



*PolyOne*<sup>TM</sup>

# OUR PEOPLE. OUR FUTURE.

ANNUAL REPORT 2016



# OUR PEOPLE. OUR FUTURE.



PolyOne Corporation, with 2016 revenues of \$3.3 billion, is a premier provider of specialized polymer materials, services and solutions. We are dedicated to serving customers in diverse industries around the globe, by creating value through collaboration, innovation and an unwavering commitment to excellence. Guided by our Core Values, Sustainability Promise and No Surprises Pledge<sup>SM</sup>, we are committed to our customers, employees, communities and shareholders through ethical, sustainable and fiscally responsible principles.

## OUR VISION

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To be the world's premier provider of specialized polymer materials, services and solutions.





## OUR VALUES

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Collaboration. Innovation. Excellence. These core values, which begin with our individual decisions and actions, focus our attention on putting the customer first by creating genuine value through collaboration, innovation and an unwavering commitment to excellence. We will uphold these values with the utmost integrity in all that we do.

**“Workplace cultures can’t be manufactured, bought or dictated by management. Cultures are instead a reflection of the values, dreams and efforts of the employees who serve a company’s mission.”**

—Robert M. Patterson  
Chairman, President and Chief Executive Officer

## OUR STRATEGY

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### SPECIALIZATION

Differentiates us through unique value-creating offerings to our customers.

### GLOBALIZATION

Positions us to serve our customers consistently, everywhere in the world.

### OPERATIONAL EXCELLENCE

Empowers us to respond to the voice of the customer with relentless continuous improvement.

### COMMERCIAL EXCELLENCE

Governs our activities in the marketplace to deliver extraordinary value to our customers.

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In this annual report, statements that are not reported financial results or other historical information are “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. Factors that could cause our actual results to differ materially from those implied by forward-looking statements are described in detail in Part I of the Form 10-K.

# A LETTER TO OUR SHAREHOLDERS

from Robert M. Patterson  
Chairman, President and CEO

**2016 was another year of accomplishments for PolyOne. I'm pleased to report we delivered our 7<sup>th</sup> consecutive year of adjusted EPS growth, despite a number of macro-economic challenges. And while this is the headline result, we achieved many supporting successes and milestones, as highlighted throughout this letter.**



Just some of our many achievements include:

- With our 0.74 incidence rate, our safety performance remained world class for our industry
- We increased our full-year adjusted EPS 9% to an all-time record of \$2.13
- Service remained at the forefront of our daily interface and commitment to customers, and for the second year in a row, we invested heavily in our commercial resources, increasing the number of sales, marketing and technology associates by 12% since 2015
- Our solutions portfolio in colorants, additives, elastomers and composites continued to expand through several specialty acquisitions and their integration
- PolyOne's exceptional team of global associates became even stronger as we invested in our people

We certainly faced many challenges in 2016 as well. These included headwinds from hydrocarbon based raw material deflation that reduced revenue by nearly \$150 million and compressed margins, primarily within our PolyOne Distribution (POD) and Performance Products and Solutions (PP&S) segments. Certain end markets, such as oil and gas, agricultural and heavy truck declined significantly. And while these do not represent our largest end markets, they impacted total sales by about 1% as we serve these areas with some of our most specialty products, such as composites and fluoropolymer colorants. Finally, the former Spartech businesses continued to experience integration challenges with our Designed Structures and Solutions (DSS) segment, falling just short of break-even in 2016.

In the face of such adversity, I am proud of our team for staying the course and looking beyond the near term to ensure we stayed true to our strategy, made the right choices, and put our customers first—with the goal of delivering long-term growth and value, for them and for our shareholders.

All companies talk about strategy. All companies talk about execution. While these things matter, I want to talk about culture. Workplace cultures can't be manufactured, bought or dictated by management. Cultures are instead a reflection of the values, dreams and efforts of the employees who serve a company's mission.

In a year with little to no macroeconomic momentum to help drive growth, it would have been easy to sacrifice our long-term prospects for short-term rewards. But we didn't do that. We invested with confidence. We served our customers with excellence in 2016, invested in strategic initiatives and continued to build a world-class sustainable organization at PolyOne.

It begins with inspirational leadership from our team.

Now in their fourth year, our keystone internal training programs—NextGen and PolyMasters—are developing “tomorrow's leaders today” in preparation to effectively lead with inspiration. They are now robust and global endeavors, with a combined 190 associates having participated from 18 countries. One of the personal highlights of my year is engaging with these associates and helping them to become better leaders.

We've also broadened our external recruiting efforts to better identify, attract and retain the best and brightest who will make a difference for our customers and our company. Perhaps most telling is with our campus recruiting and an increased emphasis on career opportunities for veterans. In 2007, we did not have a formalized effort to recruit or hire new associates who were graduating college students. Sounds hard to believe, I know.

Today, we recruit at more than 30 leading universities around the world and hire approximately 60 new graduates each year as full-time, co-ops or interns. We have also launched 7 highly coveted leadership development programs—from marketing to operational excellence to finance to IT—where newly hired associates rotate through various departments and jobs for up to two years, contributing their skills while also building diverse, well-rounded knowledge of our company and many stakeholders. We also support and invest in the skills of our existing associates because we believe that career-long learning and continual improvement is crucial to our culture and our core values of Collaboration, Innovation and Excellence. These three values, when demonstrated consistently, define who we strive to be and allow us to execute our proven strategy that continues to deliver shareholder value.

## COLLABORATION

One of the key reasons for our company's transformation since 2006 has been our exceptional ability to listen and understand our customers' business needs—then collaborate to deliver solutions that enable their success. As we've since evolved as a specialty company, we have learned that our customers value PolyOne well beyond our leading portfolio of polymer materials. They also benefit from the comprehensive approach we use to deliver them. In essence, it's these complementary services—and our “customer first” approach—that sets us apart. Service is PolyOne's timeless differentiator.

Service, like polymer science, takes commitment, investment and an impassioned team to deliver it. In 2016 we increased our commercial resources by 6%—adding to the 6% investment we made during 2015. These associates led to an almost immediate impact in POD and PP&S, where sales cycles are often the shortest within the company. Consistent with the culture we're building, we provide new hires technical and practical training that enables their success in the marketplace. It's a similar development journey that our longer-tenured sellers have benefitted from in the past. Today, experienced commercial and marketing leaders from across our different businesses form regional, unified teams to visit customers—it's our “One PolyOne” approach, and it's another unique way that we provide differentiated value to our customers.

These high, wide and deep relationships with our customers put us in position to help in their earliest stages of design and innovation. In fact, approximately 80% of our Vitality Index—which measures our percent of revenue generated from technologies developed in the last five years—results from direct collaboration with our customers.

## INNOVATION

Collaboration and innovation go hand-in-hand, and we live these values among our PolyOne team, just as we do externally with customers.

This year, we hosted our first Global Innovation Summit, bringing together more than 120 of our scientists and others in R&D for collaborating, sharing solutions and approaches and establishing new programs aimed to accelerate innovation—and in doing so, PolyOne's growth. Innovation is the lifeblood of growth, and our 2016 Vitality Index of 42% provides confidence that our innovation engine remains strong as we prepare for the future.

But not all innovation has to be developed internally.

With four specialty acquisitions in 2016 (and an additional one in January 2017), we continue to build our growing portfolio of solutions with complementary and next-generation technologies. We purchased assets from Kraton's thermoplastic elastomer business to augment our leading GLS offerings and expertise. Within Color, Additives and Inks (CAI), we purchased Germany-based Comptek, a producer of colorants, additives and formulations for products that utilize high-temperature, highly engineered thermoplastics. In a strategic move that immediately positioned PolyOne as a leader in the high-strength, lightweight material space of composites, we acquired Gordon Composites and Polystrand. This allowed us to establish the PolyOne Advanced Composites platform, from which we deliver on the demanding performance needs of high-profile, innovative products—from Corvettes to crossbows, and ballistic panels to prosthetics.

We were proud to welcome these new businesses and associates to our team, a global collection of talented innovators who every day work to develop unique formulations for our customers.

## EXCELLENCE

There is no greater responsibility we have than the safety of our associates, communities and customers. Safety is paramount and

leads our approach to operational excellence. In 2016 we achieved an injury incident rate of 0.74, despite accounting for several acquired companies who had higher rates than our legacy PolyOne businesses, which have been operating with our high standards and disciplined processes. Still, our rate remains nearly six times better than the Plastics and Rubber Manufacturing Industry average of 4.3. As we integrate these new additions, we are also continuing to improve our overall Environmental, Health, Safety and Security performance, having recently begun to manage to heightened standards of the American Chemistry Council's renowned Responsible Care® program.

Our facility investments were numerous last year, as we progressed with the installation of Royalite™ and PETG sheet lines at our DSS facility in Greenville, Ohio—important infrastructure to improving the business overall. Additionally, we transformed our North Haven, Connecticut facility to white room standards, and it has become a showplace for our healthcare customers who manufacture medical tubing, catheters and other devices. We also have made important investments in our CAI facilities in Massillon and Norwalk, Ohio, and added a new Specialty Engineered Materials (SEM) production line in Avon Lake, Ohio. Strategic capital deployment took place at many facilities last year, and we will continue to do so in the future. It's part of PolyOne's belief that—just like our people—our facilities require world-class and modern capability in our quest for continual improvement.

When we demonstrate excellence, it ultimately develops and delivers our unparalleled service levels. So last year, we continued to leverage these unique offerings with our customers. With our LSS Customer First initiative, we temporarily deployed associates who utilize expertise in Lean Six Sigma to improve PolyOne, to also help our customers improve their internal processes, such as supply chain, finance and operations. We also invested in our IQ Design Labs, a PolyOne service offering powered by highly experienced industrial designers and project engineers who help our customers design, innovate and accelerate their product development.

These are just some of the many ways PolyOne delivers excellence to our customers, and we will continue to invest in service—to bolster our unique capabilities that can differentiate us and our customers wherever we do business.

## CLOSING THOUGHTS AND THE YEAR AHEAD

Upon reflection of 2016, I view it as both a year where we delivered growth in a challenging environment, and equally as important, made investments and decisions that will enable our longer-term goals. Our 2020 Platinum Vision targets are in focus and achievable, and we view each year's performance as an incremental step toward them.

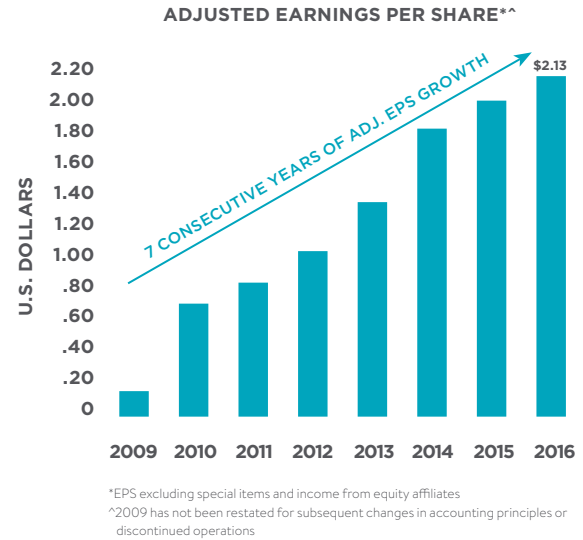
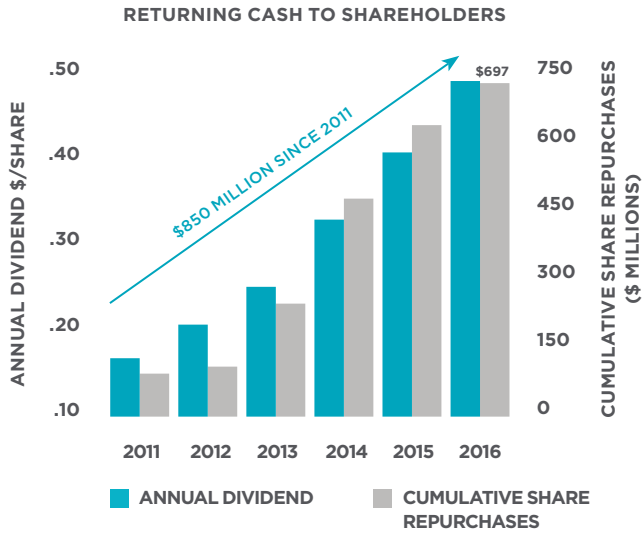
We continue to emphasize our culture's development as a crucial component to our success, while we work to become one of the top workplaces in the world. Our people are our future. The management team's experience and dedication sets the tone and the strategy that we execute. And our exceptional Board of Directors provides governance and insightful input through their perspectives and accomplished professional backgrounds. It was a true honor to have been elected Chairman of the Board this past year, succeeding Steve Newlin, a visionary leader who had mentored and prepared me for this role.

In closing, I am proud of what we have accomplished and the momentum we are building to drive an even brighter future. The management team and I remain fully dedicated to the success of our customers, our associates and our shareholders each and every day. It is an honor to serve our many stakeholders, and I thank you for your ongoing support and confidence as we continue our mission.

