term Incentive Plan. The Company did not capitalize any expense related to share-based payments and recognizes share-based expense within Selling, General, and Administrative expense.

Earnings Per Share—The Company uses the two-class method for computing earnings per share where participating securities are included in the computation of earnings per share. Participating securities include unvested share-based payment

Note A—Description of Business and Significant Accounting Policies (Continued)

awards that contain nonforfeitable rights to dividends or dividend equivalents, whether paid or not. The Company did not have any participating securities outstanding during 2016, 2015, and 2014.

Accounting Standards Adopted in 2016

In May of 2015, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2015-07, Fair Value Measurement (Topic 820): Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share (or its equivalent), followed in July of 2015 by ASU 2015-12, Plan Accounting: Defined Benefit Pension Plans (Topic 960), Defined Contribution Pension Plans (Topic 962), and Health and Welfare Benefit Plans (Topic 965): Part (1) Fully Benefit Responsive Investment Contracts, Part (II) Plan Investment Disclosures, Part (III) Measurement Date Practical Expedient. These ASU's were issued with the intent to simplify and eliminate certain financial statement disclosures. These ASU's also required retrospective application with the exception of the guidance in part (III) of ASU 2015-12, which can be applied on a prospective basis and permits early adoption. The adoption of this ASU will not have an impact on the Company's financial position, results of operations, or cash flows.

Accounting Standards Not Yet Adopted

In October 2016, the FASB issued ASU No. 2016-16, Intra-Entity Transfers of Assets Other Than Inventory, which amends existing guidance related to the recognition of current and deferred incomes taxes for intra-entity asset transfers. Under the new guidance, current and deferred income tax consequences of an intra-entity asset transfer, other than an intra-entity asset transfer of inventory, are now recognized when the transfer occurs. The guidance is effective for annual periods, including interim periods within those annual periods, beginning after December 15, 2017 with early adoption permitted as of the beginning of the annual reporting period in which the ASU was issued. The Company is currently evaluating the potential impact of the adoption of this ASU on the Company's financial statements.

In August 2016, the FASB issued ASU No. 2016-15, Statement of Cash Flows- Classification of Certain Cash Receipts and Cash Payments, which clarifies existing guidance related to accounting for cash receipts and cash payments and classification on the statement of cash flows. This guidance is effective for fiscal years, and interim periods within those years, beginning after December 15, 2017, and early adoption is permitted. The adoption of this ASU will not have an impact on the Company's financial position, results of operations, or cash flows.

In June 2016, the FASB issued ASU No. 2016-13, Measurement of Credit Losses on Financial Instruments, which requires financial assets measured at amortized cost basis to be presented at the net amount expected to be collected. The income statement reflects the measurement of credit losses for newly recognized financial assets, as well as the expected increases or decreases of expected credit losses that have taken place during the period. This ASU changes the impairment model for most financial assets and certain other instruments, which will result in earlier recognition of allowances for losses. The guidance should be applied using a modified-retrospective approach, through a cumulative-effect adjustment to retained earnings as of the beginning of the first reporting period in which the guidance is effective. ASU 2016-13 is effective for fiscal years beginning after December 15, 2019 including interim periods within those fiscal years. Early adoption is permitted for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. The Company is currently evaluating the potential impact of the adoption of this ASU on the Company's financial statements.

In March 2016, the FASB issued ASU 2016-09, Improvements to Employee Share-Based Payment Accounting, which amends existing guidance related to accounting for employee share-based payments affecting the income tax consequences of awards, classification of awards as equity or liabilities, and classification on the statement of cash flows. This guidance is effective for fiscal years, and interim periods within those years, beginning after December 15, 2016, and early adoption is permitted. The Company is evaluating the potential impact that adoption of this ASU will have on its Consolidated Financial Statements and related disclosures.

Note A—Description of Business and Significant Accounting Policies (Continued)

In February 2016, the FASB issued ASU 2016-02, Leases (Topic 842), which requires a lessee to recognize on the balance sheet the assets and liabilities for the rights and obligations created by those leases with a lease term of more than twelve months. Leases will continue to be classified as either financing or operating, with classification affecting the recognition, measurement and presentation of expenses and cash flows arising from a lease. The new guidance is effective for fiscal years beginning after December 15, 2018 including interim periods within those fiscal years, and requires a modified retrospective approach to adoption for lessees related to capital and operating leases existing at, or entered into after, the earliest comparative period presented in the financial statements, with certain practical expedients available. Early adoption is permitted. The Company is currently evaluating the potential impact that adoption of this ASU will have on its Consolidated Financial Statements and related disclosures.

In January 2016, the FASB issued ASU 2016-01, Financial Instruments—Overall (Subtopic 825-10: Recognition and Measurement of Financial Assets and Financial Liabilities), which revised entities' accounting related to: (i) the classification and measurement of investments in equity securities; and (ii) the presentation of certain fair value changes for financial liabilities measured at fair value. The ASU also amends certain disclosure requirements associated with the fair value of financial instruments. The new guidance is effective for fiscal years beginning after December 15, 2018, and interim periods within fiscal years beginning after December 15, 2019. ASU 2016-01 requires a modified retrospective approach to adoption. Early adoption is only permitted for the provision related to instrument-specific credit risk. The Company is currently evaluating the potential impact this ASU will have on its Consolidated Financial Statements and related disclosures.

In April 2015, the FASB issued 2015-03, Interest—Imputation of Interest (Subtopic 835-30), which expands upon the guidance on the presentation of debt issuance costs. The guidance requires that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of the debt liability, consistent with debt discounts. This guidance requires retrospective application and is effective for fiscal years beginning after December 15, 2015 and for interim periods within those fiscal years, with early adoption permitted. The Company expects the adoption of this guidance to impact the classification of deferred financing fees on its balance sheet, but it will not impact the Company's financial position, results of operations or cash flows.

In May 2014, the FASB issued ASU No. 2014-09, Revenue from Contracts with Customers, which clarifies existing accounting literature relating to how and when a company recognizes revenue. Under ASU 2014-09, a company will recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods and services. This guidance is effective for annual reporting periods beginning after December 15, 2017, including interim reporting periods within that reporting period. The Company has developed a project plan to assess the potential impact of the standard and has evaluated a sampling of significant contracts. Despite the progress, the Company has not yet reached a conclusion as to how the adoption of the standard will impact the Company's financial position, results of operations and cash flows.

Note B—Restructuring and Severance

The following table is a summary of restructuring and severance charges for 2016, 2015, and 2014:

	2016	2015	2014
	(Dolla	rs in millio	ons)
Severance expense			
Closure costs	2.7		1
Total	\$11.1	\$5.9	\$.9

Note B—Restructuring and Severance (Continued)

During 2016, the Engineered Surfaces segment recognized restructuring and severance costs of \$0.6 million, and \$0.1 million related to closure costs, the Performance Chemicals segment recognized restructuring and severance costs of \$2.9 million, and closure costs of \$2.6 million, primarily related to facility closure actions and Corporate recognized severance costs of \$4.9 million primarily related to the resignation of the Company's former CEO pursuant to an agreement with the Company in November 2016.

During 2015, the Engineered Surfaces segment recognized restructuring and severance costs of \$1.5 million primarily related to workforce reductions and closure costs, the Performance Chemicals segment recognized \$4.3 million of severance costs related to workforce reductions, and Corporate recognized \$0.1 million of severance costs related to workforce reductions. All costs were paid by the end of the third guarter of 2016.

During 2014, the Engineered Surfaces segment recognized restructuring and severance costs related to its continuing operations of \$0.4 million primarily related to workforce reductions and plant closure costs and the Performance Chemicals segment recognized \$0.5 million of severance costs related to workforce reductions. All of the costs were paid during 2014.

The following table summarizes the Company's liabilities related to restructuring and severance activities:

	November 30,	2016		November 30,	
	2015		Payments	2016	
		(Dollars in millions)			
Performance Chemicals	\$1.4	\$ 5.5	\$6.5	\$.4	
Engineered Surfaces	.8	.7	1.5	_	
Corporate	1	4.9	1.2	3.8	
Total	\$2.3	\$11.1	\$9.2	\$4.2	

Note C—Impairment & Asset Sales

Asset Impairment

During the fourth quarter of 2016, due to changes in markets and expected lower capacity utilization at the Engineered Surfaces Minhang, China facility, the Company performed an impairment analysis of this asset group. Based on this analysis, it was determined that the fair value of the asset group was less than book value, and accordingly, the Company recognized an impairment charge of \$5.4 million and reduced Property, Plant, and Equipment by \$5.2 million and intangible assets by \$0.2 million. Fair value was determined based on valuation techniques and third party appraisals, which represent level 3 inputs in the fair value hierarchy. The Engineered Surfaces Minhang facility also recognized \$0.3 million of impairment charges during the first quarter of 2016 related to idled equipment.

During 2015, the Company recognized \$19.4 million of asset impairments which included an impairment on the Company's non-core India business of \$18.3 million in connection with its pending sale in February 2016, an impairment on land at the Company's former headquarters location of \$0.6 million, and other asset impairments of \$0.5 million on assets that were idled during 2015. In November 2015, the Company's management committed to a plan to sell the assets of the Performance Chemicals' India business. The Company recognized an impairment charge to write-down the net assets of this disposal group to its expected sales price after considering costs to sell. Additionally, as of November 30, 2015, the assets and liabilities of this business were considered as held for sale and were included in Other Current Assets and Other Current Liabilities, respectively. The Company utilized unobservable inputs in determining the magnitude of the non-recurring impairment representing level 3 inputs in the fair value hierarchy.

At November 30, 2015 the India operation comprised the following assets and liabilities.

Note C—Impairment & Asset Sales (Continued)

Assets classified as held for sale

(dollars in millions)	November 30, 2015
Cash	\$1.0
Accounts receivable	.2
Other current assets	.8
Inventories	2
Total current assets	2.2
Deferred tax assets	2.8
Total assets	\$5.0
Liabilities classified as held for sale	
(dollars in millions)	
Short-term debt	\$1.5
Accounts payable	.8
Other payables	1.8
Total current liabilities	4.1
Deferred tax liabilities	3.0
Other non-current liabilities	0.3
Total liabilities	\$7.4

There were no asset impairments during 2014.

Asset Sales

On February 5, 2016, the Company completed the sale of its Performance Chemicals' India operations (through the sale of 100% of the equity outstanding of the Company's OMNOVA Solutions India Private Limited Subsidiary) to Apcotex Inc., a private industrial products manufacturer headquartered in India. The sale included all assets and liabilities, contracts and other assets associated with the Company's production of rubber related products. Under terms of the sale, the Company received \$5.2 million in cash. The sale price was equal to the net book value of these assets and liabilities and therefore, there was no gain or loss recognized on this transaction. The Company will continue to sell certain of its products within India through its other subsidiaries in the ordinary course of business.

Note D—Other (Income) Expense

Included in other (income) expense in 2016 were environmental remediation costs of \$0.3 million, and other expenses of \$0.4 million, which were more than offset by sales of scrap material of \$1.0 million, and a reversal of operational development charges of \$0.4 million.

Included in other expense (income) in 2015 were operational development costs of \$5.4 million, environmental remediation costs of \$3.0 million, shareholder activist costs of \$1.9 million, which was partially offset by gains on foreign currency transactions of \$1.5 million, sales of scrap material of \$1.1 million, and net other income \$0.8 million.

Included in other expense (income) in 2014 were income from scrap material sales of \$1.8 million, a gain on settlement of notes receivable of \$1.1 million, gain on foreign currency transactions of \$1.1 million, and interest income of \$0.8 million, partially offset by miscellaneous non-income tax expense of \$1.1 million, environmental remediation costs of \$1.0 million, and other expense of \$0.3 million.

Note E—Income Taxes

The components of income (loss) from continuing operations before income taxes are as follows:

	Years Ended November 30,		
	2016	2015	2014
	(Dollars in millions)		
Income (Loss) from Continuing Operations Before Income Taxes			
U.S		\$(11.2)	\$ (1.7)
Foreign	8.4	<u>(9.9)</u>	13.4
	\$9.9 ====	\$(21.1) =====	<u>\$11.7</u>
	Years En	ded Noven	ber 30,
	2016	2015	2014
	(Dol	lars in milli	ons)
Income Tax (Expense) Benefit			
Current			
U.S. Federal	\$ (.6)		\$ —
U.S. State and Local	(.2)		(.2)
Foreign	(4.3)	(2.7)	(4.5)
	(5.1)	(3.5)	(4.7)
Deferred			
U.S. Federal	(2.4)		5.6
U.S. State and Local	(.5)		(.3)
Foreign	(2.3)	2.1	(.2)
	(5.2)	5.9	5.1
Income Tax (Expense) Benefit	\$(10.3)	\$ 2.4	\$ 0.4
	Years En	ded Novem	ber 30,
	2016	2015	2014
Effective Income Tax Rate			
Lifective income Tax Raie		0.5.00/	35.0%
	35.0%	35.0%	JJ.070
Tax at Federal statutory rate	35.0% 18.8	(2.6)	(49.7)
Tax at Federal statutory rate			
Tax at Federal statutory rate Valuation allowance (reversal) Foreign taxes at different rates	18.8	(2.6)	(49.7)
Tax at Federal statutory rate Valuation allowance (reversal) Foreign taxes at different rates Permanent items	18.8 (10.5)	(2.6) 14.8	(49.7) (22.5)
Tax at Federal statutory rate Valuation allowance (reversal) Foreign taxes at different rates Permanent items U.S. tax on foreign dividends Non-deductible executive compensation	18.8 (10.5) (2.7) 22.2 .2	(2.6) 14.8 .9	(49.7) (22.5) 4.3
Tax at Federal statutory rate Valuation allowance (reversal) Foreign taxes at different rates Permanent items U.S. tax on foreign dividends Non-deductible executive compensation Changes in deferred taxes	18.8 (10.5) (2.7) 22.2 .2 (.5)	(2.6) 14.8 .9 — (1.0)	(49.7) (22.5) 4.3 10.8
Tax at Federal statutory rate Valuation allowance (reversal) Foreign taxes at different rates Permanent items U.S. tax on foreign dividends Non-deductible executive compensation Changes in deferred taxes Uncertain tax positions	18.8 (10.5) (2.7) 22.2 .2 (.5) 1.5	(2.6) 14.8 .9 — (1.0) .1 4.3	(49.7) (22.5) 4.3 10.8 2.4 6.6
Tax at Federal statutory rate Valuation allowance (reversal) Foreign taxes at different rates Permanent items U.S. tax on foreign dividends Non-deductible executive compensation Changes in deferred taxes Uncertain tax positions State and local taxes	18.8 (10.5) (2.7) 22.2 .2 (.5) 1.5 7.0	(2.6) 14.8 .9 — (1.0) .1 4.3 (2.0)	(49.7) (22.5) 4.3 10.8 2.4 6.6 — 4.2
Tax at Federal statutory rate Valuation allowance (reversal) Foreign taxes at different rates Permanent items U.S. tax on foreign dividends Non-deductible executive compensation Changes in deferred taxes Uncertain tax positions State and local taxes Foreign withholding tax	18.8 (10.5) (2.7) 22.2 .2 (.5) 1.5 7.0 6.5	(2.6) 14.8 .9 — (1.0) .1 4.3 (2.0) (3.3)	(49.7) (22.5) 4.3 10.8 2.4 6.6 — 4.2 5.5
Tax at Federal statutory rate Valuation allowance (reversal) Foreign taxes at different rates Permanent items U.S. tax on foreign dividends Non-deductible executive compensation Changes in deferred taxes Uncertain tax positions State and local taxes Foreign withholding tax Non-deductible impairment	18.8 (10.5) (2.7) 22.2 .2 (.5) 1.5 7.0	(2.6) 14.8 .9 — (1.0) .1 4.3 (2.0)	(49.7) (22.5) 4.3 10.8 2.4 6.6 — 4.2 5.5
Tax at Federal statutory rate Valuation allowance (reversal) Foreign taxes at different rates Permanent items U.S. tax on foreign dividends Non-deductible executive compensation Changes in deferred taxes Uncertain tax positions State and local taxes Foreign withholding tax Non-deductible impairment Tax credits	18.8 (10.5) (2.7) 22.2 .2 (.5) 1.5 7.0 6.5 —	(2.6) 14.8 .9 (1.0) .1 4.3 (2.0) (3.3) (29.3)	(49.7) (22.5) 4.3 10.8 2.4 6.6 — 4.2 5.5 — (3.0)
Tax at Federal statutory rate Valuation allowance (reversal) Foreign taxes at different rates Permanent items U.S. tax on foreign dividends Non-deductible executive compensation Changes in deferred taxes Uncertain tax positions State and local taxes Foreign withholding tax Non-deductible impairment Tax credits Foreign non-deductible interest	18.8 (10.5) (2.7) 22.2 .2 (.5) 1.5 7.0 6.5 — 6.6	(2.6) 14.8 .9 (1.0) .1 4.3 (2.0) (3.3) (29.3) (4.4)	(49.7) (22.5) 4.3 10.8 2.4 6.6 — 4.2 5.5 — (3.0) 2.4
Tax at Federal statutory rate Valuation allowance (reversal) Foreign taxes at different rates Permanent items U.S. tax on foreign dividends Non-deductible executive compensation Changes in deferred taxes Uncertain tax positions State and local taxes Foreign withholding tax Non-deductible impairment Tax credits Foreign non-deductible interest French business tax	18.8 (10.5) (2.7) 22.2 .2 (.5) 1.5 7.0 6.5 — 6.6 4.6	(2.6) 14.8 .9 (1.0) .1 4.3 (2.0) (3.3) (29.3)	(49.7) (22.5) 4.3 10.8 2.4 6.6 — 4.2 5.5 — (3.0)
Tax at Federal statutory rate Valuation allowance (reversal) Foreign taxes at different rates Permanent items U.S. tax on foreign dividends Non-deductible executive compensation Changes in deferred taxes Uncertain tax positions State and local taxes Foreign withholding tax Non-deductible impairment Tax credits Foreign non-deductible interest French business tax French Legislation change	18.8 (10.5) (2.7) 22.2 .2 (.5) 1.5 7.0 6.5 — 6.6 4.6 16.1	(2.6) 14.8 .9 (1.0) .1 4.3 (2.0) (3.3) (29.3) (4.4) (2.0)	(49.7) (22.5) 4.3 10.8 2.4 6.6 — 4.2 5.5 — (3.0) 2.4 (2.5)
Tax at Federal statutory rate Valuation allowance (reversal) Foreign taxes at different rates Permanent items U.S. tax on foreign dividends Non-deductible executive compensation Changes in deferred taxes Uncertain tax positions State and local taxes Foreign withholding tax Non-deductible impairment Tax credits Foreign non-deductible interest French business tax	18.8 (10.5) (2.7) 22.2 .2 (.5) 1.5 7.0 6.5 — 6.6 4.6	(2.6) 14.8 .9 (1.0) .1 4.3 (2.0) (3.3) (29.3) (4.4)	(49.7) (22.5) 4.3 10.8 2.4 6.6 — 4.2 5.5 — (3.0) 2.4

Note E—Income Taxes (Continued)

As of November 30, 2016, the Company's effective tax rate was an expense of 104.0% on global pretax income of \$9.9 million. The 2016 effective tax rate was higher than the statutory income tax rate of 35% primarily as a result of a 22.2% tax expense related to the payment of an intercompany dividend and a 16.1% tax expense related to a newly enacted French deemed distribution tax. The intercompany dividend and the enactment of the French deemed distribution tax were both fourth quarter events. Neither item had a current year cash tax impact. It is also expected that the \$1.6 million tax expense related to the French deemed distribution tax legislation will reverse in the first quarter of 2017 as the law was repealed in late December of 2016. An 18.8% tax expense was also recorded for foreign valuation allowances on deferred tax assets in which no benefit can be realized. In addition, the Company realized a 10.5% tax benefit related to foreign taxes in jurisdictions in which the tax rate is lower than the US federal statutory rate.

Deferred Taxes

	November 30,			
	2016		2015	
(Dollars in millions)	Assets	Liabilities	Assets	Liabilities
Accrued estimated costs	\$ 10.6	\$ —	\$ 9.2	\$ —
Goodwill and intangible assets	_	21.6	_	22.6
Depreciation	_	12.0	_	14.0
Pension	30.2	_	30.8	_
NOLC's and other carryforwards	<i>5</i> 1. <i>7</i>	_	56.6	_
Post-retirement employee benefits	4.3	_	4.5	_
Other	6.2	_	4.0	_
Valuation allowance	(14.1)		(10.2)	
Deferred Taxes	\$ 88.9	\$33.6	\$ 94.9	\$36.6

As of November 30, 2016, the Company had approximately \$92.0 million of U.S. federal net operating loss carryforwards (NOLCs), \$108.7 million of state and local NOLCs, \$0.1 million of foreign tax credit carryforwards, and \$0.7 million of Federal Alternative Minimum Tax ("AMT") credit carryforwards. The \$108.7 million of state and local NOLCs have a realizable deferred tax asset value of \$3.8 million. The Company utilized approximately \$15.5 million and \$7.8 million of federal net operating loss carryforwards for the years ended November 30, 2016 and 2015, respectively. The majority of the federal, state and local NOLCs will expire in tax years 2021 through 2034 while the foreign tax credit carryforwards will expire, in the tax years 2017 through 2022. As of November 30, 2016, the Company had approximately \$49.2 million of foreign NOLCs of which \$39.9 million have an indefinite carryforward period. Of the \$39.9 million foreign NOLCs which have an indefinite carryforward period, \$32.0 million have a valuation allowance provided against them as the Company does not anticipate utilizing these carryforwards. Cash paid for income taxes in 2016, 2015, and 2014 was \$4.2 million, \$3.8 million and \$3.9 million, respectively, and related primarily to state and foreign income taxes.

The total unrecognized tax benefits are \$0.3 million at November 30, 2016. There were no unrecognized tax positions at November 30, 2015. There were minimal interest and penalties recognized in the statement of financial position at November 30, 2016 and none recognized during November 30, 2015. Of the total \$0.3 million of unrecognized tax benefits at November 30, 2016, \$0.1 million would, if recognized, impact the Company's effective tax rate. The amount of unrecognized tax benefits which impacted the Company's effective tax rate in 2015 was \$0.6 million and there were no unrecognized tax benefits that impacted the Company's effective tax rate in 2014.

Note E—Income Taxes (Continued)

A reconciliation of the beginning and ending amounts of unrecognized tax benefits, excluding interest and penalties is as follows:

	Years Ended November 30,		
	2016	2015	2014
	(Dol	ons)	
Opening balance December 1	\$—	\$.6	\$.8
Increase based on tax positions related to current year			
Reduction due to lapse of statute of limitations	_	(.6)	(.2)
Ending balance November 30	\$.3	<u>\$—</u>	\$.6 ===

Interest and penalties related to unrecognized tax benefits are recognized as a component of income tax expense. For the year 2016, the Company recognized minimal income tax expense related to interest and penalties. The Company recognized a \$0.4 million income tax benefit related to interest and penalties in 2015 and no income tax expense related to interest and penalties in 2014.

With limited exceptions, the Company is no longer open to audit under the statutes of limitation by the Internal Revenue Service and various states and foreign taxing jurisdictions for years prior to 2011.

Note F—Accumulated Other Comprehensive Loss

The components of Accumulated Other Comprehensive Loss are as follows:

	November 30,	
	2016	2015
	(Dollars in	millions)
Foreign currency translation adjustments	\$ (29.6)	\$ (30.2)
Employee benefit plans	(108.9)	(105.7)
Accumulated other comprehensive loss	\$(138.5)	\$(135.9)

The following table provides additional details of the amounts recognized into net earnings from accumulated other comprehensive loss:

	Foreign Currency Items	Defined Benefit Plans	Accumulated Other Comprehensive Loss
		(Dollars in mi	llions)
Balance December 1, 2013	\$.2	\$ (88.8)	\$ (88.6)
Other comprehensive (loss) before reclassifications	(10.5)	(31.0)	(41.5)
Amounts reclassified from accumulated other comprehensive earnings		1.3	1.3
Balance November 30, 2014	\$(10.3)	\$(118.5)	\$(128.8)
Other comprehensive (loss) earnings before reclassifications	(19.9)	10.1	(9.8)
Amounts reclassified from accumulated other comprehensive earnings (loss)		2.7	2.7
Balance November 30, 2015	\$(30.2)	\$(105. <i>7</i>)	\$(135.9)
Other comprehensive earnings (loss) before reclassifications	6.5	(5.3)	(4.7)
Amounts reclassified from accumulated other comprehensive earnings (loss)	(5.9)	2.1	2.1
Balance November 30, 2016	\$(29.6)	\$(108.9)	\$(138.5)

Note G—Earnings Per Share

The following table sets forth the computation of earnings per common share and earnings per common share—assuming dilution, and does not include participating securities for any year (in millions, except per share amounts):

	Years Ended November 30,		
	2016	2015	2014
Numerator			
(Loss) income from continuing operations	\$ (.4)	<u>\$(18.7)</u>	\$12.1
Income (loss) from discontinued operations, net of tax		9	(.6)
Net (loss) income	\$ (.4)	\$(17.8)	\$11.5
Denominator (shares in millions)			
Denominator for basic earnings per share—weighted average shares outstanding	44.0	45.3	46.3
Effect of dilutive securities		0.4	0.8
Denominator for dilutive earnings per share—adjusted weighted average shares and assumed			
conversions	44.0	45.7	47.1
Basic and Diluted Income (Loss) Per Share			
(Loss) income from continuing operations	\$ (.01)	\$ (.41)	\$.26
Income (loss) from discontinued operations, net of tax	<u> </u>	\$.02	\$ (.01)
Net (loss) income	\$ (.01)	\$ (.39)	\$.25

Anti-dilutive share equivalents related to share-based incentive compensation are excluded from the computation of dilutive weighted-average shares. Anti-dilutive options to purchase common stock and unearned restricted stock of the Company consisted of 1.0 million, 0.9 million and 0.1 million shares during 2016, 2015 and 2014, respectively.

Note H—Accounts Receivable

The Company's net accounts receivable of \$99.5 million are generally unsecured. There was no customer who represented more than 10% of the Company's net trade receivables at November 30, 2016 or 2015. The allowance for doubtful accounts was \$1.4 million and \$1.3 million at November 30, 2016 and 2015, respectively. Write-offs of uncollectible accounts receivable totaled \$0.2 million, \$0.3 million, and \$0.9 million in 2016, 2015, and 2014, respectively. The provision for bad debts was \$0.3 million, \$0.2 million, and \$0.3 million in 2016, 2015, and 2014, respectively.

Note I-Inventories

	November 30,	
	2016	2015
	(Dollars i	n millions)
Raw materials and supplies	\$ 33.2	\$ 34.7
Work-in-process	5.1	4.9
Finished products	58.7	60.7
Acquired cost of inventories		100.3
Excess of acquired cost over LIFO cost	(12.9)	(11.1)
Obsolescence reserves	(7.1)	(7.3)
Inventories	\$ 77.0	\$ 81.9

Inventories valued using the LIFO method represented \$46.4 million, or 47.9%, and \$50.4 million, or 48.4%, of inventories at November 30, 2016 and 2015, respectively.

Note I-Inventories (Continued)

In 2016, inventory quantities decreased in both Performance Chemicals and Engineered Surfaces and along with changing costs, this resulted in a partial liquidation of LIFO inventory layers. In 2015, inventory quantities declined in both segments, resulting in a partial liquidation of LIFO inventory layers. This resulted in increased cost of products sold of \$1.8 million in 2016 and decreased cost of products sold by \$9.5 million in 2015. The partial liquidation resulted in a decrement in the LIFO inventories of \$1.6 million in 2016.