**Robert M. Patterson**  
Chairman, President and Chief Executive Officer  
March 2017

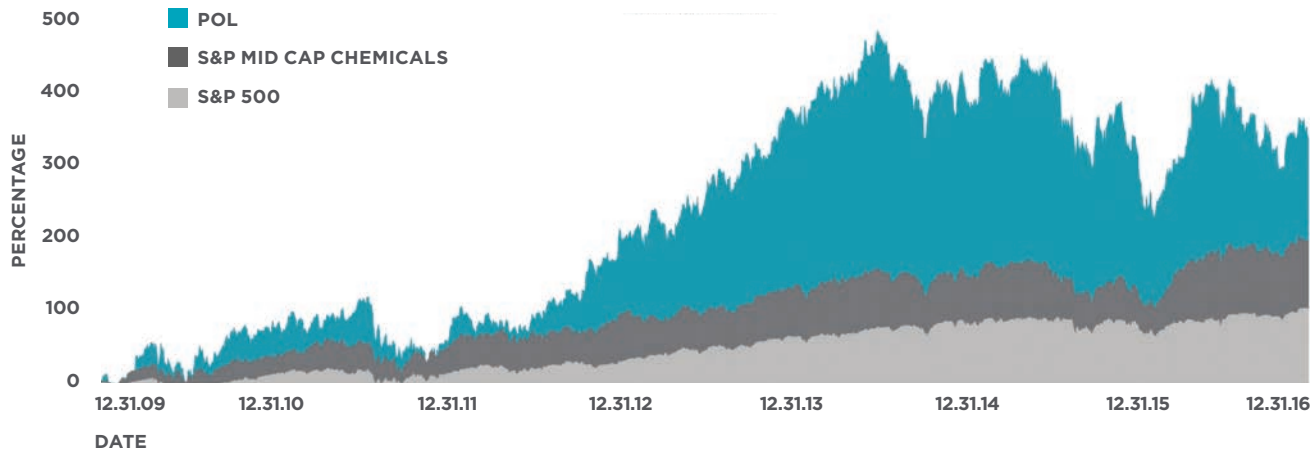
## VALUE AND GROWTH

We continue to generate value for our customers and shareholders, while having achieved our seventh consecutive year of adjusted EPS growth.



## STOCK PERFORMANCE

PolyOne's stock performance has significantly outpaced the S&P 500 index and the S&P Mid Cap Chemicals index.



## 2020 PLATINUM VISION—OUR TRANSFORMATION CONTINUES...

Our track record of growth has been excellent, and we're aspiring to even greater heights with our 2020 Platinum Vision.

	2006 "Where we were"	2016 "Where we are"	2020 Platinum Vision
<b>OPERATING INCOME % OF SALES</b>			
Color, Additives & Inks	1.7%	16.0%	20% +
Specialty Engineered Materials	1.1%	14.3%	20% +
PP&S	5.5%	11.1%	12-14%
Distribution	2.6%	6.4%	6.5-7.5%
Designed Structures & Solutions	N/A	-0.9%	8-10%

# United States Securities and Exchange Commission

Washington, DC 20549

## FORM 10-K

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

For the fiscal year ended December 31, 2016

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

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission file number 1-16091

## PolyOne Corporation

(Exact name of registrant as specified in its charter)

Ohio

(State or other jurisdiction of  
incorporation or organization)

34-1730488

(IRS Employer Identification No.)

33587 Walker Road,  
Avon Lake, Ohio

(Address of principal executive offices)

44012

(Zip Code)

Registrant's telephone number, including area code (440) 930-1000

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

<u>Title of each class</u>	<u>Name of each exchange on which registered</u>
Common Shares, par value \$.01 per share	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  No

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.

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

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

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

The aggregate market value of the registrant's outstanding common shares held by non-affiliates on June 30, 2016, determined using a per share closing price on that date of \$35.24, as quoted on the New York Stock Exchange, was \$3.0 billion.

The number of shares of common shares outstanding as of February 1, 2017 was 82,167,364.

### DOCUMENTS INCORPORATED BY REFERENCE

Part III of this Annual Report on Form 10-K incorporates by reference certain information from the registrant's definitive Proxy Statement with respect to the 2017 Annual Meeting of Shareholders.

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## PART I

### CAUTIONARY NOTE ON FORWARD-LOOKING STATEMENTS

In this Annual Report on Form 10-K, statements that are not reported financial results or other historical information are “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements give current expectations or forecasts of future events and are not guarantees of future performance. They are based on management’s expectations that involve a number of business risks and uncertainties, any of which could cause actual results to differ materially from those expressed in or implied by the forward-looking statements. You can identify these statements by the fact that they do not relate strictly to historic or current facts. They use words such as “anticipate,” “estimate,” “expect,” “project,” “intend,” “plan,” “believe” and other words and terms of similar meaning in connection with any discussion of future operating or financial performance and/or sales. In particular, these include statements relating to future actions; prospective changes in raw material costs, product pricing or product demand; future performance; estimated capital expenditures; results of current and anticipated market conditions and market strategies; sales efforts; expenses; the outcome of contingencies such as legal proceedings; and financial results. Factors that could cause actual results to differ materially from those implied by these forward-looking statements include, but are not limited to:

- effects on foreign operations due to currency fluctuations, tariffs and other political, economic and regulatory risks;
- changes in polymer consumption growth rates and laws and regulations regarding the disposal of plastic materials where we conduct business;
- changes in global industry capacity or in the rate at which anticipated changes in industry capacity come online in the industries in which we participate;
- fluctuations in raw material prices, quality and supply, and in energy prices and supply;
- production outages or material costs associated with scheduled or unscheduled maintenance programs;
- unanticipated developments that could occur with respect to contingencies such as litigation and environmental matters, including any developments that would require any increase in our costs and/or reserves for such contingencies;
- an inability to achieve or delays in achieving or achievement of less than the anticipated financial benefit from initiatives related to working capital reductions, cost reductions and employee productivity goals;
- an inability to raise or sustain prices for products or services;
- an inability to maintain appropriate relations with unions and employees;
- the strength and timing of economic recoveries;
- the financial condition of our customers, including the ability of customers (especially those that may be highly leveraged and those with inadequate liquidity) to maintain their credit availability;
- disruptions, uncertainty or volatility in the credit markets that may limit our access to capital;
- other factors affecting our business beyond our control, including, without limitation, changes in the general economy, changes in interest rates and changes in the rate of inflation;
- the amount and timing of repurchases, if any, of PolyOne common shares;
- our ability to pay regular quarterly cash dividends and the amounts and timing of any future dividends;
- our ability to realize anticipated savings and operational benefits from the realignment of assets, including the closure of manufacturing facilities; the timing of closings and shifts of production to new facilities related to asset realignments and any unforeseen loss of customers and/or disruptions of service or quality caused by such closings and/or production shifts; separation and severance amounts that differ from original estimates, amounts for non-cash charges related to asset write-offs and accelerated depreciation realignments of property, plant and equipment, that differ from original estimates;
- our ability to identify and evaluate acquisition targets and consummate acquisitions;
- the ability to successfully integrate acquired businesses into our operations, including whether such businesses will be accretive to our earnings, retain the management teams of acquired businesses, and retain relationships with customers of acquired businesses, including, without limitation, SilCoTec, Comptek, substantially all of the assets of Gordon Composites, Polystrand and Gordon Holdings and certain TPE assets from Kraton;

- information systems failures and cyberattacks; and
- other factors described in this Annual Report on Form 10-K under Item 1A, “Risk Factors.”

We cannot guarantee that any forward-looking statement will be realized, although we believe we have been prudent in our plans and assumptions. Achievement of future results is subject to risks, uncertainties and assumptions. Should known or unknown risks or uncertainties materialize, or should underlying assumptions prove inaccurate, actual results could vary materially from those anticipated, estimated or projected. Investors should bear this in mind as they consider forward-looking statements. We undertake no obligation to publicly update forward-looking statements, whether as a result of new information, future events or otherwise, except as otherwise required by law. You are advised, however, to consult any further disclosures we make on related subjects in our reports on Forms 10-Q, 8-K and 10-K filed with the SEC. You should understand that it is not possible to predict or identify all risk factors. Consequently, you should not consider any such list to be a complete set of all potential risks or uncertainties.

## **ITEM 1. BUSINESS**

### **Business Overview**

We are a premier provider of specialized polymer materials, services and solutions with operations in specialty engineered materials, color and additive systems, plastic sheet and film solutions and polymer distribution. We are also a highly specialized developer and manufacturer of performance enhancing additives, liquid colorants and fluoropolymers and silicone colorants. Headquartered in Avon Lake, Ohio, we have employees at sales, manufacturing and distribution facilities in North America, South America, Europe, Asia and Africa. When used in this Annual Report on Form 10-K, the terms “we,” “us,” “our,” “PolyOne” and the “Company” mean PolyOne Corporation and its consolidated subsidiaries.

PolyOne was formed on August 31, 2000 from the consolidation of The Geon Company (Geon) and M.A. Hanna Company (Hanna). Geon’s roots date back to 1927 when B.F. Goodrich scientist Waldo Semon produced the first usable vinyl polymer. In 1948, B.F. Goodrich created a vinyl plastic division that was subsequently spun off through a public offering in 1993, creating Geon, a separate publicly-held company. Hanna was formed in 1885 as a privately-held company and became publicly-held in 1927. In the mid-1980s, Hanna began to divest its historic mining and shipping businesses to focus on polymers. Hanna purchased its first polymer company in 1986 and completed its 26<sup>th</sup> polymer company acquisition in 2000.

PolyOne Corporation is incorporated in Ohio and headquartered in Avon Lake, Ohio. We employ approximately 7,000 people and have 80 manufacturing sites and eight distribution facilities in North America, South America, Europe, Asia and Africa. We offer more than 35,000 polymer solutions to over 10,000 customers across the globe. In 2016, we had sales of \$3.3 billion, 36% of which were to customers outside the United States.

We use our ability to leverage our polymer and formulation expertise with our operational capabilities, being the essential link between large chemical producers (our raw material suppliers) and designers, assemblers and processors of plastics (our customers). We believe that our role in the value chain continues to become more essential as our customers need reliable suppliers with global reach and more effective solutions to improve their profitability and competitive advantage. Our goal is to provide our customers with specialized materials and service solutions through our global reach, broad market knowledge, technical expertise, product breadth, efficient manufacturing operations, a fully integrated information technology network and raw material procurement leverage. Our end markets are primarily in transportation, packaging, building and construction, industrial, healthcare, consumer, wire and cable, electrical and electronics and appliance.

### **Polymer Industry Overview**

Polymers are a class of organic materials that are generally produced by converting natural gas or crude oil derivatives into monomers, such as ethylene, propylene, vinyl chloride and styrene. These monomers are then polymerized into chains called polymers, or plastic resin, such as polyethylene and polypropylene, in their most basic forms. Large petrochemical companies, including some in the petroleum industry, produce a majority of the monomers and base resins because they have direct access to the raw materials needed for production. Monomers make up the majority of the variable cost of manufacturing the base resin. As a result, the cost of a base resin tends to move in tandem with the industry market prices for monomers and the cost of raw materials and energy used during production. Resin selling prices can move in tandem with costs, but are largely driven by supply and demand.

Thermoplastic polymers make up a substantial majority of the resin market and are characterized by their ability to be reshaped repeatedly into new forms after heat and pressure are applied. Thermoplastics offer versatility and a

wide range of applications. The major types of thermoplastics include polyethylene, polyvinyl chloride, polypropylene, polystyrene, polyester and a range of specialized engineering resins. Each type of thermoplastic has unique qualities and characteristics that make it appropriate for use in a particular application. Thermoplastic composites include these base resins, but are combined with a structural filler such as glass, wood, carbon or polymer fibers to enhance strength, rigidity and structure. Further performance can be delivered through an engineered thermoplastic sheet or thick film, which may incorporate more than one resin formulation or composite in multiple layers to impart additional properties such as gas barrier, structural integrity and lightweighting.

Thermoplastics and polymer composites are found in a variety of end-use products and markets, including packaging, building and construction, wire and cable, transportation, medical, furniture and furnishings, durable goods, outdoor high performance, electrical and electronics, adhesives, inks and coatings. Each type of thermoplastic resin has unique characteristics (such as flexibility, strength or durability) suitable for use in a particular end-use application. The packaging industry requires plastics that help keep food fresh and free of contamination while providing a variety of options for product display, and offering advantages in terms of weight and user-friendliness. In the building and construction industry, plastic provides an economical and energy efficient replacement for other traditional materials in piping applications, siding, flooring, insulation, windows and doors, as well as structural and interior or decorative uses. In the wire and cable industry, thermoplastics serve to protect by providing electrical insulation, flame resistance, durability, water resistance and color coding to wire coatings and connectors. In the transportation industry, plastic has proven to be durable, lightweight and corrosion resistant while offering fuel savings, design flexibility and high performance, often replacing traditional materials such as metal and glass. In the medical industry, plastics are used for a vast array of devices and equipment, including blood and intravenous bags, medical tubing, catheters, lead replacement for radiation shielding, clamps and connectors to bed frames, curtains and sheeting, electronic enclosures and equipment housings. In the outdoor high performance industry, plastic applications are used for components and colorants for all terrain vehicles and reinforced polymers are used for various outdoor activities. In the electronics industry, plastic enclosures and connectors not only enhance safety through electrical insulation, but thermally and electrically conductive plastics provide heat transferring, cooling, antistatic, electrostatic discharge, and electromagnetic shielding performance for critical applications including integrated circuit chip packaging.

Various additives can be formulated with a base resin and further engineered into a structure to provide them with greater versatility and performance. Polymer formulations and structures have advantages over metals, wood, rubber, glass and other traditional materials, which have resulted in the replacement of these materials across a wide spectrum of applications that range from automobile parts to construction materials. These specialized polymers offer advantages compared to traditional materials that include design freedom, processability, weight reduction, chemical resistance, flame retardance and lower cost. Plastics are renowned for their durability, aesthetics, ease of handling and recyclability.

### **PolyOne Segments**

We operate in five reportable segments: (1) Color, Additives and Inks; (2) Specialty Engineered Materials; (3) Designed Structures and Solutions; (4) Performance Products and Solutions; and (5) PolyOne Distribution.

On January 3, 2017, the Company completed the acquisition of SilCoTec, Inc. (SilCoTec), a leading producer of innovative silicone colorants, dispersions and formulations. The results of operations of SilCoTec will be reported in the Color, Additives and Inks segment.

On November 30, 2016, the Company completed the acquisition of COMPTEK Kunststoffverarbeitung GmbH (Comptek), an innovative producer of colorants, additives and formulations for products that utilize high-temperature and highly engineered thermoplastics. The results of operations of Comptek are reported in the Color, Additives and Inks segment.

On July 26, 2016, the Company completed the acquisition of substantially all of the assets of Gordon Composites, Inc. (Gordon Composites), Polystrand, Inc. (Polystrand) and Gordon Holdings, Inc. (Gordon Holdings). Gordon Composites develops high strength profiles and laminates for use in vertical and crossbow archery, sports and recreation equipment, prosthetics and office furniture systems. Polystrand operates in the advanced area of continuous reinforced thermoplastic composite technology space, a next generation material science that delivers the high strength and lightweight characteristics of composites, further enhanced with the design flexibility to form more complex shapes. The results of operations of the acquired businesses are reported in the Specialty Engineered Materials segment.

On January 29, 2016, the Company completed the acquisition of certain technologies and assets from Kraton Performance Polymers, Inc. (Kraton), to expand its global footprint and expertise in thermoplastic elastomer (TPE)

innovation and design. The results of operations of Kraton are reported in the Specialty Engineered Materials segment.

Our segments are further discussed in Note 14, *Segment Information*.

### **Color, Additives and Inks**

Color, Additives and Inks is a leading provider of specialized custom color and additive concentrates in solid and liquid form for thermoplastics, dispersions for thermosets, as well as specialty inks, plastisols, and vinyl slush molding solutions. Color and additive solutions include an innovative array of colors, special effects and performance-enhancing and eco-friendly solutions. When combined with polymer resins, our solutions help customers achieve differentiated specialized colors and effects targeted at the demands of today's highly design-oriented consumer and industrial end markets. Our additive concentrates encompass a wide variety of performance and process enhancing characteristics and are commonly categorized by the function that they perform, including UV light stabilization and blocking, antimicrobial, anti-static, blowing or foaming, antioxidant, lubricant, oxygen and visible light blocking and productivity enhancement. Our colorant and additives concentrates are used in a broad range of polymers, including those used in medical and pharmaceutical devices, food packaging, personal care and cosmetics, transportation, building products, wire and cable markets. We also provide custom-formulated liquid systems that meet a variety of customer needs and chemistries, including polyester, vinyl, natural rubber and latex, polyurethane and silicone. Our offerings also include proprietary inks and latexes for diversified markets such as recreational and athletic apparel, construction and filtration, outdoor furniture and healthcare. Our liquid polymer coatings and additives are largely based on vinyl and are used in a variety of markets, including building and construction, consumer, healthcare, industrial, packaging, textiles, appliances, transportation, and wire and cable. Color, Additives and Inks has manufacturing, sales and service facilities located throughout North America, South America, Europe, Asia and Africa.

### **Specialty Engineered Materials**

Specialty Engineered Materials is a leading provider of specialty polymer formulations, services and solutions for designers, assemblers and processors of thermoplastic materials across a wide variety of markets and end-use applications. Our product portfolio, which we believe to be one of the most diverse in our industry, includes specialty formulated high-performance polymer materials that are manufactured using thermoplastic resins and elastomers, which are then combined with advanced polymer additives, reinforcement, filler, colorant and/or biomaterial technologies. We also have what we believe is the broadest composite platform of solutions, which include a full range of products from long glass and carbon fiber technology to thermoset and thermoplastic composites. These solutions meet a wide variety of unique customer requirements for light weighting. Our technical and market expertise enables us to expand the performance range and structural properties of traditional engineering-grade thermoplastic resins to meet evolving customer needs. Specialty Engineered Materials has manufacturing, sales and service facilities located throughout North America, Europe, and Asia. Our product development and application reach is further enhanced by the capabilities of our Innovation Centers in the United States, Germany and China, which produce and evaluate prototype and sample parts to help assess end-use performance and guide product development. Our manufacturing capabilities are targeted at meeting our customers' demand for speed, flexibility and critical quality.

### **Designed Structures and Solutions**

The Designed Structures and Solutions segment was created on March 13, 2013, as a result of the acquisition of Spartech Corporation (Spartech). PolyOne's Designed Structures and Solutions segment utilizes a variety of polymers, specialty additives and processing technologies to produce a complete portfolio of sheet, custom rollstock and specialty film, laminate and acrylic solutions. Our solutions can be engineered to provide structural or functional performance in an application or design and visual aesthetics to meet our customers' needs. Our offerings also include a wide range of sustainable, cost-effective stock and custom packaging solutions for various industry processes used in the food, medical and consumer markets. In addition to packaging, we also work closely with customers to provide solutions for transportation, building and construction, healthcare and consumer markets. Designed Structures and Solutions has manufacturing, sales and service facilities located throughout North America.

### **Performance Products and Solutions**

Performance Products and Solutions is comprised of the Geon Performance Materials (Geon) and Producer Services business units. The Geon business delivers an array of products and services for vinyl molding and extrusion processors located in North America and Asia. The Geon™ brand name carries strong recognition globally. Geon's products are sold to manufacturers of durable plastic parts and consumer-oriented products. We also offer a wide range of services including materials testing, component analysis, custom formulation



development, colorant and additive services, part design assistance, structural analysis, process simulations, mold design and flow analysis and extruder screw design. Vinyl is used across a broad range of markets and applications, including, but not limited to: healthcare, wire and cable, building and construction, consumer and recreational products and transportation and packaging. The Producer Services business unit offers contract manufacturing and outsourced polymer manufacturing services to resin producers and polymer marketers, primarily in the United States and Mexico, as well as its own proprietary formulations for certain applications. As a strategic and integrated supply chain partner, Producer Services offers resin producers a capital-efficient way to effectively develop custom products for niche markets by leveraging its extensive process technology expertise, broad manufacturing capabilities and geographic locations.

### **PolyOne Distribution**

The PolyOne Distribution business distributes more than 4,000 grades of engineering and commodity grade resins, including PolyOne-produced solutions, principally to the North American and Asian markets. These products are sold to over 6,500 custom injection molders and extruders who, in turn, convert them into plastic parts that are sold to end-users in a wide range of industries. Representing over 25 major suppliers, we offer our customers a broad product portfolio, just-in-time delivery from multiple stocking locations and local technical support. Recent expansion in Central America and Asia have bolstered PolyOne Distribution's ability to serve the specialized needs of customers globally.

### **Competition**

The production of plastics and the manufacturing of custom and proprietary formulated color and additives systems for the plastics industry are highly competitive. Competition is based on service, performance, product innovation, product recognition, speed, delivery, quality and price. The relative importance of these factors varies among our products and services. We believe that we are the largest independent formulator of plastic materials and producer of custom and proprietary color and additive systems in the United States and Europe, with a growing presence in Asia and South America. Our competitors range from large international companies with broad product offerings to local independent custom producers whose focus is a specific market niche or product offering.

The distribution of polymer resin is also highly competitive. Speed, service, reputation, product line, brand recognition, delivery, quality and price, are the principal factors affecting competition. We compete against other national independent resin distributors in North America, along with other regional distributors. Growth in the polymer distribution market is highly correlated with growth in the base polymer resins market. We believe that the strength of our company name and reputation, the broad range of product offerings from our suppliers and our speed and responsiveness, combined with the quality of products and agility of our distribution network, allow us to compete effectively.

### **Raw Materials**

The primary raw materials used by our manufacturing operations are polyolefin and other thermoplastic resins, polyvinyl chloride (PVC) resin, plasticizers, inorganic and organic pigments, all of which we believe are in adequate supply. Oxy Vinyls LP sells PVC to PolyOne under terms of a Resin Purchase Agreement that expires on December 31, 2020. The agreement requires PolyOne to purchase a majority of its annual requirements in North America from Oxy Vinyls LP. This contract provides a year-by-year evergreen renewal provision, unless terminated by either party with a one-year advance notice. We believe this contract assures the availability of adequate amounts of PVC resin. We also believe that the pricing under this contract provides PVC resin to PolyOne at a competitive price. See the discussion of risks associated with raw material supply and costs in Item 1A, "Risk Factors".

## **Patents and Trademarks**

We own and maintain a number of patents and trademarks in the United States and other key countries that contribute to our competitiveness in the markets we serve because they protect our inventions and product names against infringement by others. Patents exist for 20 years from filing date, and trademarks have an indefinite life based upon continued use. While we view our patents and trademarks to be valuable because of the broad scope of our products and services and brand recognition we enjoy, we do not believe that the loss or expiration of any single patent or trademark would have a material adverse effect on our results of operations, financial position or cash flows. Nevertheless, we have management processes designed to rigorously protect our inventions and trademarks.

## **Seasonality and Backlog**

Sales of our products and services are seasonal as demand is generally slower in the first and fourth calendar quarters of the year. Because of the nature of our business, we do not believe that our backlog is a meaningful indicator of the level of our present or future business.

## **Working Capital Practices**

Our products are generally manufactured with a short turnaround time, and the scheduling of manufacturing activities from customer orders generally includes enough lead time to assure delivery of an adequate supply of raw materials. We offer payment terms to our customers that are competitive. We generally allow our customers to return merchandise if pre-agreed quality standards or specifications are not met; however, we employ quality assurance practices that seek to minimize customer returns. Our customer returns are immaterial.

## **Significant Customers**

No customer accounted for more than 1% of our consolidated revenues in 2016, and we do not believe we would suffer a material adverse effect to our consolidated financial statements if we were to lose any single customer.

## **Research and Development**

We have substantial technology and development capabilities. Our efforts are largely devoted to developing new product formulations to satisfy defined market needs, by providing quality technical services to evaluate alternative raw materials, assuring the continued success of our products for customer applications, providing technology to improve our products, processes and applications and providing support to our manufacturing plants for cost reduction, productivity and quality improvement programs. We operate research and development centers that support our commercial development activities and manufacturing operations. These facilities are equipped with state-of-the-art analytical, synthesis, polymer characterization and testing equipment, along with pilot plants and polymer manufacturing operations that simulate specific production processes that allow us to rapidly translate new technologies into new products. Our investment in product research and development was \$54.5 million in 2016, \$53.0 million in 2015 and \$53.4 million in 2014.

## **Methods of Distribution**

We sell products primarily through direct sales personnel, distributors, including our PolyOne Distribution segment, and commissioned sales agents. We primarily use truck carriers to transport our products to customers, although some customers pick up product at our manufacturing facilities or warehouses. We also ship some of our manufactured products to customers by rail.

## **Employees**

As of December 31, 2016, we employed approximately 7,000 people. Approximately 4% of our employees are represented by labor unions under collective bargaining agreements. We believe that relations with our employees are good, and we do not anticipate significant operating issues to occur as a result of current negotiations, or when we renegotiate collective bargaining agreements as they expire.

## **Environmental, Health and Safety**

We are subject to various environmental laws and regulations that apply to the production, use and sale of chemicals, emissions into the air, discharges into waterways and other releases of materials into the environment and the generation, handling, storage, transportation, treatment and disposal of waste material. We endeavor to ensure the safe and lawful operation of our facilities in the manufacture and distribution of products, and we believe we are in material compliance with all applicable laws and regulations.

We maintain a disciplined environmental and occupational safety and health compliance program and conduct periodic internal and external regulatory audits at our facilities to identify and correct potential environmental exposures, including compliance matters and operational risk reduction opportunities. This effort can result in

process or operational modifications, the installation of pollution control devices or cleaning up grounds or facilities. We believe that we are in material compliance with all applicable requirements.

We are strongly committed to safety as evidenced by our injury incidence rate of 0.74 per 100 full-time workers per year in 2016 and in 2015. The 2015 average injury incidence rate for our NAICS Code (326 Plastics and Rubber Products Manufacturing) was 4.3.

In our operations, we must comply with product-related governmental law and regulations affecting the plastics industry generally and also with content-specific law, regulations and non-governmental standards. We believe that compliance with current governmental laws and regulations and with non-governmental content-specific standards will not have a material adverse effect on our financial position, results of operations or cash flows. The risk of additional costs and liabilities, however, is inherent in certain plant operations and certain products produced at these plants, as is the case with other companies in the plastics industry. Therefore, we may incur additional costs or liabilities in the future. Other developments, such as increasingly strict environmental, safety and health laws, regulations and related enforcement policies, including those under the Restrictions on the Use of Certain Hazardous Substances (RoHS), Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), the Dodd-Frank Wall Street Reform and Consumer Protection Act (covering Conflict Minerals), and the Consumer Product Safety Improvement Act, the implementation of additional content-specific standards, discovery of unknown conditions, and claims for damages to property, persons or natural resources resulting from plant emissions or products, could also result in additional costs or liabilities.

A number of foreign countries and domestic communities have enacted, or are considering enacting, laws and regulations concerning the use and disposal of plastic materials. Widespread adoption of these laws and regulations, along with public perception, may have an adverse impact on sales of plastic materials. Although many of our major markets are in durable, longer-life applications that could reduce the impact of these kinds of environmental regulations, more stringent regulation of the use and disposal of plastics may have an adverse effect on our business.

We have been notified by federal and state environmental agencies and by private parties that we may be a potentially responsible party (PRP) in connection with the investigation and remediation of certain environmental sites. While government agencies frequently assert that PRPs are jointly and severally liable at these sites, in our experience, the interim and final allocations of liability costs are generally made based on the relative contribution of waste. We initiate corrective and preventive environmental projects of our own to ensure safe and lawful activities at our operations. We believe that compliance with current governmental regulations at all levels will not have a material adverse effect on our financial position, results of operations or cash flows.