Note J-Property, Plant and Equipment, Net

	November 30,	
	2016	2015
	(Dollars in	millions)
Land	\$ 16.8	\$ 16.5
Building and improvements	146.8	140.7
Machinery and equipment	429.0	425.5
Construction in progress	14.4	16.1
	607.0	598.8
Accumulated depreciation	(401.2)	(383.9)
Property, Plant, and Equipment, Net	\$ 205.8	\$ 214.9

As of November 30, 2016, included in Land and Buildings and improvements are \$3.0 million and \$11.9 million (net of accumulated depreciation of \$1.2 million), respectively, of assets under capital leases.

Depreciation expense was \$26.8 million, \$30.3 million, and \$29.5 million in 2016, 2015, and 2014, respectively. Included in depreciation expense is \$22.3 million, \$26.0 million, and \$23.4 million in 2016, 2015, and 2014, respectively, related to depreciation of manufacturing facilities and equipment.

As of November 30, 2016 and 2015, the Company had \$3.9 million and \$2.8 million, respectively, of unamortized software costs included in machinery and equipment, primarily related to an Enterprise Resource Program (ERP) system. Depreciation expense of software costs was \$1.6 million, \$1.0 million, and \$0.6 million in 2016, 2015, and 2014, respectively. The Company is depreciating these costs over five years.

Included in depreciation expense is \$3.0 million in 2016 and \$5.8 million in 2015 of accelerated depreciation expense related to the conversion of the plant in Calhoun, Georgia to a distribution center and the transfer of styrene butadiene capacity in Mogadore, Ohio to the Green Bay, Wisconsin plant. The Calhoun, Georgia and Mogadore, Ohio assets are fully depreciated as of November 30, 2016.

Note K—Goodwill and Other Intangible Assets

Goodwill

The following table reflects changes in the carrying value of goodwill:

	(Dollars in millions)
Balance November 30, 2014	\$85.4
Acquisitions	1.6
Currency translation adjustment	(6.2)
Balance November 30, 2015	80.8
Currency translation adjustment	
Balance November 30, 2016	\$80.2

Note K—Goodwill and Other Intangible Assets (Continued)

Intangible Assets

The following table summarizes the Company's intangible assets as of November 30, 2016 and 2015:

	November 30, 2016		November 30, 2015		November 30, 2016
	Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization	Weighted Average Remaining Life
		(Dollars i	n millions)		
Finite-lived intangible assets					
Patents	\$ 19.6	\$17.5	\$ 19.5	\$16.7	2.4
Trademarks	7.9	7.1	7.9	<i>7</i> .1	11.5
Technical know-how	5.6	4.5	5.6	4.3	9.4
Customer lists	32.9	16.2	32.9	13.4	6.6
Land use rights	6.4	1.1	6.9	1.1	52.8
Other	1.8	1.8	1.9	1.9	0.0
Sub-total	\$ 74.2	\$48.2	\$ 74.7	\$44.5	14.6
Indefinite lived intangible assets					
Trademarks	30.7		30.7		N/A
Total intangible assets	\$104.9	\$48.2	\$105.4	\$44.5	

Amortization expense for finite-lived intangible assets was \$3.8 million, \$3.7 million, and \$5.3 million for the years ended November 30, 2016, 2015, and 2014, respectively.

The following table summarizes expected future annual amortization expense for the Company's finite-lived intangible assets:

	(Dollars in millions)
2017	
2018	3.6
2019	3.2
2020	2.8
2021	2.8
Thereafter	10.0
Total	\$26.0

Note L—Debt and Credit Lines

Amounts Due Banks

Amounts due banks consist of the following debt obligations that are due within the next twelve months:

	November 30,	
	2016	2015
	(Dollars in	millions)
Capital lease obligations	\$.7	\$.5
\$350 million Term Loan B—current portion (interest at 5.25%)		
\$200 million Term Loan B—current portion (interest at 4.25%)		2.0
Total	\$4.2	\$2.5

Note L—Debt and Credit Lines (Continued)

The Company maintains borrowing facilities at certain foreign subsidiaries, which consist of working capital credit lines and facilities for the issuance of letters of credit. As of November 30, 2016, total borrowing capacity for foreign working capital credit lines and letters of credit facilities was \$6.6 million, of which \$6.5 million was available for utilization. As of November 30, 2015, total borrowing capacity for foreign working capital credit lines and letters of credit facilities was \$17.7 million, of which \$0.4 million was utilized as letters of credit issued. These letters of credit support commitments made in the ordinary course of business

The Company's long-term debt consists of the following:

	November 30,	
(Dollars in millions)	2016	2015
\$350 million Term Loan B (interest at 5.25%)	\$349.2	\$ —
\$200 million Term Loan B (interest at 4.25%)	_	190.0
Senior Unsecured Notes (interest at 7.875%)	_	150.0
Capital lease obligations	16.8	17.2
	366.0	357.2
Less: current portion	(4.2)	(2.5)
Unamortized original issue discount	(3.4)	(0.5)
Total long-term Debt	\$358.4	\$354.2

The following table reflects payments on long-term debt (excluding capital lease obligations) through maturity:

	(Dollars i	in millions)
2017		
2018	\$	3.5
2019		
2020		
2021		3.5
Thereafter	\$33	31.7

Between August and November 2016, the Company refinanced its U.S. debt facilities, issuing a \$350.0 million Term Loan B ("Term Loan B") and amending and restating its Senior Revolving Credit Facility ("Facility"). A portion of the Term Loan B was used to redeem the outstanding principal and interest on the prior \$200.0 million Term Loan B ("Prior Term Loan B"). In addition, \$155.9 million of the Term Loan B proceeds were used to redeem the remaining balance outstanding and accrued interest on the Company's 7.875% Senior Notes ("Senior Notes") on November 1, 2016.

The Term Loan B was issued at a discount of \$3.5 million which is reflected as unamortized original issue discount. The Company also incurred new debt issuance costs of \$5.1 million, which are capitalized as a component of debt issuance costs on the Statements of Operation. These amounts will be amortized over the respective term of the debt as a non-cash component of interest expense. In addition, the Company wrote-off \$1.7 million of existing debt issuance costs and the original issue discount related to the Prior Term Loan B and Senior Revolving Credit Facility and \$1.2 million of debt issuance costs related to the Senior Notes.

Term Loan

The Company's \$350.0 million Term Loan B matures on August 26, 2023. The Term Loan B is primarily secured by all real property, plant, and equipment of the Company's U.S. facilities and fully and unconditionally and jointly and severally guaranteed by the material U.S. subsidiaries of the Company. The Term Loan carries a variable interest rate based on, at the Company's

Note L—Debt and Credit Lines (Continued)

option, either a eurodollar rate or a base rate, in each case plus an applicable margin. The eurodollar rate is a periodic fixed rate equal to the ICE InterBank Offered Rate ("LIBOR") subject to a floor of 1.00%. The applicable margin for the eurodollar rate is 4.25%. The base interest rate is a fluctuating rate equal to the higher of (i) the Prime Rate, (ii) the sum of the Federal Funds Effective Rate plus 0.50%, or (iii) the one-month eurodollar rate plus 1.00%. The applicable margin for the base rate is 3.25%. Annual principal payments consist of \$3.5 million due in quarterly installments beginning November 30, 2016, and potential annual excess free cash flow payments as defined in the Term Loan B agreement, with any remaining balance to be paid on August 26, 2023. The Company was not required to make any annual excess free cash flow payments during 2016. The Company can prepay any amount at any time without penalty upon proper notice and subject to a minimum dollar requirement, except for prepayments arising from a repricing transaction occurring prior to February 26, 2017 which bear a premium of 1% of the loan amount being repaid. Prepayments will be applied towards any required annual excess free cash flow payment.

Additionally, the New Term Loan B provides for additional borrowings of the greater of \$85.0 million or an amount based on a senior secured leverage ratio, as defined in the New Term Loan B, provided that certain requirements are met. The New Term Loan B contains affirmative and negative covenants, including limitations on additional debt, certain investments and acquisitions outside of the Company's line of business. The New Term Loan B requires the Company to maintain a total net leverage ratio of less than 5.0 to 1.0. The Company is in compliance with this covenant with a total net leverage ratio of 3.5 to 1.0 at November 30, 2016.

Senior Revolving Credit Facility

The Company also has a Senior Secured Revolving Credit Facility (the "Facility") with a potential availability of \$90.0 million, which can be further increased up to \$140.0 million subject to additional borrowing base assets and lender approval. The Facility was amended in August and November 2016, resulting in a new maturity date, a reduction of potential availability from \$100.0 million to \$90.0 million and a reduction of applicable margins. The Facility now matures on August 26, 2021. The Facility is secured by U.S. accounts receivable, inventory (collectively the "Eligible Borrowing Base") and intangible assets. Availability under the Facility will fluctuate depending on the Eligible Borrowing Base and is determined by applying customary advance rates to the Eligible Borrowing Base. The Facility includes a \$5.0 million sub-limit for the issuance of commercial and standby letters of credit and a \$10.0 million sub-limit for swingline loans. Outstanding letters of credit on November 30, 2016 were \$0.4 million. The Facility contains affirmative and negative covenants, similar to the New Term Loan B, including limitations on additional debt, certain investments and acquisitions outside of the Company's line of business. If the average excess availability of the Facility falls below \$25.0 million during any fiscal quarter, the Company must then maintain a fixed charge coverage ratio greater than 1.1 to 1.0 as defined in the agreement. Average excess availability is defined as the average daily amount available for borrowing under the Facility during the Company's fiscal quarter. The Company was in compliance with this requirement as the average excess availability did not fall below \$25.0 million during the fourth quarter of 2016.

Advances under the Facility bear interest, at the Company's option, at either an alternate base rate or a eurodollar rate, in each case plus an applicable margin. The alternate base interest rate is a fluctuating rate equal to the higher of the prime rate or the sum of the federal funds effective rate plus 0.50%. The eurodollar rate is a periodic fixed rate equal to LIBOR. Applicable margins are based on the Company's average daily excess availability during the previous fiscal quarter. If average excess availability is greater than \$50 million, the applicable margin will be 1.50% on eurodollar loans and 0.50% on base rate borrowings. If average excess availability is greater than or equal to \$25 million but less than or equal to \$50.0 million, the applicable margin will be 1.75% on eurodollar loans and 0.75% on base rate borrowings. If average excess availability is less than \$25.0 million, the applicable margin will be 2.0% on eurodollar loans and 1.0% on base rate borrowings. The commitment fee for unused credit lines will be 0.25% if outstanding borrowings on the Facility are greater than or equal to 50% of the maximum revolver amount and 0.375% if outstanding borrowings are less than 50% of the maximum revolver amount.

At November 30, 2016, there were no amounts borrowed under the Facility and the amount available for borrowing under the Facility was \$63.0 million.

Note L—Debt and Credit Lines (Continued)

Senior Unsecured Notes

The Senior Notes, which were redeemed on November 1, 2016, had a face value of \$150.0 million with a 7.875% interest rate. The Senior Notes would have matured on November 1, 2018 and were unsecured. The Company was permitted to redeem the Senior Notes any time after October 31, 2014 at a premium above par subject to certain restrictions. The Senior Notes were fully and unconditionally and jointly and severally guaranteed on a senior, unsecured basis by all of OMNOVA Solution Inc.'s existing material domestic subsidiaries that from time to time guarantee obligations under the Company's Senior Notes.

The weighted-average interest rate on the Company's debt was 5.78% and 6.05% during 2016 and 2015, respectively.

The following is a schedule by year of future minimum lease payments for this capital lease together with the present value of the net minimum lease payments as of November 30, 2016.

Year Ending November 30:	(Dollars in millions)
2017	\$ 1.4
2018	1.5
2019	1.5
2020	
2021	1.4
Thereafter	18.0
Total minimum lease payments	
Less: Amount representing estimated executory costs	(.6)
Net minimum lease payments	24.7
Less: Amount representing interest	(7.9)
Present value of minimum lease payments	\$16.8

Deferred Financing Fees

Debt issuance costs and original issue discounts incurred in connection with the issuance of the Company's debt are being amortized over the respective terms of the underlying debt, including any amendments. Total amortization expense of deferred financing costs and original issue discounts was \$1.8 million, \$2.0 million, and \$2.3 million for 2016, 2015, and 2014, respectively. As a result of redeeming debt during 2016, 2015, and 2014, the Company wrote-off \$2.9 million, \$0.6 million, and \$0.8 million, respectively, of existing deferred financing fees.

Cash paid for interest was \$23.2 million, \$24.9 million, and \$30.9 million for 2016, 2015, and 2014, respectively. Included in 2015 and 2014 is the premium paid on the partial redemption of the Senior Notes as described previously.

Note M—Employee Benefit Plans

The Company maintains a number of defined benefit and defined contribution plans to provide retirement benefits for employees. These plans are maintained and contributions are made in accordance with the Employee Retirement Income Security Act of 1974 ("ERISA"), local statutory law, or as determined by the Board of Directors. The plans generally provide benefits based upon years of service and compensation. Pension plans are funded except for a U.S. non-qualified pension plan for certain key employees and certain foreign plans. The Company uses a November 30 measurement date for its plans.

Prior to 2016, the Company used a single weighted-average discount rate approach to develop the interest and service cost components of the net periodic benefit costs for its U.S. benefit plans. This method represented the constant annual rate that would be required to discount all future benefit payments related to past service from the date of expected future payment to the measurement date such that the aggregate present value equals the obligation. Effective in 2016, the Company adopted certain amendments to alter the method previously used. The new method was used for determining 2016 benefit expense for its U.S.