We incurred environmental expenses, before insurance recoveries, of \$8.3 million in 2016, \$9.3 million in 2015 and \$10.3 million in 2014. Our environmental expense in 2016, 2015 and 2014 related mostly to ongoing remediation projects. In 2016, 2015 and 2014, we recognized gains associated with insurance recoveries of \$6.1 million, \$3.5 million and \$3.7 million, respectively, as reimbursement of previously incurred environmental remediation costs.

We also conduct investigations and remediation at certain of our active and inactive facilities and have assumed responsibility for the resulting environmental liabilities from operations at certain sites we, or our predecessors, formerly owned or operated. We believe that our potential continuing liability at these sites will not have a material adverse effect on our results of operations, financial position or cash flows. As of December 31, 2016, our reserves totaled \$117.3 million, covering probable future environmental expenditures that we can reasonably estimate related to previously contaminated sites. This amount represents our best estimate of probable costs, based upon the information and technology currently available. We continue to pursue available insurance coverage related to these matters and recognize gains as we receive reimbursement. No receivable has been recognized for future recoveries.

Refer to Note 11, *Commitments and Contingencies*, for further discussion of our environmental liabilities.

We expect 2017 cash environmental expenditures to approximate \$10.0 million.

### **International Operations**

Our international operations are subject to a variety of risks, including currency fluctuations and devaluations, exchange controls, currency restrictions and changes in local economic conditions. While the impact of these risks is difficult to predict, any one or more of them could adversely affect our future operations. For more information about our international operations, see Note 14, *Segment Information*, to the accompanying consolidated financial statements.

## Where You Can Find Additional Information

Our principal executive offices are located at 33587 Walker Road, Avon Lake, Ohio 44012, and our telephone number is (440) 930-1000. We are subject to the information reporting requirements of the Exchange Act, and, in accordance with these requirements, we file annual, quarterly and other reports, proxy statements and other information with the SEC relating to our business, financial results and other matters. The reports, proxy statements and other information we file may be inspected and copied at prescribed rates at the SEC's Public Reference Room and via the SEC's website (see below for more information).

You may inspect a copy of the reports, proxy statements and other information we file with the SEC, without charge, at the SEC's Public Reference Room, 100 F Street, N.E., Washington, D.C. 20549, and you may obtain copies of the reports, proxy statements and other information we file with the SEC, from those offices for a fee. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. Our filings are available to the public at the SEC's website at <http://www.sec.gov>.

Our Internet address is [www.polyone.com](http://www.polyone.com). Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act are available, free of charge, on our website ([www.polyone.com](http://www.polyone.com), select Investors and then SEC Filings) or upon written request, as soon as reasonably practicable after we electronically file or furnish them to the SEC. The contents of our website are not part of this Annual Report on Form 10-K, and the reference to our website does not constitute incorporation by reference into this Form 10-K of the information contained at that site.

## **ITEM 1A. RISK FACTORS**

The following are certain risk factors that could affect our business, results of operations, financial position or cash flows. These risk factors should be considered along with the forward-looking statements contained in this Annual Report on Form 10-K because these factors could cause our actual results or financial condition to differ materially from those projected in forward-looking statements. The following discussion is not an all-inclusive listing of risks, although we believe these are the more material risks that we face. If any of the following occur, our business, results of operations, financial position or cash flows could be adversely affected.

***Demand for and supply of our products and services may be adversely affected by several factors, some of which we cannot predict or control.***

Several factors may affect the demand for and supply of our products and services, including:

- economic downturns in the significant end markets that we serve;
- product obsolescence or technological changes that unfavorably alter the value/cost proposition of our products and services;
- competition from existing and unforeseen polymer and non-polymer based products;
- declines in general economic conditions or reductions in industrial production growth rates, both domestically and globally, which could impact our customers' ability to pay amounts owed to us;
- changes in environmental regulations that would limit our ability to sell our products and services in specific markets;
- changes in laws and regulations regarding the disposal of plastic materials; and
- inability to obtain raw materials or supply products to customers due to factors such as supplier work stoppages, supply shortages, plant outages or regulatory changes that may limit or prohibit overland transportation of certain hazardous materials and exogenous factors, like severe weather.

If any of these events occur, the demand for and supply of our products and services could suffer and potentially lead to asset impairment.

***Our manufacturing operations are subject to hazards and other risks associated with polymer production and the related storage and transportation of raw materials, products and wastes.***

The occurrence of an operating problem at our facilities (e.g., an explosion, mechanical failure, chemical spills or discharges) may have a material adverse effect on the productivity and profitability of a particular manufacturing or distribution facility or on our operations as a whole, during and after the period of these operating difficulties. Operating problems may cause personal injury and/or loss of life, customer attrition and severe damage to or destruction of property and equipment and environmental damage. We are subject to present claims and potential future claims with respect to workplace exposure, workers' compensation and other matters. Our property and



casualty insurance, which we believe is of the types and in the amounts that are customary for the industry, may not fully insure us against all potential hazards that are incident to our business or otherwise could occur.

***Extensive environmental, health and safety laws and regulations impact our operations and financial statements.***

Our operations on, and ownership of, real property are subject to extensive environmental, health and safety laws and regulations at the national, state and local governmental levels (including, but not limited to, the Restrictions on the Use of Certain Hazardous Substances and the Consumer Product Safety Information Act of 2008). The nature of our business exposes us to compliance costs and risks of liability under these laws and regulations due to the production, storage, transportation, recycling or disposal and/or sale of materials that can cause contamination and other harm to the environment or personal injury if they are improperly handled and released. Environmental compliance requirements on us and our vendors may significantly increase the costs of these activities involving raw materials, energy, finished products and wastes. We may incur substantial costs, including fines, criminal or civil sanctions, damages, remediation costs or experience interruptions in our operations for violations of these laws.

***Our operations could be adversely affected by various risks inherent in conducting operations worldwide.***

Our operations are subject to risks; including, but not limited to, the following:

- changes in local government regulations and policies including, but not limited to foreign currency exchange controls or monetary policy, repatriation of earnings, expropriation of property, duty or tariff restrictions, investment limitations and tax policies;
- political and economic instability and disruptions, including labor unrest, civil strife, acts of war, guerrilla activities, insurrection and terrorism;
- legislation that regulates the use of chemicals;
- disadvantages of competing against companies from countries that are not subject to U.S. laws and regulations, including the Foreign Corrupt Practices Act (FCPA) and the U.K. Bribery Act;
- compliance with international trade laws and regulations, including export control and economic sanctions;
- difficulties in staffing and managing multi-national operations;
- limitations on our ability to enforce legal rights and remedies;
- reduced protection of intellectual property rights; and
- other risks arising out of foreign sovereignty over the areas where our operations are conducted.

In addition, we could be adversely affected by violations of the FCPA, U.K Bribery Act and similar worldwide anti-bribery laws as well as export controls and economic sanction laws. The FCPA, U.K. Bribery Act and similar anti-bribery laws in other jurisdictions generally prohibit companies and their intermediaries from making improper payments to non-U.S. officials for the purpose of obtaining or retaining business. Our policies mandate compliance with these laws. We operate in many parts of the world that have experienced governmental corruption to some degree and, in certain circumstances, strict compliance with anti-bribery laws may conflict with local customs and practices. We cannot assure you that our internal controls and procedures will always protect us from the reckless or criminal acts committed by our employees or agents. If we are found to be liable for FCPA, U.K Bribery Act, export control or sanction violations, we could suffer from criminal or civil penalties or other sanctions, including loss of export privileges or authorization needed to conduct aspects of our international business, which could have a material adverse effect on our business.

Any of these risks could have an adverse effect on our international operations by reducing demand for our products.

***We engage in acquisitions and joint ventures, and may encounter unexpected difficulties integrating those businesses.***

Attainment of our strategic plan objectives require, in part, strategic acquisitions or joint ventures intended to complement or expand our businesses globally or add product technology that accelerates our specialization strategy, or both. Success will depend on our ability to complete these transactions or arrangements, and integrate the businesses acquired in these transactions as well as develop satisfactory working arrangements with our strategic partners in the joint ventures. Unexpected difficulties in integrating recent and future acquisitions with our existing operations and in managing strategic investments could occur. Furthermore, we may not realize the degree, or timing, of benefits initially anticipated.

***Natural gas, electricity, fuel and raw material costs and other external factors that are also beyond our control can cause volatility in our results.***

The cost of our natural gas, electricity, fuel and raw materials, and other costs, may not correlate with changes in the prices we receive for our products, either in the direction of the price change or in absolute magnitude. Natural gas and raw materials costs represent a substantial part of our manufacturing costs. Most of the raw materials we use are commodities and the price of each can fluctuate widely for a variety of reasons, including changes in availability because of major capacity additions or reductions or significant facility operating problems. Other external factors beyond our control can cause volatility in raw materials prices, demand for our products, product prices, sales volumes and margins.

***Volatility of end markets that PolyOne serves.***

PolyOne's segment results have varied in the past and may vary from quarter to quarter in the future. Profitability can be negatively impacted by volatility in the end markets that PolyOne serves. The Company has undertaken measures to reduce the impact of this volatility through diversification of markets it serves and expansion of geographic regions in which it operates. Future downturns in any of the markets could adversely affect our results.

***We face competition from other companies and alternative technologies.***

We encounter competition in price, payment terms, delivery, service, performance, product innovation, product recognition and quality, depending on the product involved.

We expect that our competitors will continue to develop and introduce new and enhanced products, which could cause a decline in the market acceptance of our products. In addition, our competitors could cause a reduction in the selling prices of some of our products as a result of intensified price competition. Competitive pressures can also result in the loss of customers.

Additionally, some of our customers may already be or may become large enough to justify developing in-house production capabilities. Any significant reduction in customer orders as a result of a shift to in-house production could adversely affect our sales and operating profits.

***A major failure of our information systems could harm our business.***

We depend on integrated information systems to conduct our business. We may experience operating problems with our information systems as a result of system failures, viruses, computer hackers or other causes. Any significant disruption or slowdown of our systems could cause customers to cancel orders or cause standard business processes to become inefficient or ineffective.

***Increased information systems security threats and more sophisticated and targeted computer crime could pose a risk to our systems, networks and products.***

Increased global information systems security threats and more sophisticated and targeted computer crime pose a risk to the security of our systems and networks and the confidentiality, availability and integrity of our data and communications. While we attempt to mitigate these risks by employing a number of measures, including employee training, comprehensive monitoring of our networks and systems, and maintenance of backup and protective systems, our systems, networks and products remain potentially vulnerable to advanced persistent threats. Depending on their nature and scope, such threats could potentially lead to the compromising of confidential information and communications, improper use of our systems and networks, manipulation and destruction of data, defective products, production downtimes and operational disruptions, which in turn could adversely affect our reputation, competitiveness and results of operations.

***Significant movements in foreign currency exchange rates or change in monetary policy may harm our financial results.***

We are exposed to fluctuations in foreign currency exchange rates. Any significant change in the value of the currencies of the countries in which we do business against the U.S. dollar could affect our ability to sell products competitively and control our cost structure, which could have a material adverse effect on our business, financial condition and results of operations. For additional detail related to this risk, see Item 7A, "Quantitative and Qualitative Disclosure About Market Risk."

***Disruptions in the global credit and financial markets could limit our access to credit, which could negatively impact our business.***

Global credit and financial markets have experienced volatility in recent years, including volatility in security prices, liquidity and credit availability, declining valuations of certain investments and significant changes in the capital and organizational structures of certain financial institutions. These market conditions may limit our ability to access the capital necessary to grow and maintain our business. Accordingly, we may be forced to delay raising capital, issue shorter tenors than we prefer or pay unattractive interest rates, which could increase our interest expense, decrease our profitability and significantly reduce our financial flexibility.

***The agreements governing our debt, including our revolving credit facility, term loan and other debt instruments, contain various covenants that limit our ability to take certain actions and also require us to meet financial maintenance tests, failure to comply with which could have a material adverse effect on us.***

The agreements governing our revolving credit facility and our secured term loan, and the indentures and credit agreements governing other debt, contain a number of customary restrictive covenants that, among other things, limit our ability to: consummate asset sales, incur additional debt or liens, consolidate or merge with any entity or transfer or sell all or substantially all of our assets, pay dividends or make certain other restricted payments, make investments, enter into transactions with affiliates, create dividend or other payment restrictions with respect to subsidiaries, make capital investments and alter the business we conduct.

In addition, certain of these agreements require us to comply under certain circumstances with specific financial tests, under which we are required to achieve certain or specific financial and operating results. Our ability to comply with these provisions may be affected by events beyond our control. A breach of any of these covenants would result in a default under such agreements and instruments, which in certain circumstances could be a default under all of these agreements and instruments. In the event of any default, our lenders could elect to declare all amounts borrowed under the agreements, together with accrued interest thereon, to be due and payable. In such event, we cannot assure that we would have sufficient assets to pay debt then outstanding under the agreements governing our debt.

Furthermore, certain of these agreements condition our ability to obtain additional borrowing capacity, engage in certain transactions or take certain other actions, on our achievement of certain or specific financial and operating results, although our failure to achieve such results would not result in a default under such agreements. Any future refinancing of the revolving credit facility or other debt may contain similar restrictive covenants.

***To service our indebtedness, we will require a significant amount of cash. Our ability to generate cash depends on many factors beyond our control.***

Our ability to pay interest on our debt and to satisfy our other debt obligations will depend in part upon our future financial and operating performance and that of our subsidiaries and upon our ability to renew or refinance borrowings. Prevailing economic conditions and financial, business, competitive, legislative, regulatory and other factors, many of which are beyond our control, will affect our ability to make these payments. While we believe that cash flow from our current level of operations, available cash and available borrowings under our revolving credit facilities will provide adequate sources of liquidity for at least the next twelve months, a significant drop in operating cash flow resulting from economic conditions, competition or other uncertainties beyond our control could create the need for alternative sources of liquidity. If we are unable to generate sufficient cash flow to meet our debt service obligations, we will have to pursue one or more alternatives, such as reducing or delaying capital or other expenditures, refinancing debt, selling assets, or raising equity capital.

***We have a significant amount of goodwill, and any future goodwill impairment charges could adversely impact our results of operations.***

As of December 31, 2016, we had goodwill of \$677.4 million. For additional information, see Note 3, *Goodwill and Intangible Assets*, to the accompanying consolidated financial statements. 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 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, which could adversely impact our results of operations. We have recorded goodwill impairment charges in the past, and such charges materially impacted our historical results of operations and financial condition. Based on our 2016 goodwill impairment test, performed as of October 1, 2016, our Custom Engineered Structures (CES) reporting unit, which is included in our Designed Structures and Solutions segment, was identified as being at risk of future impairment. For additional information, see "Critical Accounting Policies" included in Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations."

***Risks related to our pension plans may adversely impact our results of operations, cash flows and financial position.***

Significant changes in the actual investment return on pension assets, discount rates, and other factors have and may continue to adversely affect our results of operations, financial position and pension contributions in future periods. U.S. generally accepted accounting principles require that we calculate income or expense for the plans using actuarial valuations. These valuations reflect assumptions about financial markets and interest rates. Changes in these assumptions have resulted in material gains and losses to income in recent years and may continue to do so in future periods. For a discussion regarding the significant assumptions used to estimate pension expense, including discount rate, expected long-term rate of return on plan assets and mortality, and how our financial statements can be affected by pension plan accounting policies, see "Critical Accounting Policies" and estimates included in Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations."

Poor investment performance by our pension plan assets resulting from a decline in prices in the equity and/or fixed income markets could impact the funded status of our plans. Should the assets earn an average return less than our assumed rate, future pension expenses and funding requirements could increase. Further, we cannot predict whether changing market or economic conditions, regulatory changes or other factors will further increase our pension expense or funding obligations, diverting funds we would otherwise apply to other uses.



## **ITEM 1B. UNRESOLVED STAFF COMMENTS**

None.

## **ITEM 2. PROPERTIES**

Headquartered in Avon Lake, Ohio we operate globally with principal locations consisting of 80 manufacturing sites and eight distribution facilities in North America, South America, Europe, Asia and Africa. We own the majority of our manufacturing sites and lease our distribution facilities. We believe that the quality and production capacity of our facilities is sufficient to maintain our competitive position for the foreseeable future. The following table identifies the principal facilities of our segments:

<b>Performance Products and Solutions</b>	<b>Specialty Engineered Materials</b>	<b>Color, Additives and Inks</b>	<b>PolyOne Distribution</b>	<b>Designed Structures and Solutions</b>
1. Carson, California	1. McHenry, Illinois	1. Glendale, Arizona	1. Rancho Cucamonga, California	1. Cape Girardeau, Missouri
2. Terre Haute, Indiana	2. Avon Lake, Ohio	2. Kennesaw, Georgia		
3. Louisville, Kentucky	Dyersburg, Tennessee <sup>(1)</sup>	Suwanee, Georgia <sup>(3)</sup>	2. Chicago, Illinois	2. Goodyear, Arizona
4. Avon Lake, Ohio	3. North Haven, Connecticut	3. Elk Grove Village, Illinois	3. Eagan, Minnesota	3. Greenville, Ohio
5. Clinton, Tennessee	Seabrook, Texas <sup>(1)</sup>	4. St. Louis, Missouri	4. Edison, New Jersey	4. Hackensack, New Jersey
6. Dyersburg, Tennessee	4. Gaggenau, Germany	5. Massillon, Ohio	5. Statesville, North Carolina	5. La Mirada, California
7. Pasadena, Texas	5. Istanbul, Turkey	6. Norwalk, Ohio		6. Manitowoc, Wisconsin
8. Seabrook, Texas	6. Barbastro, Spain	7. North Baltimore, Ohio	6. Elyria, Ohio	7. McMinnville, Oregon
9. Orangeville, Ontario, Canada	7. Melle, Germany	8. Lehigh, Pennsylvania	7. La Porte, Texas	8. Muncie, Indiana
10. St. Remi de Napierville, Quebec, Canada	8. & 9. Suzhou, China <sup>(2)</sup>	9. Mountain Top, Pennsylvania	8. Brampton, Ontario, Canada	9. Newark, New Jersey
	10. Shenzhen, China	10. Vonore, Tennessee	(8 Distribution Facilities)	10. Paulding, Ohio
	Shanghai, China <sup>(3)</sup>			11. Pleasant Hill, Iowa
11. Dongguan, China	11. Birmingham, Alabama	11. Toluca, Mexico		12. Ripon, Wisconsin
12. Lockport, New York	12. Englewood, Colorado	12. Assesse, Belgium		13. Salisbury, Maryland
13. Ramos Arizpe, Mexico	13. Montrose, Colorado	13. Cergy, France		14. Portage, Wisconsin
(13 Manufacturing Plants)	(13 Manufacturing Plants)	14. Tossiat, France		15. Sheboygan Falls, Wisconsin
		15. Gyor, Hungary		16. Stamford, Connecticut
		16. Milan, Italy		Maryland Heights, Missouri (3)
		17. Kutno, Poland		(16 Manufacturing Plants)
		18. Pune, India		
		19. Pamplona, Spain		
		20. Bangkok, Thailand		
		21. Pudong (Shanghai), China		
		22. Jeddah, Saudi Arabia		
		Shenzhen, China <sup>(1)</sup>		
		23. Tianjin, China		
		24. Novo Hamburgo, Brazil		
		25. Berea, Ohio		
		26. Richland Hills, Texas		
		27. Bethel, Connecticut		
		28. Barberton, Ohio		
		29. Knowsley, United Kingdom		
		30. Eindhoven, Netherlands		
		31. Suzhou, China		
		32. & 33. Shanghai, China <sup>(4)</sup>		
		34. Itupeva, Brazil		
		35. Odkarby, Finland		
		Manitowoc, Wisconsin <sup>(1)</sup>		
		36. Cape Town, South Africa		
		37. Diez, Germany		
		38. La Porte, Indiana		
		(38 Manufacturing Plants)		

(1) Facility is not included in manufacturing plants total as it is also included as part of another segment.

(2) There are two manufacturing plants located at Suzhou, China.

(3) Facility is not included in manufacturing plants total as it is a design center/lab.

(4) There are two manufacturing plants located at Shanghai, China

### **ITEM 3. LEGAL PROCEEDINGS**

Information regarding other legal proceedings can be found in Note 11, *Commitments and Contingencies*, to the consolidated financial statements and is incorporated by reference herein.

### **ITEM 4. MINE SAFETY DISCLOSURES**

Not applicable.

### **EXECUTIVE OFFICERS OF THE REGISTRANT**

Executive officers are elected by our Board of Directors to serve one-year terms. The following table lists the name of each person currently serving as an executive officer of the Company, their age as of February 16, 2017 and current position with the Company.

<b>Name</b>	<b>Age</b>	<b>Position</b>
Robert M. Patterson	44	Chairman, President and Chief Executive Officer
Bradley C. Richardson	58	Executive Vice President, Chief Financial Officer
Richard N. Altice	52	Senior Vice President, President of Designed Structures and Solutions
Mark D. Crist	58	Senior Vice President, President of Distribution
Michael A. Garratt	53	Senior Vice President, Chief Commercial Officer
Lisa K. Kunkle	48	Senior Vice President, General Counsel and Secretary
M. John Midea, Jr.	52	Senior Vice President, Global Operations and Process Improvement
Craig M. Nikrant	55	Senior Vice President, President of Specialty Engineered Materials
Joel R. Rathbun	44	Senior Vice President, Mergers & Acquisitions
João José San Martin Neto	56	Senior Vice President, Chief Human Resource Officer
John V. Van Hulle	59	Senior Vice President, President of Color, Additives and Inks
Donald K. Wiseman	49	Senior Vice President, President of Performance Products and Solutions

**Robert M. Patterson:** Chairman, President and Chief Executive Officer, May 2016 to date. President and Chief Executive Officer, May 2014 to May 2016. Executive Vice President and Chief Operating Officer, March 2012 to May 2014. Executive Vice President and Chief Financial Officer, January 2011 to March 2012. Senior Vice President and Chief Financial Officer, May 2008 to January 2011. Vice President and Treasurer of Novelis, Inc. (an aluminum rolled products manufacturer) from 2007 to May 2008. Vice President, Controller and Chief Accounting Officer of Novelis from 2006 to 2007. Mr. Patterson served as Vice President and Segment Chief Financial Officer, Thermal and Flow Technology Segments of SPX Corporation (a multi-industry manufacturer and developer) from 2005 to 2006 and as Vice President and Chief Financial Officer, Cooling Technologies and Services of SPX from 2004 to 2005.

**Bradley C. Richardson:** Executive Vice President, Chief Financial Officer, November 2013 to date. Executive Vice President, Chief Financial Officer of Diebold, Incorporated (an integrated self-service delivery manufacturer for the banking industry and security systems) from November 2009 through November 2013. Executive Vice President, Corporate Strategy and Chief Financial Officer at Modine Manufacturing Company (a manufacturer of thermal management systems and components) from 2003 to 2009. Vice President, Performance Management Planning and Control, Chief Financial Officer, Upstream, BP Amoco, London, (a producer of oil, natural gas, and petro chemicals) from 2000 to 2003. Mr. Richardson serves on the Board of Directors of Brady Corporation and is Chair of its Audit Committee.

**Richard N. Altice:** Senior Vice President, President of Designed Structures and Solutions, May 2015 to date. Vice President, Epoxy Specialties Resins of Hexion Inc. (a global manufacturer of thermoset resins) from June 2013 to May 2015. Operating Partner, Quinpario Partners LLC (a private equity firm specializing in investments in specialty chemical businesses) from September 2012 to June 2013. Mr. Altice served as President & General Manager, Technical Specialties of Solutia Inc. (a global manufacturer of performance materials and specialty chemicals) from October 2011 to September 2012, as Vice President, Business Management of Solutia Inc. from August 2010 to October 2011, as Vice President, Commercial Services of Solutia Inc. from May 2009 to August 2010, as Global Commercial Director, Fluids of Solutia Inc. from October 2008 to May 2009.

**Mark D. Crist:** Senior Vice President, President of Distribution, June 2014 to date. Vice President, Global Key Accounts and Vice President of Asia January 2012 to May 2014. Global Commercial Director of Geon Performance Materials, June 2008 to December 2011. General Manager, Nalco Chemical Company Europe (a manufacturer of specialty chemicals, services and systems) from April 2006 to March 2008. General Manager, Nalco Chemical Company North America from June 2003 to March 2006.

Michael A. Garratt: Senior Vice President, Chief Commercial Officer, April 2016 to date. Senior Vice President, President of Performance Products and Solutions, September 2013 to April 2016. President, Marmon Utility (a manufacturer of medium-high voltage utility, subsea and down-hole power cables and molded insulator systems) from March 2011 to September 2013. Chief Operating Officer, Excel Polymers (a custom thermoset rubber formulator) from November 2009 to December 2010. Vice President and General Manager - Americas Compounding and Performance Additives, Excel Polymers from March 2009 to November 2009. Vice President and General Manager - Industrial and Consumer, Excel Polymers from December 2005 to March 2009. From April 1996 to June 2005, Mr. Garratt worked for DuPont Dow Elastomers, a joint venture of Dupont and Dow (global manufacturers of engineered thermoset rubber and thermoplastic elastomer materials) in market development and product management positions, culminating in a regional commercial leadership role for Europe, the Middle East and Africa.

Lisa K. Kunkle: Senior Vice President, General Counsel and Secretary, May 2015 to date. Vice President, General Counsel and Secretary, August 2007 to May 2015, Assistant General Counsel February 2007 to August 2007. Partner, Jones Day (a global law firm) from January 2006 to February 2007. Associate, Jones Day from August 1995 to January 2006.

M. John Midea, Jr.: Senior Vice President, Global Operations and Process Improvement, February 2015 to date. President and Chief Executive Officer, Resco Products (a refractory products company) from August 2012 to October 2014. President and Chief Operating Officer, Ennis Traffic Safety Solutions (a traffic safety and infrastructure company) from June 2008 to July 2012. Vice President, North American - General Industrial, Valspar Corporation (a manufacturer of paints and coatings) from June 2007 to May 2008. Vice President and General Manager, Power Coatings, Valspar Corporation from February 2002 to June 2007.

Craig M. Nikrant: Senior Vice President, President of Specialty Engineered Materials, January 2010 to date. Vice President and General Manager, Specialty Engineered Materials, September 2006 to December 2009. General Manager, Specialty Film & Sheet, General Electric Plastics (a former division of General Electric specializing in supplying plastics) from June 2004 to September 2006. Director, Global Commercial Effectiveness, General Electric Plastics from December 2003 to June 2004. Six Sigma Master Black Belt, General Electric Company Plastics Business from March 2001 to December 2002. General Manager, Commercial Operations, North Central Region, General Electric Plastics from June 1999 to March 2001.

Joel R. Rathbun: Senior Vice President, Mergers and Acquisitions, January 2016 to date. General Manager, Specialty Engineered Material North America, February 2013 to January 2016. Vice President, Mergers and Acquisitions, June 2011 to February 2013. Mr. Rathbun served as Senior Vice President, Mergers and Acquisitions, Moelis & Company (an American global independent investment bank) from January 2008 to June 2011. He also served as Executive Director, Mergers and Acquisitions of CIBC World Markets (an investment bank in the domestic and international equity and debt capital markets) from 2006 to 2008.