Note M—Employee Benefit Plans (Continued)

plans. The Company utilizes an approach that discounts the individual expected cash flows underlying interest and service costs using the applicable spot rates derived from the yield curve used to determine the benefit obligation to the relevant projected cash flows. The change in method resulted in a decrease in the service and interest components for benefit cost in 2016. The spot rates used to determine service and interest costs for 2016 expense ranged from 1.14% to 5.07%. The ultimate spot rate used to discount cash flows beyond 30 years was 4.68% for 2016. The spot rates used to determine service and interest costs for 2017 expense ranged from 1.35% to 5.07%. The ultimate spot rate used to discount cash flows beyond 30 years was 5.07% for 2017. The Company accounted for this action as a change in estimate and accordingly accounted for it on a prospective basis.

The use of disaggregated discount rates results in a different amount of Interest Cost compared to the traditional single weighted-average discount rate approach because of different weightings given to each subset of payments. The use of disaggregated discount rates affects the amount of Service Cost because the benefit payments associated with new service credits for active employees tend to be of longer duration than the overall benefit payments associated with the plan's benefit obligation. As a result, the payments would be associated with longer-term spot rates on the yield curve, resulting in lower present values than the calculations using the traditional single weighted-average discount rate.

Defined Benefit Plans

The Company's defined benefits plans generally provide benefits based on years of service and compensation for salaried employees and under negotiated non-wage based formulas for union-represented employees.

Changes in benefit obligations and plan assets are as follows:

	2016	2015
	(Dollars in	n millions)
Change in Benefit Obligation		
Benefit obligation at beginning of year		\$333.8
Service cost	1.8	1.4
Interest cost	9.6	12.9
Curtailments	_	(.5)
Actuarial loss (gain)	7.7	(34.7)
Settlement	(.6)	(.2)
Benefits paid net of retiree contributions	(20.3)	(28.2)
Exchange rate changes	1	(2.0)
Benefit Obligation at End of Year	\$280.8	\$282.5
Change in Plan Assets		
Fair value of plan assets at beginning of year	\$197.1	\$221.8
Actual return on assets	13.6	(2.2)
Employer contributions	6.9	5.7
Settlement	(.2)	_
Benefits and expenses paid net of retiree contributions	(20.3)	(28.2)
Fair Value of Plan Assets at End of Year	\$197.1	\$197.1
Funded Status at November 30	\$ (83.7)	\$ (85.4)
Amounts Recognized in the Consolidated Balance Sheets		
Current liability	\$ (1.4)	\$ (.5)
Non-current liability	(82.3)	(84.9)
Net Amount Recognized	\$ (83.7)	\$ (85.4)

Note M—Employee Benefit Plans (Continued)

As of November 30, 2016 and 2015, the amounts included in Accumulated Other Comprehensive Loss that have not yet been recognized in net periodic benefit cost consist of:

	2016	2015	
	(Dollars in	n millions)	
Net actuarial loss	\$(141.5)	\$(139.5)	
Prior service credits	\$.1	\$.1	

The after-tax amount of unrecognized net actuarial loss at November 30, 2016 was \$126.6 million. The estimated net loss for defined benefit plans that will be amortized from Accumulated Other Comprehensive Loss during 2017 is \$4.9 million.

Net Periodic Benefit Cost

	2016	2015	2014
	(Dollars in millions)		
Net Periodic Benefit Cost			
Service costs for benefits earned	\$ 1.8	\$ 1.4	\$ 1.5
Interest costs on benefit obligation	9.6	12.9	13.1
Assumed return on plan assets	(15.3)	(15.7)	(14.9)
Amortization of net loss	4.6	5.4	3.9
Curtailment (gain) loss	(0.1)	(.4)	
Total	\$ 0.6	\$ 3.6	\$ 3.6

The Company made \$6.2 million and \$5.7 million in contributions to its plans during 2016 and 2015, respectively. The Company anticipates that it will be required to make a contribution to its pension plans of \$7.4 million in 2017. The Company anticipates pension expense to be approximately \$1.6 million in 2017.

Future service benefits are frozen for all participants under the Company's U.S. defined benefit plan. All benefits earned by affected employees through the effective dates of the freezes have become fully vested with the affected employees eligible to receive benefits upon retirement, as described in the Plan document.

Estimated future benefit payments to retirees from the Company's pension plans are as follows: 2017—\$17.7 million, 2018—\$16.9 million, 2019—\$17.3 million, 2020—\$17.7 million, 2021—\$17.6 million, and thereafter \$91.1 million.

Information regarding pension plans with accumulated benefit obligations in excess of plan assets is as follows:

	2016	20)15
	(Dollars in millions)		ons)
U.S. Pension Plans			
Projected benefit obligation	\$270.	0 \$27	71.2
Accumulated benefit obligation	\$270.	0 \$27	71.2
Fair value of plan assets	\$196.	4 \$19	96.1
Non-U.S. Pension Plans			
Projected benefit obligation	\$ 10.	8 \$ 1	11.3
Accumulated benefit obligation	\$ 7.	5 \$	8.1
Fair value of plan assets	\$.	7 \$	1.0

Note M—Employee Benefit Plans (Continued)

Assumptions

Weighted average assumptions used to measure the benefit obligation for the Company's defined benefit plans as of November 30, 2016 and 2015 were as follows:

	Pension Plans		
	2016	2015	
Weighted Average Assumptions			
Discount rate used for liability determination	4.12%	4.29%	
Annual rates of salary increase (non-U.S. plans)	3.44%	3.77%	

Weighted average assumptions used to measure the net periodic benefit cost for the Company's defined benefit plans as of November 30, 2016, 2015, and 2014 were as follows:

	Pension Plans		is
	2016	2015	2014
Weighted Average Assumptions			
Discount rate used for expense determination	4.29%	4.01%	4.74%
Assumed long-term rate of return on plan assets	7.70%	7.75%	7.75%
Annual rates of salary increase (non-U.S. plans)	3.77%	3.67%	3.56%

The discount rate used for the liability measurement reflects the current rate at which the pension liabilities could be effectively settled at the end of the year. The discount rate used spot rates on a yield curve matching benefit payments to determine the weighted average discount rate that would be applied in determining the benefit obligation at November 30, 2016. The increase in the discount rate used in 2016 is due to higher yields on investments used in establishing the yield curve as compared to the prior year. The assumed long-term rate of return on plan assets assumption is based on the weighted average expected return of the various asset classes in the plans' portfolios. The asset class return is developed using historical asset return performance, as well as current market conditions, such as inflation, interest rates, and equity market performance. The rate of compensation increase is based on management's estimates using historical experience and expected increases in rates.

During 2016, the Company continued to use the Mercer modified version (MRP—2007) of the Society of Actuaries' (SOA) RP-2014 mortality table for the pre-retirement mortality base table. The Company also continued to use the Mercer Industry Longevity Experience Study (MILES) table for the Chemical, Oil & Gas and Utilities industry for Performance Chemical plan participants and the Consumer Goods and Food & Drink industry for Engineered Surfaces plan participants for the post-retirement morality base table. The Company chose to update the projection scale (used for both pre and post retirement) with an updated modified generational projection scale of MMP-2016. The MMP-2016 scale takes into account the historical grade-down of mortality improvements and relies on the Social Security Administration improvement data through 2013 (published in 2016) and reflects long-term rate of improvement based on historical experience and the Company's view of those trends. Due to the change in the mortality projection scale in 2016, the Company recognized an actuarial gain of approximately \$1.6 million and a decrease in its projected benefit obligation. Due to the change in the mortality tables in 2015, the Company recognized an actuarial gain of approximately \$18.0 million and a decrease in its projected benefit obligation in 2015.

Note M—Employee Benefit Plans (Continued)

Pension Plans Assets

The Company's defined benefit plans are funded primarily through asset trusts or through general assets of the Company. The Company employs a total return on investments approach for its U.S. defined benefit pension plan assets. A mix of equity securities, fixed income securities, and alternative investments are used to maximize the long-term rate of return on assets for the level of acceptable risk. Asset allocation at November 30, 2016, target allocation for 2016, and expected long-term rate of return by asset category are as follows:

Asset		Percentage of Plan Assets At November 30,		Weighted- Average Expected Long-Term Rate	
Category	Allocation 2016	2016	2015	Of Return	
Equity securities	58%	54%	49%	4.80%	
Fixed income securities	18%	16%	18%	.90%	
Real estate investments	10%	11%	12%	.80%	
Other	_14%	_19%	_21%	1.20%	
Total	100%	100%	100%	7.70%	

Note M—Employee Benefit Plans (Continued)

Included in Other are hedge funds and short-term money market funds.

The following tables set forth, by level within the fair value hierarchy, the U.S. defined benefit plans' assets at November 30, 2016 and November 30, 2015:

	Total	Level 1	Level 2	Level 3
	(Dollars in millions)			
2016 Money market funds	\$.1	\$.1	\$-	\$ —
Equity mutual funds	105.0 30.9	105.0 30.9		
Total registered investment companies	135.9	135.9	_	0.3
	\$136.3	\$136.0	\$ <i>—</i>	\$0.3
Collective trust funds: Core property collective Structured credit collective Energy debt collective	21.8 26.9 11.4			
Total collective trust funds measured at NAV	60.1			
	\$196.4			
2015				
Money market funds	\$.1	\$.1	\$—	\$ —
Equity mutual funds	105.2 34.2	105.2 34.2	_	
Total registered investment companies Real estate partnerships	139.5	139.4	_	1.5
	\$141.0	\$139.5	\$ <i>—</i>	\$1.5
Collective trust funds: Collateralized loan obligations	55.1			
Total collective trust funds measured at NAV	55.1			
	\$196.1			

Money market funds are valued at a net asset value (NAV) of \$1.00 per share held by the plan at year end, which approximates fair value.

The fair value of the participation units owned by the Plan in the collective trust funds are based on the NAV of participating units held by the Plan.

Investments in real estate partnerships are valued at the fair value of the underlying assets based on comparable sales value for similar assets, discounted cash flow models, appraisals, and other valuation techniques.

Note M—Employee Benefit Plans (Continued)

The preceding methods described may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, although the Company believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

A reconciliation of the beginning and ending Level 3 measurements is as follows:

	Partnerships
	(Dollars in millions)
Beginning balance, December 1, 2014	\$ 4.5
Redemptions	(2.9)
Unrealized net gains or losses included in funded status	(.1)
Ending balance, November 30, 2015	\$ 1.5
Redemptions	(1.0)
Unrealized net gains or losses included in funded status	(.2)
Ending balance, November 30, 2016	\$ 0.3

Daul Estata

For Level 3 investments in the Company's U.S. defined benefit plan, the Benefits Management Committee, which is comprised of certain executives of the Company, uses third party services as the primary basis for valuation of these investments. The third party services do not provide access to valuation models, inputs, and assumptions. Accordingly, the Benefits Management Committee conducts a review of a variety of factors including internal controls reports and financial statements of the investment, economic conditions, industry and market developments, and overall credit ratings, as well as utilizing a vendor review of the fund in assessing the propriety of the estimated fair value.

The following table summarizes the quantitative inputs and assumptions used for items categorized as recurring Level 3 assets not reported at a NAV as of November 30, 2016 and 2015.

Financial Assets	2016 Fair Value	2015 Fair Value	Valuation Techniques	Unobservable Inputs	Ranges
	(Dollars i	n Millions)			
Real estate partnerships			Discounted cash flow		
(not reported at NAV)	\$.3	\$1.6	analysis	Discount rate	6.75% - 13.0%
				Exit capitalization rate	6.43% - 10.0%
				DCF term (years)	10 - 12
	_		Appraisals	Comparable sales	N/A
	\$.3	\$1.6			

The following table sets forth a summary of the Plan's investments with a reported NAV, which is a practical expedient to estimating fair value, as of November 30, 2016 and 2015.

	November 30,	
(dollars in millions)	2016 Fair Value	2015 Fair Value
SEI Structured Credit Collective Fund(a)	\$26.9	\$22.2
Energy Debt Collective Investment Trust(b)	\$11.4	\$ 9.7
Core Property Collective Investment Trust ^(c)	\$21.8	\$23.1

Note M—Employee Benefit Plans (Continued)

- (a) The SEI Structured Credit Collective Fund seeks to provide high general returns by investing in collateralized debt obligations ("CDO's") and other structured credit instruments. The SEI Structured Credit Collective Fund requires a two-year non-redemption period after which investments can be redeemed at any time; however, a 90 day redemption notification period is required. The Plan has satisfied all funding obligations related to this investment and has surpassed the two-year non-redemption period.
- (b) The SEI Energy Debt Collective Funds seeks to generate high total returns by primarily investing in debt securities of U.S. and international energy companies denominated in U.S. dollars. The Fund will invest in investment grade bonds, below investment grade bonds, loans, rights issues, or equities of U.S. companies. Equity investments will be limited. In most cases, equity investments will be attached to a debt investment for extending credit or if received in a restructuring, though the Sub-Adviser is permitted to add-on to an existing equity position through a secondary market transaction.
- (c) The SEI Core Property Fund, (the "Fund") seeks both current income and long-term capital appreciation through investing in underlying funds that acquire, manage, and dispose of commercial real estate properties. The Fund expects to invest at least 85% of its assets in open-end core underlying funds focused on properties in the U.S. with "core" meaning high-quality, low-leveraged, income-generating office, industrial, retail, and multi-family properties, generally fully-leased to credit-worthy companies and governmental entities. Up to 5% of the Fund's net assets may be invested in liquid real estate strategies (publicly-traded REITs) for cash management purposes and the fund may have up to a 15% allocation to non-core sectors and strategies.

Defined Contribution Plans

The Company also sponsors a defined contribution 401(k) plan. Participation in this plan is available to substantially all U.S. salaried employees and to certain groups of U.S. hourly employees. Company contributions to this plan are based on either a percentage of employee contributions or on a specified amount per hour based on the provisions of the applicable collective bargaining agreement. Contribution expense to this plan was approximately \$2.5 million in 2016, \$2.4 million in 2015, and \$2.8 million in 2014. The defined contribution 401(k) plan contained approximately 0.9 million shares at November 30, 2016 and 1.1 million shares at November 30, 2015 of the Company's common stock.