João José San Martin Neto: Senior Vice President, Chief Human Resources Officer, November 2016 to date. Senior Director, Human Resources, Color, Additives and Inks, February 2013 to November 2016. Group Global Director, Human Resources, Engineered Products and Solutions from November 2012 to February 2013. Vice President Human Resources, Alcoa Power and Propulsion (a business unit of Alcoa Inc. specializing in titanium and aluminum castings) from May 2009 to October 2012. Vice President Human Resources, Alcoa Electrical & Electronic Solutions (a business unit of Alcoa Inc. specializing in the design, development and production of electrical and electronic distribution systems) from August 2003 to April 2009.

John V. Van Hulle: Senior Vice President, President of Color, Additives and Inks, January 2010 to date. Senior Vice President and General Manager, Specialty Color, Additives and Inks, July 2006 to January 2010. President and Chief Executive Officer — ChemDesign Corporation (a custom chemical manufacturer) from December 2001 to July 2006. President, Specialty & Fine Chemicals — Cambrex Corporation (a specialty chemical and pharmaceutical business) from August 1994 to November 2000.

Donald K. Wiseman: Senior Vice President, President of Performance Products and Solutions, April 2016 to date. General Manager of Geon Performance Materials, September 2015 to April 2016. Prior to PolyOne, he worked at Johns Manville (a manufacturer of insulation, roofing materials and engineered products), where he had responsibility for its Performance Materials business from December 2013 to September 2015. Managing Director, Cabot Microelectronics Corporation (a provider of chemical mechanical planarization solutions) from June 2012 to December 2013. Global Business Director, Cabot Microelectronics Corporation from June 2007 to June 2012. Vice President of Operations, Michelman (a manufacturer of advanced materials used in coatings, printing & packaging and industrial markets) from May 2005 to June 2007. Global Business Director, Americhem (a global manufacturer specializing in custom color and additive solutions) from June 1994 to June 2005.

## PART II

### ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

The following table sets forth the range of the high and low sale prices for our common shares, \$0.01 par value per share, as reported by the New York Stock Exchange, where the shares are traded under the symbol "POL," for the periods indicated:

Common share price:	2016 Quarters				2015 Quarters			
	Fourth	Third	Second	First	Fourth	Third	Second	First
High	\$ 34.68	\$ 38.34	\$ 38.41	\$ 31.30	\$ 36.24	\$ 39.89	\$ 41.20	\$ 40.72
Low	\$ 28.77	\$ 31.25	\$ 29.74	\$ 22.35	\$ 28.97	\$ 29.09	\$ 36.33	\$ 34.41

As of February 1, 2017, there were 2,010 holders of record of our common shares.

The following table presents quarterly dividends declared per common share for the fiscal year ended December 31, 2016 and 2015:

Quarter Ended:	2016	2015
March 31,	\$ 0.120	\$ 0.100
June 30,	0.120	0.100
September 30,	0.120	0.100
December 31,	0.135	0.120
Total	\$ 0.495	\$ 0.420

The table below sets forth information regarding repurchase of shares of our common shares during the period indicated. For the full year 2016, we repurchased 3.0 million shares at a weighted average share price of \$28.91.

Period	Total Number of Shares Purchased	Weighted Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Program	Maximum Number of Shares that May Yet be Purchased Under the Program <sup>(1)</sup>
October 1 to October 31	593,767	\$ 29.43	593,767	9,088,333
November 1 to November 30	526,795	29.55	526,795	8,561,538
December 1 to December 31	75,000	33.27	75,000	8,486,538
Total	1,195,562	\$ 29.75	1,195,562	

(1) On August 18, 2008, we announced that our Board of Directors approved a common shares repurchase program authorizing PolyOne to purchase up to 10.0 million of its common shares. On October 11, 2011 and October 23, 2012, we further announced that our Board of Directors had increased the common shares repurchase authorization by an additional 5.3 million and 13.2 million, respectively. On May 16, 2016, we announced that we would increase our share buyback by 7.3 million to 10.0 million. As of December 31, 2016, approximately 8.5 million shares remain available for purchase under these authorizations. Purchases of common shares may be made by open market purchases or privately negotiated transactions and may be made pursuant to Rule 10b5-1 plans and accelerated share repurchases.



**ITEM 6. SELECTED FINANCIAL DATA**

Refer to Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations," in Part II of this Annual Report on Form 10-K and the notes to our accompanying consolidated financial statements for additional information regarding the financial data presented below, including matters that might cause this data not to be indicative of our future financial condition, results of operations or cash flows.

(In millions, except per share data)	2016	2015	2014	2013	2012
Sales	\$ 3,339.8	\$ 3,377.6	\$ 3,835.5	\$ 3,771.2	\$ 2,860.8
Operating income	281.9	250.9	155.1	231.5	137.5
Net income from continuing operations	165.0	144.7	77.2	92.9	53.2
Net income from continuing operations attributable to PolyOne shareholders	165.2	144.6	78.0	94.0	53.3
Cash dividends declared per common share	\$ 0.495	\$ 0.420	\$ 0.340	\$ 0.260	\$ 0.200
Earnings per share from continuing operations attributable to PolyOne shareholders:					
Basic	\$ 1.97	\$ 1.65	\$ 0.85	\$ 0.98	\$ 0.60
Diluted	\$ 1.95	\$ 1.63	\$ 0.83	\$ 0.97	\$ 0.59
Total assets	\$ 2,723.3	\$ 2,595.1	\$ 2,666.3	\$ 2,896.6	\$ 2,102.0
Long-term debt	\$ 1,239.8	\$ 1,128.0	\$ 948.9	\$ 961.1	\$ 686.5

## **ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

### **Overview**

Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) is designed to provide information that is supplemental to, and should be read together with, our consolidated financial statements and the accompanying notes contained in this Annual Report on Form 10-K. Information in this Item 7 is intended to assist the reader in obtaining an understanding of our consolidated financial statements, the changes in certain key items in those financial statements from year to year, the primary factors that accounted for those changes, and any known trends or uncertainties that we are aware of that may have a material effect on our future performance, as well as how certain accounting principles affect our consolidated financial statements.

The following discussion contains forward-looking statements that reflect our plans, estimates and beliefs. Our actual results could differ materially from those discussed in these forward-looking statements. Factors that could cause or contribute to these differences include, but are not limited to, those discussed below and elsewhere in this Annual Report on Form 10-K, particularly in "Cautionary Note on Forward-Looking Statements" and Item 1A, "Risk Factors."

### **Our Business**

We are a premier provider of specialized polymer materials, services and solutions with operations in specialty engineered materials, color and additive systems, plastic sheet and packaging solutions and polymer distribution. We are also a highly specialized developer and manufacturer of performance enhancing additives, liquid colorants, and fluoropolymer and silicone colorants. Headquartered in Avon Lake, Ohio, with 2016 sales of \$3.3 billion, we have manufacturing sites and distribution facilities in North America, South America, Europe, Asia and Africa. We currently employ approximately 7,000 people and offer more than 35,000 polymer solutions to over 10,000 customers across the globe. We provide value to our customers through our ability to link our knowledge of polymers and formulation technology with our manufacturing and supply chain capabilities to provide value-added solutions to designers, assemblers and processors of plastics (our customers).

### ***Business Model and Key Concepts***

The central focus of our business model is to provide specialized material and service solutions to our customers by leveraging our global footprint, product and technology breadth, manufacturing expertise, fully integrated information technology network, broad market reach and raw material procurement strength. These resources enable us to capitalize on dynamic changes in the end markets we serve, which include transportation, packaging, building and construction, industrial, healthcare, consumer, wire and cable, electrical and electronics and appliance.

### ***Key Challenges***

Our business faces macroeconomic exposures resulting from economic downturns, especially as it relates to cyclical markets such as building and construction, automotive and industrial. In addition, with 55% and 49% of our respective Color, Additives and Inks and Specialty Engineered Materials segments' sales outside the United States, we experience volatility related to foreign currency fluctuations, most significantly the Euro. Increasing profitability during periods of raw material price volatility is another challenge. Further, we strive to capitalize on the opportunity to accelerate development of products that meet a growing body of environmental laws and regulations such as lead and phthalate restrictions included in the Restrictions on the Use of Certain Hazardous Substances and the Consumer Product Safety Information Act of 2008.

### ***Strategy and Key Trends***

To address these challenges and achieve our vision, we have implemented a strategy with four core components: specialization, globalization, operational excellence and commercial excellence. Specialization differentiates us through products, services, technology and solutions that add value. Globalization allows us to service our customers with consistency wherever their operations might be around the world. Operational excellence empowers us to respond to the voice of the customer while focusing on continuous improvement. Commercial excellence enables us to deliver value to customers by supporting their growth and profitability with superior customer service.

As part of our Platinum Vision for 2020, we have established margin improvement targets for all businesses. In the short term, we will maintain our focus on sales growth with expanding margins, with a goal of offsetting weaker foreign currencies and raw material volatility. Longer term, we will continue to focus on accelerating the launch of new products and collaborating with our customers to develop new and unique solutions for their benefit. Capital expenditures will be focused primarily to support sales growth, investment in recent acquisitions, and other strategic investments. We also continue to consider acquisitions and other synergy opportunities that complement our core

platforms. These actions will ensure that we continue to invest in capabilities that advance the pace of our transformation and continue to support growth in key markets and product offerings.

We will continue our enterprise-wide Lean Six Sigma program directed at improving margin, profitability and cash flow by applying proven management techniques and strategies to key areas of the business, such as pricing, supply chain and operations management, productivity and quality. Long-term trends that currently provide opportunities to leverage our strategy include improving health and wellness, protecting the environment, globalizing and localizing and increasing energy efficiency. Examples of how our strategy supports these trends can be found in numerous initiatives: active participation in the medical device market, leveraging our global footprint to deliver consistent solutions globally, lightweighting and metal replacement and development of solutions that respond to ever-changing market needs by offering alternatives to traditional materials.

### **Recent Developments**

On January 3, 2017, the Company completed the acquisition of SilCoTec, Inc. (SilCoTec), a leading producer of innovative silicone colorants, dispersions and formulations. The results of operations of SilCoTec will be reported in the Color, Additives and Inks segment.

On November 30, 2016, the Company completed the acquisition of COMPTEK Kunststoffverarbeitung GmbH (Comptek), an innovative producer of colorants, additives and formulations for products that utilize high-temperature and highly engineered thermoplastics. The results of operations of Comptek are reported in the Color, Additives and Inks segment.

On July 26, 2016, the Company completed the acquisition of substantially all of the assets of Gordon Composites, Inc. (Gordon Composites), Polystrand, Inc. (Polystrand) and Gordon Holdings, Inc. (Gordon Holdings). Gordon Composites develops high strength profiles and laminates for use in vertical and crossbow archery, sports and recreation equipment, prosthetics and office furniture systems. Polystrand operates in the advanced area of continuous reinforced thermoplastic composite technology space, a next generation material science that delivers the high strength and lightweight characteristics of composites, further enhanced with the design flexibility to form more complex shapes. The results of operations of the acquired businesses are reported in the Specialty Engineered Materials segment.

On January 29, 2016, the Company completed the acquisition of certain technologies and assets from Kraton Performance Polymers, Inc. (Kraton), to expand its global footprint and expertise in thermoplastic elastomer (TPE) innovation and design. The results of operations of Kraton are reported in the Specialty Engineered Materials segment.

### **Highlights and Executive Summary**

A summary of PolyOne's sales, operating income, income from continuing operations net of income taxes, net income from continuing operations attributable to PolyOne common shareholders, liquidity and total debt is included in the following table:

<b>(In millions)</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>
Sales	\$ 3,339.8	\$ 3,377.6	\$ 3,835.5
Operating income	281.9	250.9	155.1
Net income from continuing operations	165.0	144.7	77.2
Net income from continuing operations attributable to PolyOne common shareholders	165.2	144.6	78.0
Liquidity	\$ 612.9	\$ 621.7	\$ 475.0
Long-term debt	\$ 1,239.8	\$ 1,128.0	\$ 948.9

## Results of Operations

(Dollars in millions, except per share data)	Variances — Favorable (Unfavorable)						
	2016	2015	2014	2016 versus 2015		2015 versus 2014	
				Change	% Change	Change	% Change
Sales	\$ 3,339.8	\$ 3,377.6	\$ 3,835.5	\$ (37.8)	(1.1)%	\$ (457.9)	(11.9)%
Cost of sales	2,633.6	2,696.1	3,127.6	62.5	2.3 %	431.5	13.8 %
Gross margin	706.2	681.5	707.9	24.7	3.6 %	(26.4)	(3.7)%
Selling and administrative expense	424.3	430.6	552.8	6.3	1.5 %	122.2	22.1 %
Operating income	281.9	250.9	155.1	31.0	12.4 %	95.8	61.8 %
Interest expense, net	(59.8)	(64.1)	(62.2)	4.3	6.7 %	(1.9)	(3.1)%
Debt extinguishment costs	(0.4)	(16.4)	—	16.0	97.6 %	(16.4)	(100.0)%
Other income (expense), net	0.6	(2.7)	(4.5)	3.3	122.2 %	1.8	40.0 %
Income from continuing operations, before income taxes	222.3	167.7	88.4	54.6	32.6 %	79.3	89.7 %
Income tax expense	(57.3)	(23.0)	(11.2)	(34.3)	(149.1)%	(11.8)	(105.4)%
Net income from continuing operations	\$ 165.0	\$ 144.7	\$ 77.2	\$ 20.3	14.0 %	\$ 67.5	87.4 %
Income from discontinued operations, net of income taxes	—	—	1.2	—	— %	(1.2)	(100.0)%
Net income	165.0	144.7	78.4	20.3	14.0 %	66.3	84.6 %
Net loss (income) attributable to noncontrolling interests	0.2	(0.1)	0.8	0.3	300.0 %	(0.9)	(112.5)%
Net income attributable to PolyOne common shareholders	\$ 165.2	\$ 144.6	\$ 79.2	\$ 20.6	14.2 %	\$ 65.4	82.6 %
Earnings per share attributable to PolyOne common shareholders - basic:							
Continuing operations	\$ 1.97	\$ 1.65	\$ 0.85				
Discontinued operations	—	—	0.01				
Total	\$ 1.97	\$ 1.65	\$ 0.86				
Earnings per share attributable to PolyOne common shareholders - diluted:							
Continuing operations	\$ 1.95	\$ 1.63	\$ 0.83				
Discontinued operations	—	—	0.02				
Total	\$ 1.95	\$ 1.63	\$ 0.85				

### Sales

Sales decreased \$37.8 million, or 1.1%, in 2016 compared to 2015. Growth within the industrial and consumer markets positively impacted sales by 3.8%, while acquisitions increased sales by 2.0%. Declining hydrocarbon based raw material costs that led to reduced overall average selling prices, particularly for the Performance Products and Solutions, PolyOne Distribution and Designed Structures and Solutions segments, reduced sales by 3.1% and unfavorable foreign exchange impacted sales 0.8%. The remaining decrease is primarily due to volume declines largely associated with legacy Spartech business.