Health Care Plans

The Company provides retiree medical plans for certain retired U.S. employees of which there were 64 retired participants as of November 30, 2016. The plan is frozen to all new participants. The plans generally provide for cost sharing in the form of retiree contributions, deductibles, and coinsurance between the Company and its retirees, and a fixed cost cap on the amount the Company pays annually to provide future retiree medical coverage. These post-retirement benefits are unfunded and are accrued by the date the employee becomes eligible for benefits. Retirees in certain other countries are provided similar benefits by plans sponsored by local governments.

Because the Company's retiree health care benefits are capped, assumed health care cost trend rates have a minimal effect on the amounts reported for the retiree health care plans. A one-percentage point increase/decrease in assumed health care cost trend rates would not significantly increase or decrease the benefit obligation at November 30, 2016 and would have no effect on the aggregate of the service and interest components of the net periodic cost.

Note M—Employee Benefit Plans (Continued)

Changes in benefit obligations are as follows:

Change in Benefit Obligation Company of Page (Page 1) Company of Page 2) S. 7. (Page 2) S. 7. (Pag		2016	2015
Benefit obligation at beginning of year \$ 7.6 \$ 7.1 Interest cost .2 .3 Actuarial (gain) loss .(6) .(6) Benefits polid net of retiree contributions .(6) .(7) Enerfit Obligation at End of Year \$ - 7 \$ - 7 Fair value of plan assets at beginning of year .(8) .(8) Employer contributions .(8) .(8) Benefits and expenses poid, net of retiree contributions .(8) .(8) Benefits and expenses poid, net of retiree contributions .(8) .(8) Benefits and expenses poid, net of retiree contributions .(8) .(7) Fair Value of Plan Assets at End of Year .(8) .(8) .(7) Funded Status at November 30 .(8) .(8) .(7) Punded Status at Recognized in the Consolidated Balance Sheets .(8) .(7) .(8) .(7) Current liability .(8) .(8) .(8) .(7) .(8) .(8) .(8) .(7) .(8) .(8) .(8) .(8) .(8) .(8) .(8) .		(Dollars	in millions)
Interest cost			
Actuarial (gain) loss ()			
Benefits paid net of retiree contributions (.6) (.6) Benefit Obligation at End of Year \$ 6.9 \$ 7.6 Change in Plan Assets Total page of plan assets at beginning of year \$ − \$ − Employer contributions .6 .7 .6 .6 .7 .6 .6 .7 .6 .6 .9 .7 .6 .9 .7 .6 .9 .7 .6 .9 .7 .6 .9 .7 .6 .9 .7 .6 .9 .7 .6 .9 .7 <td< td=""><td></td><td></td><td></td></td<>			
Benefit Obligation at End of Year \$6.9 \$7.6 Change in Plan Assets Fair value of plan assets at beginning of year \$ − \$ − Employer contributions .6 .6 Benefits and expenses paid, net of retiree contributions .6.9 .6.9 Fair Value of Plan Assets at End of Year \$ − \$ − Funded Status at November 30 \$ (6.9) \$ (7.6) Amounts Recognized in the Consolidated Balance Sheets \$ (6.9) \$ (7.7) Current liability .6.3 .6.9 Net Amount Recognized \$ (6.9) \$ (7.6) As of November 30, 2016 and 2015, the amounts included in Accumulated Other Comprehensive Income (Loss) that have not been recognized in net periodic benefit cost consist of:			
Change in Plan Assets Fair value of plan assets at beginning of year \$ - \$ 6 Employer contributions .6 (.6) 6 Benefits and expenses paid, net of retiree contributions [.6) (.6) (.6) Fair Value of Plan Assets at End of Year \$ - \$ \$ - \$ - \$ \$ - Funded Status at November 30 \$ (.6) \$ (.7) \$ (.6) \$ (.7) Amounts Recognized in the Consolidated Balance Sheets \$ (.6) \$ (.7) \$ (.6) \$ (.7) Non-current liability [.6] \$ (.7) \$ (.6) \$ (.7) As of November 30, 2016 and 2015, the amounts included in Accumulated Other Comprehensive Income (l.oss) that have not been recognized in net periodic benefit cost consist of: \$ (.6) \$ (.7) As of November 30, 2016 and 2015, the amounts included in Accumulated Other Comprehensive Income (l.oss) that have not been recognized in net periodic benefit cost consist of: \$ (.6) \$ (.7) As of November 30, 2016 and 2015, the amounts included in Accumulated Other Comprehensive Income (l.oss) that have not been recognized in net periodic benefit cost consist of: \$ (.5) \$ (.5) \$ (.7) As of November 30, 2016 and 2015, the amounts included in Accumulated Other Comprehensive Income (l.oss) that have not been recognized in net period	Benefits paid net of retiree contributions	. (.6)	(.6)
Fair value of plan assets at beginning of year \$ − 6 \$ −	Benefit Obligation at End of Year	. \$ 6.9	\$ 7.6
Employer contributions .6 6 Benefits and expenses paid, net of retiree contributions (.6) (.6) Fair Value of Plan Assets at End of Year \$ — \$ — Funded Status at November 30 \$ (.6.9) \$ (7.6) Amounts Recognized in the Consolidated Balance Sheets Urrent liability \$ (.6.3) (6.9) Non-current liability \$ (.6.9) \$ (7.6) Net Amount Recognized \$ (6.9) \$ (7.6) As of November 30, 2016 and 2015, the amounts included in Accumulated Other Comprehensive Income (Loss) that have not been recognized in net periodic benefit cost consist of: \$ 2016 \$ 2015 Net actuarial gain \$ 12.5 \$ 13.2 Prior service credit \$ 12.5 \$ 13.2 Prior service credit \$ 2015 \$ 2014 Net Periodic Benefit Cost \$ 2015 \$ 2014 Net Periodic Benefit Cost (Income) \$ 2015 \$ 2014 Interest costs on benefit obligation \$ 2 \$ 3 \$ 3 Amortization of prior service credits \$ 2 \$ 3 \$ 3 Amortization of net gain \$ 2 \$ 2 \$ 3<	Change in Plan Assets		
Benefits and expenses paid, net of retiree contributions (.6) (.6) (.6) (.6) (.6) (.6) (.6) (.7)	Fair value of plan assets at beginning of year	. \$ —	\$ —
Fair Value of Plan Assets at End of Year \$ — \$ — \$ — \$ — \$ — \$ — \$ — \$ — \$ — \$ —	Employer contributions	6	.6
Funded Status at November 30 \$(5.9) \$(7.6) Amounts Recognized in the Consolidated Balance Sheets Current liability \$ (.6) \$ (.7) Non-current liability [6.3] (6.9) Net Amount Recognized \$ (.6) \$ (7.7) As of November 30, 2016 and 2015, the amounts included in Accumulated Other Comprehensive Income (Loss) that have not been recognized in net periodic benefit cost consist of: 2016 2015 2015	Benefits and expenses paid, net of retiree contributions	. (.6)	(.6)
Amounts Recognized in the Consolidated Balance Sheets Current liability \$ (.6) \$ (.7) Non-current liability (6.7) \$ (.6.7) Net Amount Recognized \$ (.6.7) \$ (.7.6) As of November 30, 2016 and 2015, the amounts included in Accumulated Other Comprehensive Income (Loss) that have not been recognized in net periodic benefit cost consist of: \$ (.7.6) Net actuarial gain \$ 12.5 \$ 13.2 Prior service credit \$ 12.5 \$ 13.2 Net Periodic Benefit Cost \$ 2016 \$ 2015 \$ 2014 Ret Periodic Benefit Cost (Income) \$ 2014 \$ 2015 \$ 2014 Interest costs on benefit obligation \$ 2 \$ 3 \$ 3 Amortization of prior service credits \$ 2 \$ 3 \$ 3 Amortization of net gain \$ 1.0 \$ 1.1 \$ (.3)	Fair Value of Plan Assets at End of Year	. <u>\$ —</u>	<u>\$ —</u>
Current liability \$ (.6) \$ (.7) Non-current liability (6.3) (6.9) Net Amount Recognized \$ (6.9) \$ (7.6) As of November 30, 2016 and 2015, the amounts included in Accumulated Other Comprehensive Income (Loss) that have not been recognized in net periodic benefit cost consist of: 2016	Funded Status at November 30	. \$(6.9)	\$(7.6)
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Net Amount Recognized \$(6.9) \$(7.6) As of November 30, 2016 and 2015, the amounts included in Accumulated Other Comprehensive Income (Loss) that have not been recognized in net periodic benefit cost consist of: 2016 2015 (Dollars in millions) Net actuarial gain \$12.5 \$13.2 Prior service credit \$ − \$ − Net Periodic Benefit Cost Net Periodic Benefit Cost (Income) Interest costs on benefit obligation \$ 2 \$ 3 \$ 3 Amortization of prior service credits − (.1) (.3) Amortization of net gain (1.0) (1.2) (1.4)	Current liability	. \$ (.6)	\$ (.7)
As of November 30, 2016 and 2015, the amounts included in Accumulated Other Comprehensive Income (Loss) that have not been recognized in net periodic benefit cost consist of: 2016 2015	Non-current liability	. (6.3)	(6.9)
been recognized in net periodic benefit cost consist of: 2016 2015 (Dollars in millions) Net actuarial gain \$ 12.5 \$ 13.2 Prior service credit \$ 2016 2016 2016 2014 (Dollars in millions) Net Periodic Benefit Cost (Income) Interest costs on benefit obligation \$ 2 \$.3 \$.3 Amortization of prior service credits — (.1) (.3) Amortization of net gain (1.0) (1.2) (1.4)	Net Amount Recognized	. \$(6.9)	\$(7.6)
(Dollars in millions) Net actuarial gain \$12.5 \$13.2 Prior service credit \$ — \$ — Net Periodic Benefit Cost Net Periodic Benefit Cost (Income) Interest costs on benefit obligation \$ 2 \$ 3 \$ 3 Amortization of prior service credits — (.1) (.3) Amortization of net gain (1.0) (1.2) (1.4)		me (Loss) th	at have not
(Dollars in millions) Net actuarial gain \$12.5 \$13.2 Prior service credit \$ — \$ — Net Periodic Benefit Cost Net Periodic Benefit Cost (Income) Interest costs on benefit obligation \$ 2 \$ 3 \$ 3 Amortization of prior service credits — (.1) (.3) Amortization of net gain (1.0) (1.2) (1.4)		201	6 2015
Net actuarial gain \$12.5 \$13.2 Prior service credit \$ − \$ − Net Periodic Benefit Cost Net Periodic Benefit Cost (Income) Interest costs on benefit obligation \$.2 \$.3 \$.3 Amortization of prior service credits − (.1) (.3) Amortization of net gain (1.0) (1.2) (1.4)			
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Net Periodic Benefit Cost 2016 2015 2014 (Dollars in millions) Net Periodic Benefit Cost (Income) Interest costs on benefit obligation \$ 2 \$ 3 \$ 3 Amortization of prior service credits — (.1) (.3) Amortization of net gain (1.0) (1.2) (1.4)			
Net Periodic Benefit Cost (Income) \$ 2 \$ 3 \$ 3 Interest costs on benefit obligation \$ 2 \$ 3 \$ 3 Amortization of prior service credits — (.1) (.3) (.10) (1.2) (1.4)			,
Net Periodic Benefit Cost (Income) \$ 2 \$ 3 \$ 3 Interest costs on benefit obligation \$ 2 \$ 3 \$ 3 Amortization of prior service credits — (.1) (.3) (.10) (1.2) (1.4)	Net Periodic Benefit Cost		
Net Periodic Benefit Cost (Income) (Dollars in millions) Interest costs on benefit obligation \$.2 \$.3 \$.3 Amortization of prior service credits — (.1) (.3) Amortization of net gain (1.0) (1.2) (1.4)		2014 20	15 2014
Net Periodic Benefit Cost (Income) Interest costs on benefit obligation \$.2 \$.3 \$.3 Amortization of prior service credits — (.1) (.3) Amortization of net gain (1.0) (1.2) (1.4)			
Interest costs on benefit obligation \$.2 \$.3 \$.3 Amortization of prior service credits — (.1) (.3) Amortization of net gain (1.0) (1.2) (1.4)	Net Periodic Renefit Cost (Income)	(Dollars II	i iiiiiionsj
Amortization of prior service credits — (.1) (.3) Amortization of net gain (1.0) (1.2) (1.4)		\$ 2 \$	3 \$ 3
Amortization of net gain		, . ,	, , , , ,
	·		
\$\langle 0\ \tau \cdot \	Total		1.0) \$(1.4)

Note M—Employee Benefit Plans (Continued)

Estimated future benefit payments and Medicare Part D subsidies for the retiree health care plans are as follows:

	Benetit Payments
	(Dollars in millions)
2017	\$.6
2018	.6
2019	.6
2020	.6
2021	.6
2022—2026	2.4

The Company expects to record non-cash retiree medical health care reduction of expenses of approximately \$0.8 million in 2017.

The estimated net actuarial gain for retiree medical plans that will be amortized from Accumulated Other Comprehensive Loss during 2017 is \$1.0 million.

Assumptions

	2016	2015	2014
Weighted Average Assumptions			
Discount rate used for liability determination	4.00%	4.15%	3.85%
Discount rate used for expense determination	4.15%	3.85%	4.39%
Current trend rate for health care costs	8.00%	8.50%	7.40%
Ultimate trend rate for health care costs	4.50%	4.50%	4.50%
Year reached	2037	2037	2028

The discount rate reflects the current rate at which the retiree medical liabilities could be effectively settled at the end of the year. The discount rate used spot rates on a yield curve matching benefit payments to determine the weighted average discount rate that would be applied in determining the benefit obligation at November 30, 2016.

Note N—Contingencies and Commitments

Litigation

From time to time, the Company is subject to various claims, proceedings, and lawsuits related to products, services, contracts, employment, environmental, safety, intellectual property, and other matters. The ultimate resolution of such claims, proceedings, and lawsuits is inherently unpredictable and, as a result, the Company's estimates of liability, if any, are subject to change. Actual results may materially differ from the Company's estimates and an unfavorable resolution of any matter could have a material adverse effect on the financial condition, results of operations and/or cash flows of the Company. However, subject to the above and taking into account such amounts, if any, as are accrued from time to time on the Company's balance sheet, the Company does not believe, based on the information currently available to it, that the ultimate resolution of these matters will have a material effect on the consolidated financial condition, results of operations, or cash flows of the Company.

Leases

The Company leases certain facilities, machinery and equipment, and office buildings under long-term, non-cancelable operating leases. The leases generally provide for renewal options ranging from 5 to 20 years and require the Company to pay for

Note N—Contingencies and Commitments (Continued)

utilities, insurance, taxes, and maintenance. Rent expense on operating leases was \$6.3 million in 2016, \$5.9 million in 2015, and \$6.9 million in 2014. Future minimum commitments at November 30, 2016 for non-cancelable operating leases were \$32.8 million with annual amounts of \$4.7 million in 2017, \$3.6 million in 2018, \$3.0 million in 2019, \$2.5 million in 2020, \$1.7 million in 2021, and \$17.3 million for leases thereafter.

Environmental Matters

The Company's policy is to conduct its businesses with due regard for the preservation and protection of the environment. The Company devotes significant resources and management attention to comply with environmental laws and regulations. The Company's Consolidated Balance Sheets as of November 30, 2016 and 2015 reflects reserves for environmental remediation of \$3.9 million and \$4.1 million, respectively. The Company's estimates are subject to change and actual results may materially differ from the Company's estimates. Management believes, on the basis of presently available information, that resolution of known environmental matters will not materially affect liquidity, capital resources, or the consolidated financial condition of the Company.

Collective Bargaining Agreements

At November 30, 2016, the Company employed approximately 2,100 employees at offices, plants, and other facilities located principally throughout the United States, France, China and Thailand. Approximately 9.9% of the Company's U.S. employees are covered by collective bargaining agreements.

Note O—Share-Based Compensation Plans

The OMNOVA Solutions Third Amended and Restated 1999 Equity and Performance Incentive Plan (the "Plan") permits the Company to grant to officers, key employees, and non-employee directors of the Company incentives directly linked to the price of OMNOVA Solutions' common shares. The Plan, by virtue of the three amendments approved by shareholders since the original plan was approved in 1999, authorizes up to 9.6 million shares of Company shares in the aggregate for 1) awards of options to purchase shares of OMNOVA Solutions' common shares, 2) performance shares and performance units, 3) restricted shares, 4) deferred shares, or 5) appreciation rights. Shares used may be either newly issued shares, treasury shares, or both. As of November 30, 2016, approximately 1.2 million shares of Company common shares remained available for grants under the Plan. All options granted under the Plan have been granted at exercise prices equal to the market value of the Company's common shares on the date of grant. Additionally, the Plan provides that the term of any stock option granted under the Plan may not exceed 10 years.

Share-based compensation is measured at the grant date, based on the calculated fair value of the award, and is recognized as an expense over the requisite service period (generally the vesting period).

For options, the fair value calculation is estimated using a Black-Scholes based option valuation model. For restricted shares grants, which consist of the Company's common shares, the fair value is equal to the market price of the Company's shares on the date of grant. Estimates of fair value are not intended to predict actual future events or the value ultimately realized by employees who receive equity awards, and subsequent events are not indicative of the reasonableness of the original estimates of fair value made by the Company.

Note O—Share-Based Compensation Plans (Continued)

A summary of the Company's stock option activity and related information for the years ended 2016, 2015, and 2014 are as follows:

	2016		2015		2014	
	Shares	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price
Outstanding at beginning of year	2,000	\$6.12	9,250	\$5.15	78,250	\$5.60
Forfeited or expired	(1,000)	\$6.01	(3,750)	\$4.70	(6,500)	\$5.21
Exercised	(1,000)	\$6.23	(3,500)	\$5.07	(62,500)	\$5.71
Outstanding at end of year		\$ —	2,000	\$6.12	9,250	\$5.15

A summary of the Company's restricted share activity and related information for the years ended November 30, 2016, 2015, and 2014 are as follows:

	2016	2016		2015		4
	Shares	Weighted Average Grant Date Fair Value	Shares	Weighted Average Grant Date Fair Value	Shares	Weighted Average Grant Date Fair Value
Non-vested at beginning of year	872,200	\$8.13	919,950	\$7.63	956,076	\$7.03
Granted	416,500	\$5.44	329,350	\$7.26	341,350	\$9.31
Vested	(258,900)	\$7.91	(333,350)	\$5.88	(332,776)	\$7.60
Forfeited	(21,650)	\$8.26	(43,750)	\$8.32	(44,700)	\$7.91
Non-vested at end of year	1,008,150	\$7.23	872,200	\$8.13	919,950	\$7.63

Compensation expense for all share-based payments included in general and administrative expense was \$2.5 million, \$2.4 million, and \$2.7 million during 2016, 2015 and 2014, respectively.

As of November 30, 2016, there was \$3.0 million of total unrecognized compensation expense related to non-vested share-based compensation arrangements to be amortized over the next 2.4 years.

The intrinsic value of stock options exercised was less than \$0.1 million in 2016, \$0.1 million, and \$0.2 million in 2015 and 2014, respectively. The intrinsic value of stock options that were outstanding was less than \$0.1 million as of November 30, 2015.

Note P—Business Segment Information

During fiscal 2016, the Company's two operating segments are Performance Chemicals and Engineered Surfaces. The Company's operating segments are strategic business units that offer different products and services. They are managed separately based on fundamental differences in their operations. Accounting policies of the segments are the same as those described in the significant accounting policies.

Segment operating profit represents net sales less applicable costs, expenses and provisions for restructuring and severance costs, asset write-offs and work stoppage costs relating to operations. However, management excludes restructuring and severance costs, asset write-offs and work stoppage costs when evaluating the results and allocating resources to the segments.

Segment operating profit excludes unallocated corporate headquarters expenses, provisions for corporate headquarters restructuring and severance, interest expense and income taxes. Corporate headquarters expense includes the cost of providing

Note P—Business Segment Information (Continued)

and maintaining the corporate headquarters functions, including salaries, rent, travel and entertainment expenses, depreciation, utility costs, outside services and amortization of deferred financing costs.

For a discussion of segment performance, refer to Segment Discussion in Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations of this Annual Report on Form 10-K.

In 2016, segment operating profit for Engineered Surfaces includes asset impairment charges of \$5.7 million, restructuring and severance charges of \$0.6 million, facility closure of \$0.1 million, environmental charges of \$0.3 million and operational improvement gains of \$1.2 million, while the Performance Chemicals operating profit includes restructuring and severance charges of \$2.7 million, facility closure of \$2.6 million, operational improvement gains of \$1.8 million, and accelerated depreciation charges of \$3.0 million.

In 2015, segment operating profit for Engineered Surfaces includes restructuring and severance charges of \$1.5 million, facility closure and asset impairment costs of \$1.6 million and environmental remediation charges of \$0.2 million while the Performance Chemicals operating profit includes asset impairment charges of \$18.4 million, \$5.8 million of accelerated depreciation, operational development costs of \$5.0 million, restructuring and severance charges of \$4.3 million and \$2.8 million of environmental remediation charges.

In 2014, segment operating profit for Engineered Surfaces includes restructuring and severance charges of \$0.4 million and a gain on a note receivable of \$1.1 million while the Performance Chemicals operating profit includes restructuring and severance charges of \$0.5 million, \$2.2 million of accelerated depreciation on re-purposed assets and \$1.0 million of environmental remediation charges.

Note P—Business Segment Information (Continued)

The following table sets forth a summary of operations by segment and a reconciliation of segment sales to consolidated sales and segment operating profit to consolidated income from continuing operations before income taxes.

	2016	2015	2014
	(Do	ns)	
Net Sales			
Performance Chemicals			
Performance Materials	\$284.1	\$331.0	\$423.9
Specialty Chemicals	264.7	277.1	322.6
Total Performance Chemicals	\$548.8	\$608.1	\$746.5
Engineered Surfaces			
Coated Fabrics	\$ 71.5	\$ 87.8	\$ 98.4
Laminates and Performance Films	139.6	142.1	142.7
Total Engineered Surfaces	\$211.1	\$229.9	\$241.1
Inter-segment sales			(0.2)
Total Net Sales	\$759.9	\$838.0	\$987.4
Segment Operating Profit			
Performance Chemicals	\$ 55.9	\$ 15.9	\$ 46.2
Engineered Surfaces	12.4	18.9	19.2
Total segment operating profit	68.3	34.8	65.4
Interest expense	(24.7)	(28.3)	(32.9)
Corporate expenses	(25.8)	(23.7)	(20.0)
Corporate severance	(4.9)	_	_
Shareholder activist costs	_	(1.9)	_
Operational improvement costs	.8	(.4)	_
Asset impairment	_	(.6)	_
Acquisition and integration costs	(.9)	(.4)	_
Debt issuance costs write-off	(2.9)	(.6)	(.8)
Income (Loss) From Continuing Operations Before Income Taxes	\$ 9.9	\$ (21.1)	\$ 11.7

Note P—Business Segment Information (Continued)

	2016	2015	2014
T. 14 .	(Dollars in millions)		ns)
Total Assets Performance Chemicals Engineered Surfaces	\$451.2 162.3	\$469.4 158.4	\$535.8 170.9
Corporate	79.7 \$693.2	59.4 \$687.2	122.5 \$829.2
Capital Expenditures Performance Chemicals Engineered Surfaces Corporate	\$ 15.6 8.1 1.9 \$ 25.6	\$ 12.5 8.6 2.9 \$ 24.0	\$ 21.8 6.6 1.4 \$ 29.8
Depreciation and Amortization Performance Chemicals Engineered Surfaces Corporate	\$ 23.0 6.3 1.3 \$ 30.6	\$ 26.9 6.0 1.1 \$ 34.0	\$ 28.1 6.2 .5 \$ 34.8
GEOGRAPHIC INFORMATION			
		2015 Ilars in millio	2014 ns)
Net Sales United States Europe Asia	\$454.0 176.0 129.9 \$759.9	\$490.4 167.6 180.0 \$838.0	\$581.5 208.9 197.0 \$987.4
Segment Operating Profit			
United States Europe Asia	\$ 56.7 10.9 0.7 \$ 68.3	\$ 31.5 (5.3) 8.6 \$ 34.8	\$ 43.4 14.5 7.5 \$ 65.4
Total Assets United States		¢011.1	\$397.5
Europe	\$362.4 197.9 132.9 \$693.2	\$311.1 199.2 176.9 \$687.2	285.0 146.7 \$829.2

Note P—Business Segment Information (Continued)

Effective December 1, 2016, the Company announced the appointment of a new Chief Executive Officer, who also is the Company's CODM. On January 20, 2017, the Company announced that it is currently evaluating how it expects to make decisions, assess performance and allocate resources prospectively. Going forward, the Company expects to have two operating segments: one focused on its specialty businesses and one focused on the Company's more mature businesses. Accordingly, during the first quarter of fiscal 2017, the Company will be assessing its segment reporting, as defined under Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 280, Segment Reporting, and expects any changes to its reportable segments to be disclosed and reflected in the Company's consolidated financial statements for the second quarter of fiscal 2017.

Note Q—Financial Instruments and Fair Value Measurements

The Company's financial instruments consist primarily of cash and cash equivalents, deposits at financial institutions, and trade receivables as well as obligations under accounts payable, trade payables, notes payable and long-term debt. Due to their short-term nature, the carrying values for cash and cash equivalents, accounts receivable, accounts payable, trade and notes payable approximate fair value due to the short-term nature of these items.

Financial Risk Management Objectives and Policies

The Company is exposed primarily to credit, interest rate, and currency exchange rate risks, which arise in the normal course of business.

Credit Risk

Credit risk is the potential financial loss resulting from the failure of a customer or counterparty to settle its financial and contractual obligations with the Company as and when they fall due. The primary credit risk for the Company is its accounts receivable and notes receivable, which are generally unsecured. The Company has established credit limits for customers and monitors their balances to mitigate its risk of loss. Concentrations of credit risk with respect to accounts receivable are generally limited due to the wide variety of customers and markets using the Company's products. There was one customer that represented approximately 10% of the Company's net sales during the year ended November 30, 2016. There was no customer who represented more than 10% of the Company's net trade receivables at November 30, 2016.

Interest Rate Risk

The Company's exposure to the risk of changes in market interest rates relates primarily to the Company's \$350.0 million Term Loan B (balance of \$349.2 million at November 30, 2016) and various foreign subsidiary borrowings, which bear interest at variable rates, approximating market interest rates. The Term Loan B has a LIBOR floor of 1.00%, which eliminates the variability in interest rate changes on Eurodollar loans as long as LIBOR is under 1.00%.

Foreign Currency Risk

The Company incurs foreign currency risk on sales and purchases denominated in other than the functional currency. The currencies giving rise to this risk are primarily the Euro, Great Britain Pound Sterling, Renminbi, Singapore Dollar, and Thai Baht.

Foreign currency exchange contracts are used by the Company to manage risks from the change in market exchange rates on cash payments by the Company's foreign subsidiaries. These forward contracts are used on a continuing basis for periods of approximately thirty days, consistent with the underlying hedged transactions. Hedging limits the impact of foreign exchange rate movements on the Company's operating results. The counterparties to these instruments are investment grade financial institutions and the Company does not anticipate any non-performance. The Company maintains control over the size of positions entered into

Note Q—Financial Instruments and Fair Value Measurements (Continued)

with any one counterparty and regularly monitors the credit rating of these institutions. Such instruments are not purchased and sold for trading purposes. These contracts are not designated as hedging instruments and changes in fair value of these instruments are recognized in earnings immediately. Gains (losses) on foreign currency contracts that were recorded in the Consolidated Statement of Operations for the year ended November 30, 2016 were not material.