Sales decreased \$457.9 million, or 11.9%, in 2015 compared to 2014. Sales decreased 6.0% as lower volume associated with the ongoing integration of the legacy Spartech businesses more than offset new business gains in smaller, niche specialty applications. Sales further declined 2.3% as a result of unfavorable foreign exchange rates and 4.5% due to declining hydrocarbon based raw material costs that led to reduced overall average selling prices, particularly for the Performance Products and Solutions and PolyOne Distribution segments. Partially offsetting these items were acquisitions, which increased sales 0.9%.

### Cost of sales

As a percent of sales, cost of sales decreased from 79.8% in 2015 to 78.9% in 2016 primarily due to lower restructuring charges of \$20.0 million.

As a percent of sales, cost of sales decreased from 81.5% in 2014 to 79.8% in 2015. This is primarily a result of improved mix within the Color, Additives and Inks and Specialty Engineered Materials specialty segments and \$27.0 million in lower restructuring charges in 2015.

### **Selling and administrative expense**

These costs include selling, technology, administrative functions, corporate and general expenses. Selling and administrative expense in 2016 decreased \$6.3 million, primarily related to an \$18.7 million reduction in our pension mark-to-market adjustment. The favorable impact of the mark-to-market adjustment in 2016 was a result of actual asset returns exceeding our assumed rate of return and the use of updated mortality tables, partially offset by a decrease in interest rates. See Note 10, *Employee Benefit Plans*, for further discussion on our mark-to-market adjustment. Offsetting this decrease were selling and administrative expenses associated with acquired businesses of \$6.7 million and an increase in employee costs, including incentives, of \$7.0 million.

Selling and administrative expense in 2015 decreased \$122.2 million, primarily related to lower restructuring charges of \$25.2 million, lower compensation costs of \$32.4 million, a \$16.6 million reduction due to foreign currency, primarily driven by the weaker Euro, and a \$43.9 million reduction in the pension mark-to-market adjustment. The 2015 adjustment was a result of actual asset returns that were lower than our assumed rate of return partially offset by the impact of increased discount rates. See Note 10, *Employee Benefit Plans*, for further discussion on our mark-to-market adjustment. The remaining decrease is primarily due to an improved cost structure as a result of restructuring actions.

### **Interest expense, net**

Interest expense, net decreased \$4.3 million in 2016 compared to 2015 due to the refinancing of higher interest-bearing debt during the fourth quarter of 2015.

Interest expense, net increased \$1.9 million in 2015 compared to 2014 due to increased borrowings on our revolving credit facility during 2015 as compared to 2014.

### **Debt extinguishment costs**

Debt extinguishment costs of \$0.4 million for 2016 includes the write-off of unamortized deferred financing costs and premium and consent payments in connection with the amendment of the senior secured term loan due 2022 that reduced the margin by 25 basis points.

Debt extinguishment costs of \$16.4 million for 2015 includes \$13.4 of premium and consent payments and \$3.0 million associated with the write-off of unamortized deferred financing costs due to the early repurchase of the remaining \$316.6 million aggregate principal of our 7.375% senior notes due 2020.

### **Income taxes**

The Company is subject to taxation in the U.S. and numerous foreign jurisdictions. In determining the effective income tax rate, the Company analyzes various factors, including annual earnings, the laws of taxing jurisdictions in which the earnings will be generated, the impact of state and local income taxes, the ability to use tax credits, net operating loss carryforwards, and available tax planning alternatives. Discrete items, including the effect of changes in tax laws, statutory tax rates, and valuation allowances or other non-recurring tax adjustments are reflected in the period in which they occur as an addition to, or reduction from, the income tax provision.

A reconciliation of the U.S. federal statutory tax rate to the consolidated effective income tax rate along with a description of significant or unusual reconciling items is included below.

	<b>2016</b>	<b>2015</b>	<b>2014</b>
Income tax expense at 35%	35.0%	35.0%	35.0%
Foreign tax rate differential	(5.2)	(5.0)	(5.7)
State and local tax, net	2.1	2.7	2.8
Tax benefits on certain foreign investments	(2.0)	(0.7)	(17.0)
Domestic production activities deduction	(1.6)	(2.0)	(2.5)
Amended prior period tax returns	(1.4)	(18.3)	(2.3)
Uncertain tax positions	(1.3)	0.6	1.0
Permanent tax differences	0.3	1.8	(2.1)
U.S. credit for research activities	(0.5)	(0.7)	(1.2)
Changes in valuation allowances	0.4	0.3	7.8
Settlements	—	—	(3.1)
Effective income tax rate	<u>25.8%</u>	<u>13.7%</u>	<u>12.7%</u>

## 2016

Tax benefits on certain foreign investments decreased the effective tax rate by 2.0% (\$4.4 million) primarily related to the dissolution of an entity.

Uncertain tax positions decreased the effective tax rate by 1.3% (\$3.0 million) that primarily related to the reversal of an uncertain tax position due to the expiration of the statute of limitations.

## 2015

Amending U.S. federal income tax returns for 2004 through 2012 to use foreign tax credits decreased the effective tax rate by 18.3% (\$30.7 million).

Uncertain tax positions increased the effective tax rate by 0.6% (\$1.0 million). The reversal of an uncertain tax position due to the expiration of the statute of limitations decreased the effective tax rate by 5.9% (\$9.9 million). A foreign court ruling, which settled an uncertain position taken in a prior year, increased the effective tax rate by 4.7% (\$7.9 million). Other unfavorable uncertain tax positions more than offset the net decrease in the effective tax rate of these two items.

## 2014

Tax benefits on certain foreign investments decreased the effective tax rate by 17.0% (\$15.0 million) related to the write-off of our investment in certain Brazil subsidiaries for tax purposes and operating losses primarily as a result of restructuring actions to close certain Brazil facilities discussed in Note 4, *Employee Separation and Restructuring Costs*.

Permanent tax differences decreased the effective tax rate by 2.1% (\$1.9 million) primarily related to foreign tax law changes and the utilization of foreign tax credits.

Changes in valuation allowances increased the effective tax rate by 7.8% (\$6.9 million) primarily related to certain Brazilian subsidiaries as a result of cumulative operating losses.

## Segment Information

Operating income is the primary measure that is reported to our chief operating decision maker for purposes of making decisions about allocating resources to the segments and assessing their performance. Operating income at the segment level does not include: corporate general and administrative costs that are not allocated to segments; intersegment sales and profit eliminations; charges related to specific strategic initiatives, such as the consolidation of operations; restructuring activities, including employee separation costs resulting from personnel reduction programs, plant closure and phase-in costs; costs incurred directly in relation to acquisitions or divestitures; integration costs; executive separation agreements; share-based compensation costs; environmental remediation costs and other liabilities for facilities no longer owned or closed in prior years; gains and losses on the divestiture of joint ventures and equity investments; actuarial gains and losses associated with our pension and post-retirement benefit plans; and certain other items that are not included in the measure of segment profit or loss that is reported to and reviewed by our chief operating decision maker. These costs are included in *Corporate and eliminations*.

PolyOne has five reportable segments: (1) Color, Additives and Inks; (2) Specialty Engineered Materials; (3) Designed Structures and Solutions; (4) Performance Products and Solutions; and (5) PolyOne Distribution.

Our segments are further discussed in Note 14, *Segment Information*, to the accompanying consolidated financial statements.

## Sales and Operating Income — 2016 compared with 2015 and 2015 compared with 2014

(Dollars in millions)	2016	2015	2014	2016 versus 2015		2015 versus 2014	
				Change	% Change	Change	% Change
<b>Sales:</b>							
Color, Additives and Inks	\$ 797.7	\$ 810.7	\$ 850.8	(13.0)	(1.6)%	(40.1)	(4.7)%
Specialty Engineered Materials	565.8	542.8	598.3	23.0	4.2 %	(55.5)	(9.3)%
Designed Structures and Solutions	401.7	453.5	617.5	(51.8)	(11.4)%	(164.0)	(26.6)%
Performance Products and Solutions	668.5	694.1	816.6	(25.6)	(3.7)%	(122.5)	(15.0)%
PolyOne Distribution	1,071.0	1,034.1	1,114.4	36.9	3.6 %	(80.3)	(7.2)%
Corporate and eliminations	(164.9)	(157.6)	(162.1)	(7.3)	(4.6)%	4.5	2.8 %
Sales	<u>\$ 3,339.8</u>	<u>\$ 3,377.6</u>	<u>\$ 3,835.5</u>	<u>\$ (37.8)</u>	<u>(1.1)%</u>	<u>\$ (457.9)</u>	<u>(11.9)%</u>
<b>Operating income:</b>							
Color, Additives and Inks	\$ 127.5	\$ 135.4	\$ 124.9	(7.9)	(5.8)%	10.5	8.4 %
Specialty Engineered Materials	81.1	79.6	72.4	1.5	1.9 %	7.2	9.9 %
Designed Structures and Solutions	(3.8)	13.8	45.1	(17.6)	(127.5)%	(31.3)	(69.4)%
Performance Products and Solutions	74.4	57.4	63.1	17.0	29.6 %	(5.7)	(9.0)%
PolyOne Distribution	68.2	68.0	68.2	0.2	0.3 %	(0.2)	(0.3)%
Corporate and eliminations	(65.5)	(103.3)	(218.6)	37.8	36.6 %	115.3	52.7 %
Operating income	<u>\$ 281.9</u>	<u>\$ 250.9</u>	<u>\$ 155.1</u>	<u>\$ 31.0</u>	<u>12.4 %</u>	<u>\$ 95.8</u>	<u>61.8 %</u>
<b>Operating income as a percentage of sales:</b>							
Color, Additives and Inks	16.0 %	16.7%	14.7%	(0.7)% points		2.0% points	
Specialty Engineered Materials	14.3 %	14.7%	12.1%	(0.4)% points		2.6% points	
Designed Structures and Solutions	(0.9)%	3.0%	7.3%	(3.9)% points		(4.3)% points	
Performance Products and Solutions	11.1 %	8.3%	7.7%	2.8% points		0.6% points	
PolyOne Distribution	6.4 %	6.6%	6.1%	(0.2)% points		0.5% points	
Total	8.4 %	7.4%	4.0%	1.0% points		3.4% points	

### **Color, Additives and Inks**

Sales decreased \$13.0 million, or 1.6%, in 2016 compared to 2015. Sales increases of 2.2% from acquisitions were offset by unfavorable foreign exchange rate impacts of 1.5% and sales declines of 1.6% associated with legacy Spartech business. The remaining decline is a result of lower demand within the oil and gas and packaging end markets.

Operating income decreased \$7.9 million in 2016 compared to 2015. An operating income increase of \$2.8 million associated with acquisitions was more than offset by the unfavorable exchange rate impacts of \$1.0 million, unfavorable product mix and the decline in sales noted above.

Sales decreased \$40.1 million, or 4.7%, in 2015 compared to 2014 primarily due to unfavorable foreign exchange rate impact of 6.7% and 2.3% related to lower volume from the legacy Spartech business offsetting smaller, specialty niche application wins. Partially offsetting these decreases were sales increases of 4.1% due to acquisitions.

Operating income increased \$10.5 million in 2015 compared to 2014. This increase was driven primarily by improved mix of \$14.6 million, \$3.0 million due to acquisitions and \$2.7 million as a result of an improved cost structure primarily due to restructuring actions. Restructuring savings were largely a result of the closure of a manufacturing plant in Europe. Partially offsetting these increases was an unfavorable foreign exchange rate impact of \$8.9 million.

### **Specialty Engineered Materials**

Sales increased \$23.0 million, or 4.2%, in 2016 compared to 2015. Sales increased 9.0% due to acquisitions, partially offset by unfavorable product mix of 3.7% primarily resulting from a decline in oil and gas applications, and an unfavorable foreign exchange rate impact of 1.1%.

Operating income increased \$1.5 million in 2016 compared to 2015. This was primarily due to the increase in operating income of \$4.8 million related to acquisitions, which was partially offset by \$1.0 million of unfavorable foreign exchange rate impact and the unfavorable product mix noted above.



Sales decreased \$55.5 million, or 9.3%, in 2015 compared to 2014 primarily due to an unfavorable foreign exchange rate impact of 5.1% and mix of 1.8%. Further reducing sales by 2.2% was lower volume as a result of exiting certain business in Brazil and legacy Spartech products, which offset gains in specialty niche applications.

Operating income increased \$7.2 million in 2015 compared to 2014. This increase was driven by favorable mix of \$6.1 million and \$3.6 million of benefits realized from the closure of two manufacturing facilities in Brazil. See further discussion of this restructuring action in Note 4, *Employee Separation and Restructuring Costs*. Partially offsetting these increases was an unfavorable foreign exchange rate impact of \$2.6 million.