Derivative Instruments

The Company recognizes the fair value of qualifying derivative instruments as either an asset or a liability within its statement of financial position. For a cash flow hedge, the fair value of the effective portion of the derivative is recognized as an asset or liability with a corresponding amount in Accumulated Other Comprehensive Income Loss ("AOCI"). Amounts in AOCI are recognized in earnings when the underlying hedged transaction is recognized in earnings. Ineffectiveness, if any, is measured by comparing the present value of the cumulative change in the expected future cash flows of the derivative to the present value of the cumulative change in the expected future as heldes instrument. Any ineffective portion of a cash flow hedge is recognized in earnings immediately. For derivative instruments not designated as hedges, the change in fair value of the derivative is recognized in earnings each reporting period. The Company does not enter into derivative instruments for trading or speculative purposes.

The Company defines fair value as the price received to transfer an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The Company uses a hierarchy of valuation inputs to measure fair value.

The hierarchy prioritizes the inputs into three broad levels:

Level 1 inputs—unadjusted quoted prices in active markets for identical assets or liabilities that the Company has the ability to access. An active market for the asset or liability is one in which transactions for the asset or liability occur with sufficient frequency and volume to provide ongoing pricing information.

Level 2 inputs—inputs other than quoted market prices included in Level 1 that are observable, either directly or indirectly, for the asset or liability. Level 2 inputs include, but are not limited to, quoted prices for similar assets or liabilities in an active market, quoted prices for identical or similar assets or liabilities in markets that are not active and inputs other than quoted market prices that are observable for the asset or liability, such as interest rate curves and yield curves observable at commonly quoted intervals, volatilities, credit risk and default rates.

Level 3 inputs—unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. This includes certain pricing models, discounted cash flow methodologies and similar techniques that use significant unobservable inputs.

The fair value of derivative financial instruments recognized in the Consolidated Statements of Financial Position follows as:

(Dollars in millions)	Notional Amount	Other Current Assets	Other Current Liabilities	Type of Hedge	Term
Derivatives designated as hedges—November 30, 2016					
Currency Forward Contracts	\$7.6	\$—	\$—	Cash Flow	30 days
Total	\$7.6	<u>\$—</u>	<u>\$—</u>		
Derivatives designated as hedges—November 30, 2015					
Currency Forward Contracts	\$9.3	<u>\$—</u>	<u>\$—</u>	Cash Flow	30 days
Total	\$9.3	<u>\$—</u>	<u>\$—</u>		

Note Q-Financial Instruments and Fair Value Measurements (Continued)

Fair Value Measurements

The Company uses the market approach and the income approach to value assets and liabilities as appropriate. The following financial assets and liabilities are measured and presented at fair value on a recurring basis as of November 30, 2016 and November 30, 2015:

(Dollars in millions)	Fair Value	Level 1	Level 2	Level 3
Fair Value Measurements—November 30, 2016				
Financial Liabilities				
Foreign currency exchange contracts	<u>\$.3</u>	\$.3	<u>\$—</u>	<u>\$—</u>
Total Liabilities	<u>\$.3</u>	<u>\$.3</u>	<u>\$—</u>	<u>\$—</u>
Fair Value Measurements—November 30, 2015				
Financial Liabilities				
Foreign currency exchange contracts	\$.1	\$.1	<u>\$—</u>	<u>\$—</u>
Total Liabilities	<u>\$.1</u>	<u>\$.1</u>	<u>\$—</u>	<u>\$—</u>

There were no transfers into or out of Level 3 during the 2016 or 2015.

The fair value of the Company's Term Loan at November 30, 2016 approximated \$351.7 million, which is more than the book value of \$349.2 million as a result of prevailing market rates on the Company's debt. The carrying value of amounts due banks approximates fair value due to their short-term nature. The fair value of the Term Loan is based on market price information and is measured using the last available trade of the instrument on a secondary market in each respective period and therefore is considered a Level 2 measurement. The fair value is not indicative of the amount that the Company would have to pay to redeem these instruments since they are infrequently traded and are not callable at this value. The fair value of the Company's capital lease obligation approximates its carrying amount based on estimated borrowing rates to discount the cash flows to their present value.

Note R—Treasury Stock Purchases

Pursuant to an approved stock repurchase plan which expired in October 2015, during 2014 the Company repurchased 0.2 million of its common shares on the open market at a total cost of \$1.4 million and in 2015 repurchased 2.6 million of its common shares on the open market at a total cost of \$18.6 million completing the repurchase program for a total cost of \$20.0 million.

OMNOVA SOLUTIONS INC. Selected Quarterly Financial Data (Unaudited)

	Three Months Ended			
2016	February 29	May 31	August 31	November 30
_	(Dollars	in millions, ex	ccept per shar	e amounts)
Net sales	\$175.3	\$202.0	\$195.6	\$187.0
Gross profit(1)(2)	\$ 44.3	\$ 58.4	\$ 52.1	\$ 49.1
Restructuring and severance	\$ 1.6	\$ 1.1	\$ 0.4	\$ 6.2
Loss on asset sales	\$ —	\$.1	\$ —	\$.2
Asset impairments and write-offs	\$.3	\$ —	\$ —	\$ 5.4
Debt issuance costs write-off	\$ —	\$ —	\$ 1.7	\$ 1.2
Net (loss) income ⁽³⁾⁽⁴⁾	\$ (1.1)	\$ 7.2	\$ 4.7	\$ (11.3)
Net (loss) income per share ⁽⁴⁾				
Basic	\$ (.03)	\$.16	\$.11	\$ (.25)
Diluted	\$ (.03)	\$.16	\$.10	\$ (.26)
Common stock price range per share—high	\$ 7.43	\$ 7.37	\$10.21	\$10.35
—low	\$ 4.69	\$ 5.22	\$ 5.95	\$ 7.15
			onths Ended	
2015	February 28	May 31	August 31	November 30
	(Dollars	in millions, ex	ccept per shar	e amounts)
Net sales	\$206.9	\$220.2	\$210.9	\$200.0
Gross profit(1)(2)	\$ 41.7	\$ 52.9	\$ 51.5	\$ 47.8
Restructuring and severance	\$ —	\$ 1.1	\$ 3.4	\$ 1.4
Asset sales	\$ —	\$ —	\$ —	\$.2
Asset impairments and write-offs	\$ —	\$.6	\$.5	\$ 18.3
Debt issuance costs write-off	\$ —	\$ —	\$ —	\$.6
Income from continuing operations ⁽³⁾	\$ (3.2)	\$ 3.0	\$.4	\$ (18.9)
Loss from discontinued operations	\$ —	\$.9	\$ —	\$ —
Net income ⁽³⁾	\$ (3.2)	\$ 3.9	\$.4	\$ (18.9)
Income per share from continuing operations ⁽⁴⁾				
Basic and Diluted	\$ (.07)	\$.07	\$.01	\$ (.43)
Net income per share				
Basic and Diluted	\$ (.07)	\$.09	\$.01	\$ (.43)
Common stock price range per share—high				
	\$ 8.52	\$ 8.62	\$ 8.24	\$ 7.55

⁽¹⁾ Gross profit excludes depreciation and amortization expense. Depreciation and amortization expense related to manufacturing facilities and equipment was \$7.7 million, \$4.9 million, \$4.7 million, and \$5.0 million for the three months ended February 29, 2016, May 31, 2016, August 31, 2016, and November 30, 2016, and \$5.0 million, \$5.0 million, \$7.8 million, and \$8.2 million for the three months ended February 28, 2015, May 31, 2015, August 31, 2015 and November 30, 2015, respectively.

\$ 6.54

\$ 7.30 \$ 5.76

\$ 5.00

⁽²⁾ Gross profit includes net LIFO inventory reserve adjustments of \$0.5 million of income, \$0.3 million of expense, \$0.6 million of expense, and \$1.4 million of expense for the three months ended February 29, 2016, May 31, 2016, August 31, 2016, and November 30, 2016, respectively, and \$2.2 million of income, \$1.5 million of income, \$2.1 million of income, and \$3.7 million of income for the three months ended February 28, 2015, May 31, 2015, August 31, 2015, and November 30, 2015, respectively.

- (3) As of November 30, 2016, the Company's income tax expense was \$10.3 million or a 104.0% effective tax rate. During the fourth quarter of 2016, the Company recorded \$2.2 million tax expense related to the payment of an intercompany dividend, \$1.6 million tax expense related to a newly enacted French deemed distribution tax, and \$1.9 million tax expense for foreign valuation allowances on deferred tax assets in which no benefit can be realized. Income from continuing operations and net income includes \$1.0 million of debt redemption premium expense related to early debt redemption for the three months ended November 30, 2015, respectively.
- (4) The sum of the quarterly earnings per share amounts may not equal the annual amount due to changes in the number of shares outstanding during the year.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

There have been no changes in accountants or disagreements with the Company's independent registered public accounting firm regarding accounting and financial disclosure matters during the two most recent years of the Company or during any period subsequent to the date of the Company's most recent consolidated financial statements.

Item 9A. Controls and Procedures

Management of the Company, including the Chief Executive Officer and the Chief Financial Officer, has evaluated the effectiveness of the Company's disclosure controls and procedures as of November 30, 2016, using criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control—Integrated Framework (2013). Based on its evaluation, management has determined that the Company's disclosure controls and procedures are effective. Further, during the quarter ended November 30, 2016, there were no changes in the Company's internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting. Management's annual report on the Company's internal control over financial reporting and the attestation report of the Company's independent registered public accounting firm are set forth in this report, respectively, and are incorporated herein by reference.

Item 9B. Other Information

Not applicable.

PART III

Item 10. Directors and Executive Officers of the Registrant

The below biographical information for OMNOVA's executive officers is given as of February 1, 2017. Except as otherwise indicated, each individual has held the same office during the preceding five-year period.

Anne P. Noonan, age 53, President and Chief Executive Officer of the Company as of December 1, 2016. Ms Noonan served as President of the Performance Chemicals business from September 2014 to December 2016. Ms. Noonan joined OMNOVA from Chemtura Corporation, a global manufacturer of specialty chemicals that was formed from the 2005 merger of Great Lakes Chemical Corp. and Crompton Corp. She most recently served as Senior Vice President and President of Chemtura's Industrial Engineered Products business from October 2013 until September 2014. Prior roles at Chemtura include Vice President, Strategic Business Development and President, Great Lakes Solutions from 2012 until 2013; President, Great Lakes Solutions from 2009 until 2012; Group President, Polymer Additives from 2007 until 2009; and Vice President & General Manager, Flame Retardants & Brominated Performance Products from 2005 until 2007. Ms. Noonan held several senior management positions at Great Lakes Chemical Corp. from 1987 until 2005, and began her career as an Analytical Research Chemist with McNeil Specialty Chemical Company and Squibb-Linson, Co. from 1985 until 1987.

Paul F. DeSantis, age 52, Senior Vice President and Chief Financial Officer since July 2014. Mr. DeSantis joined the Company from Bob Evans Farms, Inc., a restaurants owner/operator and packaged foods business, where he served as Chief Financial Officer from March 2011 until June 2014. Prior to Bob Evans Farms, he was Chief Financial Officer for The A. Schulman Company, a leading global plastic compounding company, from 2006 until 2011. Previously, he served in senior finance roles for The Scotts-Miracle-Gro Co., a leading supplier of branded consumer products for lawn and garden care, from 1997 until 2006; and for the Kellogg Company, a manufacturer and marketer of ready-to-eat cereal and convenience foods, from 1993 until 1997.

James C. LeMay, age 60, Senior Vice President, Corporate Development; General Counsel of OMNOVA Solutions Inc. since December 1, 2000. Previously, Mr. LeMay was Senior Vice President, Law and General Counsel of OMNOVA Solutions Inc. since its formation. Prior to the spin-off of OMNOVA Solutions in October 1999, Mr. LeMay served as Assistant General Counsel of GenCorp Inc.

Jay T. Austin, age 60, Senior Vice President, Global Operations and Supply Chain as of January 20, 2017. Mr. Austin served as Senior Vice President, Global Sourcing and Logistics from December 2010 to January 2017. Prior to that, he had served as Vice President, Strategic Sourcing of OMNOVA Solutions since August 2008. Prior to joining the Company, Mr. Austin had served as Vice President of Global Procurement for ICI Paints (a leading international paint business) since March 2006 and, prior to that, as Director of Purchasing, North America for The Glidden Company, a division of ICI Paints, since July 2002.

Marshall D. Moore, age 52, Vice President and Chief Technology Officer as of January 20, 2017. Mr. Moore served as Vice President, Technology and Innovation Excellence for Performance Chemicals from March 2015 to January 2017. Prior to joining OMONVA, Mr. Moore served in a range of leadership roles at Chemtura Corporation including Director of Research & Development, Advocacy and Marketing from September 2008 to December of 2014, and Vice President of Quality and Process Excellence from July 2003 to August 2008. Prior roles included Global Technology Director and Six Sigma Master Black Belt at GE Specialty Chemicals from February 2000 to July 2003, and Global Product Design Leader at GE Plastics from to 1996 to 2000.

Michael A. Quinn, age 53, Senior Vice President and Chief Human Resources Officer since October 2013. Prior to joining OMNOVA, Mr. Quinn spent 28 years in human resources positions with high technology, manufacturing, and service companies. Most recently, Mr. Quinn had served since January 2009 as Vice President, Human Resources for the Specialty Diagnostics Group of Thermo Fisher Scientific (the world leader in serving science through products and services that help customers solve complex analytical challenges, improve patient diagnostics, and increase laboratory productivity). Previously, Mr. Quinn had served as Vice President, Talent Management and Development for Thermo Fisher Scientific since June 2007. Before joining Thermo Fisher Scientific, Mr. Quinn spent four years as Director, Talent Acquisition and Development for the Integrated Defense Systems business of Raytheon Company (a leading defense and aerospace company).

The Company's executive officers generally hold terms of office of one year and/or until their successors are elected.

The information required by this item is set forth in the following sections of OMNOVA's Definitive Proxy Statement for the 2017 Annual Meeting of Shareholders to be held March 22, 2017 (the "2017 Proxy Statement") and these sections are incorporated herein by reference:

- "Nominees for election at this Annual Meeting"
- "Continuing directors not up for election"
- "Ownership of OMNOVA Equity Securities—Section 16(a) beneficial ownership reporting compliance"
- "Corporate Governance Documents—Business Conduct Policies (Code of Ethics)"
- "Audit Matters—Audit committee independence and financial experts"

OMNOVA expects to file the 2017 Proxy Statement with the SEC on or before February 3, 2017. Any amendment to, or waiver from a provision of, the Code of Ethics that applies to its Chief Executive Officer, Chief Financial Officer, or any other executive officer or director, will be promptly disclosed on its website (www.omnova.com) as required by laws, rules and regulations of the SEC.

Item 11. Executive Compensation

The information required by this item is set forth in the following sections of the 2017 Proxy Statement and these sections are incorporated herein by reference:

- "Compensation Discussion and Analysis"
- "Compensation of Executive Officers"
- "Compensation and Corporate Governance Committee Report"
- "Corporate Governance and the Board—Risk management—Oversight of compensation practices and risks"

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Shareholder Matters

The information required by this item is set forth in the section captioned "Ownership of OMNOVA Equity Securities" of the 2017 Proxy Statement and is incorporated herein by reference.

Equity Compensation Plan Information

OMNOVA is currently authorized to issue is common shares under OMNOVA's Third Amended and Restated 1999 Equity and Performance Incentive Plan (approved by the Company's shareholders in 2012) and the OMNOVA's Employee Share Purchase Plan (approved by the Company's shareholders in 2016).

The following table sets forth certain information as of November 30, 2016 concerning those plans.

Plan Category	be issued upon exercise of outstanding options, warrants and rights	exercise price of outstanding options, warrants and rights	remaining available for issuance under equity compensation plans
Equity compensation plans approved by security holders	1,008,150	\$7.23	1,677,640
Equity compensation plans not approved by security holders	N/A	N/A	N/A
Total	1,008,150	\$7.23	1,677,640

Item 13. Certain Relationships and Related Transactions, Director Independence

The information required by this item is set forth in the following sections of the 2017 Proxy Statement and these sections are incorporated herein by reference:

- "Corporate Governance and the Board—Director independence"
- "Corporate Governance and the Board—Related-party transactions"

Item 14. Principal Accountant Fees and Services

The information required by this item is set forth in the section captioned "Audit Matters" of the 2017 Proxy Statement and is incorporated herein by reference.

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a)(1) Consolidated Financial Statements:

The following consolidated financial statements of OMNOVA Solutions Inc. are included in Item 8:

Consolidated Statements of Operations for the years ended November 30, 2016, 2015, and 2014

Consolidated Statements of Comprehensive (Loss) Income for the years ended November 30, 2016, 2015, and 2014

Consolidated Balance Sheets at November 30, 2016 and 2015

Consolidated Statements of Shareholders' Equity for the years ended November 30, 2016, 2015, and 2014

Consolidated Statements of Cash Flows for the years ended November 30, 2016, 2015, and 2014

Notes to Consolidated Financial Statements

(a)(2) Schedules

All schedules for which provision is made in the applicable accounting regulation of the Securities and Exchange Commission are either presented in the Company's consolidated financial statements or are not required under the related instructions or are inapplicable and therefore have been omitted.

EXHIBIT INDEX

(a)(3) Exhibits

Exhibit	Description
	CHARTER DOCUMENTS
3.1	Amended and Restated Articles of Incorporation of OMNOVA Solutions Inc. (incorporated by reference to the same numbered exhibit to the Company's Annual Report on Form 10-Q for the fiscal quarter ended May 31, 2016 (File No. 1-15147)).
3.2	Amended and Restated Code of Regulations of OMNOVA Solutions Inc. (incorporated by reference to the same numbered exhibit to the Company's Annual Report on Form 10-Q for the fiscal quarter ended May 31, 2016 (File No. 1-15147))
	MATERIAL CONTRACTS
10.1†	Form of Amended and Restated Severance Agreement granted to certain executive officers of OMNOVA Solutions (incorporated by reference to Exhibit 10.6 to the Company's Annual Report on Form 10-K for the year ended November 30, 2008 (File No. 1-15147)).
10.2†	OMNOVA Solutions Third Amended and Restated 1999 Equity and Performance Incentive Plan (incorporated by reference to Appendix C to the Company's 2012 Proxy Statement filed with the Securities and Exchange Commission on February 3, 2012 (File No. 1-15147)).
10.3†	OMNOVA Solutions Deferred Compensation Plan for Nonemployee Directors, as amended and restated effective January 1, 2009 (incorporated by reference to Exhibit 10.8 to the Company's Annual Report on Form 10-K for the year ended November 30, 2008 (File No. 1-15147)).
10.4†	Retirement Plan for Nonemployee Directors of OMNOVA Solutions, as amended and restated effective January 1, 2009 (incorporated by reference to Exhibit 10.9 to the Company's Annual Report on Form 10-K for the year ended November 30, 2008 (File No. 1-15147)).
10.5†	Savings Benefits Restoration Plan for Salaried Employees of OMNOVA Solutions (incorporated by reference to Exhibit 10.11 to the Company's Annual Report on Form 10-K for the year ended November 30, 2008 (File No. 1-15147)).
10.6†	Pension Benefits Restoration Plan for Salaried Employees of OMNOVA Solutions (incorporated by reference Exhibit 10.12 to the Company's Annual Report on Form 10-K for the year ended November 30, 2008 (File No. 1-15147)).
10.7†	OMNOVA Solutions Corporate Officers Severance Plan, effective January 1, 2009 (incorporated by reference to Exhibit 10.13 to the Company's Annual Report on Form 10-K for the year ended November 30, 2008 (File No. 1-15147)).
10.8†	OMNOVA Solutions Long-Term Incentive Program, as amended and restated effective January 19, 2012 (incorporated by reference to Appendix B to the Company's 2012 Proxy Statement filed with the Securities and Exchange Commission on February 3, 2012 (File No. 1-15147)).
10.9†	Form of Deferred Share Agreement (incorporated by reference to Exhibit 10.22 to the Company's Annual Report on Form 10-K for the year ended November 30, 2009 (File No. 1-15147)).
10.10†	Form of Performance Share Agreement (incorporated by reference to Exhibit 10.23 to the Company's Annual Report on Form 10-K for the year ended November 30, 2012 (File No. 1-15147)).
10.11†	Form of Restricted Stock Agreement (incorporated by reference to Exhibit 10.24 to the Company's Annual Report on Form 10-K for the year ended November 30, 2011 (File No. 1-15147)).
10.12†	Form of Restricted Share Units Agreement (filed herewith).
10.13†	OMNOVA Solutions Executive Incentive Compensation, as amended and restated effective January 19, 2012 (incorporated by reference to Appendix A to the Company's 2012 Proxy Statement filed with the Securities and Exchange Commission on February 3, 2012 (File No. 1-15147)).
10.14†	Separation Agreement dated November 6, 2016 by and between OMNOVA Solutions Inc. and Kevin M. McMullen (filed herewith).
10.15†	Chief Executive Officer Employment Agreement dated December 1, 2016 by and between OMNOVA Solutions Inc. and Anne P. Noonan (filed herewith).

Exhibit Description

- 10.16 Second Amended and Restated Term Loan Credit Agreement dated as of December 9, 2010 by and among OMNOVA Solutions Inc., as Borrower, the financial institutions party thereto as Lenders, and Deutsche Bank Trust Company Americas, as agent for the Lenders (incorporated by reference to Exhibit 10.30 to the Company's Annual Report on Form 10-K for the year ended November 30, 2010 (File No. 1-15147)).
- 10.17 Amendment dated March 7, 2013, to Second Amended and Restated Term Loan Credit Agreement dated as of December 9, 2010, by and among OMNOVA Solutions Inc., as Borrower, the financial institutions party thereto, as Lenders, and Deutsche Bank Trust Company Americas, as agent for the Lenders (incorporated by reference to Exhibit 10.33 to the Company's Annual Report on Form 10-K for the year ended November 30, 2013 (File No. 1-15147)).
- 10.18 Amendment No. 2, dated March 28, 2014, to Second Amended and Restated Term Loan Credit Agreement dated as of December 9, 2010, by and among OMNOVA Solutions Inc., as Borrower, the financial institutions party thereto, as Lenders, and Deutsche Bank Trust Company Americas, as agent for the Lenders (incorporated by reference Exhibit 10.35 to the Company's Annual Report on Form 10-K for the year ended November 30, 2014 (File No. 1-15147)).
- 10.19 Consent to Limited Release of Collateral, dated November 21, 2014, to Second Amended and Restated Term Loan Credit Agreement dated as of December 9, 2010, by and among OMNOVA Solutions Inc., as Borrower, the financial institutions party thereto, as Lenders, and Deutsche Bank Trust Company Americas, as agent for the Lenders (incorporated by reference to Exhibit 10.36 to the Company's Annual Report on Form 10-K for the year ended November 30, 2014 (File No. 1-15147)).
- Third Amended and Restated Senior Secured Credit Facility dated as of November 30, 2016 by and among OMNOVA Solutions Inc. as borrower, the financial institutions party thereto as lenders, and JPMorgan Chase Bank N.A., as agent for the lenders (filed herewith).
- 10.21 Form of Indemnification Agreement by and among OMNOVA Solutions Inc. and the directors and officers of the Company (incorporated by reference to Exhibit 10.39 to the Company's Annual Report on Form 10-K for the year ended November 30, 2015).
- 12.1 Computation of Ratio of earnings to fixed charges.

SUBSIDIARIES OF THE REGISTRANT

21.1 Listing of Subsidiaries.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

23.1 Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm.

POWER OF ATTORNEY

24.1 Powers of Attorney.

CERTIFICATIONS

- 31.1 Principal Executive Officer's Certifications pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- 31.2 Principal Financial Officer's Certifications pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- 32.1 Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
- The following financial information from our Annual Report on Form 10-K for 2016, filed with the SEC on February 1, 2017, formatted in XBRL: (i) the Consolidated Statements of Operations for the years ended November 30, 2016, 2015, and 2014; (ii) the Consolidated Statements of Comprehensive Income (Loss) for the years ended November 30, 2016, 2015, and 2014; (iii) the Consolidated Balance Sheets at November 30, 2016 and 2015; (iv) the Consolidated Statements of Shareholders' Equity for the years ended November 30, 2016, 2015, and 2014; (v) the Consolidated Statements of Cash Flows for the years ended November 30, 2016, 2015, and 2014; and (vi) the Notes to the Consolidated Financial Statements.

The Company will supply copies of any of the foregoing exhibits to any shareholder upon receipt of a written request addressed to OMNOVA Solutions Inc., 25435 Harvard Road, Beachwood, Ohio 44122-6201, Attention: Corporate Secretary, and payment of \$1 per page to help defray the costs of handling, copying, and return postage.

† Management contract or compensatory arrangement.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: February 1, 2017

OMNOVA SOLUTIONS INC.

By /s/ ANNE P. NOONAN

Anne P. Noonan President and Chief Executive Officer and Director (Principal Executive Officer)

By /s/ PAUL F. DESANTIS

Paul F. DeSantis Senior Vice President and Chief Financial Officer (Principal Financial Officer)

By /s/ DONALD B. McMILLAN

Donald B. McMillan Chief Accounting Officer (Principal Accounting Officer)

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 and on the dates indicated.

Signature	<u>Title</u>	Date
*	Chairman and Director	February 1, 2017
William R. Seelbach		
*	Director	February 1, 2017
D. J. D'Antoni		
*	Director	February 1, 2017
Janet Plaut Giesselman		
*	Director	February 1, 2017
Joseph M. Gingo		
*	Director	February 1, 2017
Michael J. Merriman		
*	Director	February 1, 2017
James A. Mitarotonda		
*	Director	February 1, 2017
Steven W. Percy		
*	Director	February 1, 2017
Larry B. Porcellato		
* Allan R. Rothwell	Director	February 1, 2017
Aliali K. Kothwell		

Signature	<u>Title</u>	Date
*	Director	February 1, 2017
Robert A. Stefanko		
*Signed by the undersigned as attorney-in-fact and agent for the Directors indicated.		
/s/ JAMES. C. LEMAY		February 1, 2017
James C. LeMay		

CERTIFICATIONS

I, Anne P. Noonan, certify that:

- 1. I have reviewed this Annual Report on Form 10-K of OMNOVA Solutions Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
 - c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent quarter (the registrant's fourth quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Name: Anne P. Noonan

Title: President and Chief Executive Officer

Date: February 1, 2017

CERTIFICATIONS

- I, Paul F. DeSantis, certify that:
 - 1. I have reviewed this Annual Report on Form 10-K of OMNOVA Solutions Inc.;
- Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
 - c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent quarter (the registrant's fourth quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Name: Paul F. DeSantis

Title: Senior Vice President and Chief Financial Officer

Date: February 1, 2017

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of OMNOVA Solutions Inc. (the "Company") on Form 10-K for the year ended November 30, 2016 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned officers of the Company certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to such officer's knowledge:

- 1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- 2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods expressed in the Report.

Date: February 1, 2017

Name: Anne P. Noonan

Title: President and Chief Executive Officer

Name: Paul F. DeSantis

Title: Senior Vice President and Chief Financial Officer

The foregoing certification is being furnished solely pursuant to 18 U.S.C. Section 1350 and is not being filed as part of the Report or as a separate disclosure document.