Total cost savings achieved in 2015 for the Spartech realignment and Brazil restructuring actions were in-line with our expectations. These actions did not have a material impact to the Specialty Engineered Materials segment in 2016.

### **Designed Structures and Solutions**

Sales decreased \$51.8 million, or 11.4%, in 2016 compared to 2015 primarily due to lower volumes and decreased average selling prices from lower hydrocarbon based raw material costs.

Operating income decreased \$17.6 million in 2016 compared to 2015. This decline was primarily due to lower sales and unfavorable mix impacting operating income by \$22.6 million. This was partially offset by \$2.8 million in benefits realized from the 2015 restructuring actions and \$2.1 million in lower compensation costs and discretionary spending.

Sales decreased \$164.0 million, or 26.6%, in 2015 compared to 2014. 13.7% was a result of lower volume, while the remaining decline is associated with lower selling prices due to declining hydrocarbon raw material costs.

Operating income decreased \$31.3 million in 2015 compared to 2014. This decline was primarily due to lower sales impacting operating income by \$48.5 million. This was partially offset by \$7.3 million in benefits realized from the 2013 Spartech manufacturing realignment actions and \$7.5 million in lower compensation costs and discretionary spending.

In 2015, PolyOne determined it would close two manufacturing facilities within the Designed Structures and Solutions segment to right size operations as a result of declining operating results and near term outlook. See further discussion of this restructuring action in Note 4, *Employee Separation and Restructuring Costs*.

### **Performance Products and Solutions**

Sales decreased \$25.6 million, or 3.7%, in 2016 compared to 2015 as volume growth of 7.0% was more than offset by a 5.6% decline related to reduced overall average selling prices, largely due to lower hydrocarbon based raw material costs and a 4.9% decline resulting from lower volume related to legacy Spartech business.

Operating income increased \$17.0 million in 2016 compared to 2015 primarily as a result of expanding gross margin driven by improved mix and volume growth.

Sales decreased \$122.5 million, or 15.0%, in 2015 compared to 2014. Sales declined 10.8% as a result of lower volume related to legacy Spartech business along with customer destocking in the first quarter of 2015. The remaining decrease in sales of 4.2% is a result of declining hydrocarbon based raw material costs that led to reduced overall average selling prices.

Operating income decreased \$5.7 million in 2015 compared to 2014. Lower volume related to legacy Spartech business reduced operating income by \$13.2 million. Benefits realized of \$6.3 million related to the 2013 Spartech restructuring actions partially offset this decrease.

The cost savings achieved from the restructuring actions noted above were in-line with our expectations. These actions did not have a material impact to the Performance Products and Solutions segment in 2016.

### **PolyOne Distribution**

Sales increased \$36.9 million, or 3.6%, in 2016 compared to 2015. Volume growth of 11.1% was partially offset by lower overall average selling prices due to declining hydrocarbon based resin costs.

Operating income increased \$0.2 million in 2016 compared to 2015 as a result of increased sales, offset by increased selling and administrative costs from our investment in commercial resources and margin compression from lower overall average selling prices due to declining hydrocarbon based resin costs.

Sales decreased \$80.3 million, or 7.2%, in 2015 compared to 2014 primarily due to declining hydrocarbon based raw material costs that led to lower overall average selling prices.

Operating income decreased \$0.2 million in 2015 compared to 2014 as a result of the decline in sales and higher selling and administrative costs resulting from an investment in commercial resources.

### **Corporate and Eliminations**

Corporate and eliminations decreased \$37.8 million in 2016 compared to 2015. This decrease was largely due to \$22.9 million of lower restructuring charges associated with our various actions that have been completed prior to or are substantially complete in 2016 and a \$20.0 million lower mark-to-market adjustment in 2016 as compared to 2015. The 2016 mark-to-market adjustment was a result of actual asset returns exceeding our assumed rate of return and the use of updated mortality tables, partially offset by a decrease in interest rates. See Note 10, *Employee Benefit Plans*, for further discussion on our mark-to-market adjustment. Offsetting these decreases was an increase associated with acquisition related costs of \$5.5 million.

Corporate and eliminations decreased \$115.3 million in 2015 as compared to 2014. This decrease was largely due to \$52.2 million of lower restructuring charges primarily associated with our 2013 and 2014 actions that were completed or are substantially complete in 2015 and a \$44.9 million lower mark-to-market adjustment in 2015 as compared to 2014. The 2015 adjustment was a result of actual asset returns that were lower than our assumed rate of return partially offset by the impact of increased interest rates. See Note 10, *Employee Benefit Plans*, for further discussion on our mark-to-market adjustment. The remaining decrease was primarily due to lower compensation costs.

### **Liquidity and Capital Resources**

Our objective is to finance our business through operating cash flow and an appropriate mix of debt and equity. By laddering the maturity structure, we avoid concentrations of debt maturities, reducing liquidity risk. We may from time to time seek to retire or purchase our outstanding debt with cash and/or exchanges for equity securities, in open market purchases, privately negotiated transactions or otherwise. We may also seek to repurchase our outstanding common shares. Such repurchases, if any, will depend on prevailing market conditions, our liquidity requirements, contractual restrictions and other factors. The amounts involved have been and may continue to be material.

The following table summarizes our liquidity as of December 31, 2016:

<b>(In millions)</b>	
Cash and cash equivalents	\$ 226.7
Revolving credit availability	386.2
Liquidity	<u>\$ 612.9</u>

As of December 31, 2016, 83% of the Company's cash and cash equivalents resided outside the United States. Repatriation of these funds could result in potential foreign and domestic taxes. To the extent foreign earnings previously treated as indefinitely reinvested were to be repatriated, the potential U.S. tax liability may be reduced by any foreign income taxes paid on these earnings. However, based on the Company's policy of indefinite reinvestment, it is not practicable to determine the U.S. federal income tax liability, if any, due to the complexities associated with this hypothetical calculation and the Company's indefinite reinvestment policy. As of December 31, 2016, the non-U.S. subsidiaries have a cumulative unremitted foreign earnings income position of \$336.9 million, for which no deferred tax liability has been provided.

Based on current projections, we believe that we will be able to continue to manage and control working capital, discretionary spending and capital expenditures and that cash provided by operating activities, along with available borrowing capacity under our revolving credit facilities, will allow us to maintain adequate levels of available capital to fund our operations, meet debt service obligations, continue paying dividends and repurchase outstanding common shares in accordance with our board authorization.

Expected sources of cash in 2017 include cash from operations and available liquidity under our revolving credit facility, if needed. Expected uses of cash in 2017 include interest payments, cash taxes, contributions to our pension plans, dividend payments, share repurchases, environmental remediation costs and capital expenditures. Capital expenditures are currently estimated to be \$90.0 to \$95.0 million in 2017, primarily to support sales growth, our continued investment in recent acquisitions and other strategic investments.

## Cash Flows

The following summarizes our cash flows from operating, investing and financing activities.

(In millions)	2016	2015	2014
<b>Cash provided by (used by):</b>			
Operating Activities	\$ 221.3	\$ 227.2	\$ 208.4
Investing Activities	(235.4)	(106.5)	(111.8)
Financing Activities	(34.0)	(70.4)	(218.4)
Effect of exchange rate on cash	(5.0)	(9.1)	(4.8)
<b>Net (decrease) increase in cash and cash equivalents</b>	<u>\$ (53.1)</u>	<u>\$ 41.2</u>	<u>\$ (126.6)</u>

### Operating activities

In 2016, net cash provided by operating activities was \$221.3 million as compared to \$227.2 million in 2015. The decrease in net cash provided by operating activities of \$5.9 million is primarily driven by working capital changes of \$60.1 million between 2016 and 2015. Reduced sales in 2015 compared to 2014 resulted in a reduction in working capital of \$55.7 million in 2015 compared to a slight build in working capital of \$4.4 million in 2016. This change in working capital was partially offset by lower incentive payments of \$22.0 million, higher earnings of \$20.3 million and lower payroll payments of \$12.3 million primarily as a result of payment timing.

Working capital as a percentage of sales, which we define as the average thirteen months of accounts receivable, plus inventory, less accounts payable, divided by full year sales, increased to 10.4% at December 31, 2016 from 9.7% at December 31, 2015. This increase is primarily due to the impact of recent acquisitions.

In 2015, net cash provided by operating activities was \$227.2 million as compared to \$208.4 million in 2014. The increase in net cash provided by operating activities of \$18.8 million is primarily driven by higher earnings and a decrease in working capital of \$18.1 million. Partially offsetting these increases were higher payroll payments of \$12.3 million as a result of payment timing and an increase in pension contributions of \$5.4 million.

### Investing Activities

Net cash used by investing activities during 2016 of \$235.4 million reflects capital expenditures of \$84.2 million and acquisitions of \$164.2 million, partially offset by the sale of and proceeds from other assets of \$13.0 million.

Net cash used by investing activities during 2015 of \$106.5 million reflects capital expenditures of \$91.2 million and acquisitions of \$18.3 million, partially offset by the sale of and proceeds from other assets of \$3.0 million.

Net cash used by investing activities during 2014 of \$111.8 million primarily reflects capital expenditures of \$92.8 million and acquisitions of \$47.2 million. These uses were partially offset by the third and final earn-out payment from the 2011 sale of our equity investment in SunBelt of \$26.8 million and the sale of and proceeds from other assets of \$1.4 million.

### Financing Activities

Net cash used by financing activities in 2016 primarily reflects repurchases of \$86.2 million of our outstanding common shares, cash dividends paid of \$40.2 million and \$6.0 million repayment of long-term debt. Partially offsetting these cash outflows was the increase of \$100.0 million to the senior secured term loan due 2022 primarily used to fund acquisitions.

Net cash used in financing activities in 2015 primarily reflects repayment of long-term debt totaling \$365.3 million, a \$45.5 million net payment under existing credit facilities, repurchases of \$156.1 million of our outstanding common shares and cash dividends paid of \$35.7 million. Partially offsetting these cash outflows was \$547.3 million of proceeds from our senior secured term loan.

Net cash used in financing activities in 2014 reflects repurchases of \$233.2 million of our outstanding common shares, cash dividends paid of \$29.9 million and the repayment of long-term debt of \$8.0 million. These cash outflows more than offset the tax benefit of \$6.9 million related to the exercise of employee equity awards and a \$45.8 million net draw under existing credit facilities.

## Total Debt

The following table summarizes debt as presented at December 31, 2016 and 2015.

(In millions)	December 31, 2016	December 31, 2015
Senior term loan due 2022	\$ 635.3	\$ 541.4
5.250% senior notes due 2023	592.9	591.7
Other debt <sup>(1)</sup>	30.1	13.5
Total debt	\$ 1,258.3	\$ 1,146.6
Less short-term and current portion of long-term debt	18.5	18.6
Long-term debt	\$ 1,239.8	\$ 1,128.0

(1) Other debt includes capital lease obligations of \$17.8 million and \$0.4 million as of December 31, 2016 and 2015, respectively.

On November 12, 2015, PolyOne entered into a senior secured term loan having an aggregate principal amount of \$550.0 million. On June 15, 2016, the Company entered into an amendment to its senior secured term loan. Under the terms of the amended senior secured term loan, the margin was reduced by 25 basis points to 275 basis points. At the Company's discretion, interest is based upon (i) a margin rate of 275 basis points plus the 1-, 2-, 3-, or 6-month LIBOR, subject to a floor of 75 basis points or (ii) a margin rate of 175 basis points plus a Prime rate, subject to a floor of 175 basis points. In connection with the amendment, the Company recognized \$0.4 million of *Debt extinguishment costs* in our Consolidated Statements of Income. On August 3, 2016, the Company increased the senior secured term loan due 2022 by \$100.0 million in connection with the acquisition of substantially all of the assets of Gordon Composites, Polystrand and Gordon Holdings. Repayments in the amount of one percent of the aggregate principal amount as of August 3, 2016 are payable annually, while the remaining balance matures on November 12, 2022. The total aggregate principal repayments as of December 31, 2016 was \$6.0 million. The weighted average annual interest rate for the senior secured term loan for the years ended December 31, 2016 and 2015 was 3.61% and 3.75%, respectively.

PolyOne has outstanding \$600.0 million aggregate principal amount of senior notes, which mature on March 15, 2023. The senior notes bear an interest rate of 5.25% per year, payable semi-annually, in arrears, on March 15 and September 15 of each year.

The Company maintains a senior secured revolving credit facility, which matures on March 1, 2018, which provides a maximum borrowing facility size of \$400.0 million, subject to a borrowing base with advances against certain U.S. and Canadian accounts receivable, inventory and other assets as specified in the agreement. We have the option to increase the availability under the facility to \$450.0 million, subject to meeting certain requirements and obtaining commitments for such increase. The revolving credit facility has a U.S. and a Canadian line of credit. Currently there are no borrowings on the U.S. or Canadian portion of the facility. Advances under the U.S. portion of our revolving credit facility bear interest, at the Company's option, at a Base Rate or a LIBOR Rate plus an applicable margin. The Base Rate is a fluctuating rate equal to the greater of (i) the Federal Funds Rate plus one-half percent, (ii) the prevailing LIBOR Rate plus one percent, and (iii) the prevailing Prime Rate. The applicable margins vary based on the Company's daily average excess availability during the previous quarter. The weighted average annual interest rate under this facility for the year ended December 31, 2016 and 2015 were 3.15% and 2.46%, respectively. As of December 31, 2016 and 2015, we had no borrowings under our revolving credit facility, which had availability of \$382.7 million and \$338.7 million, respectively.

The agreements governing our revolving credit facility and our senior secured term loan, and the indentures and credit agreements governing other debt, contain a number of customary financial and restrictive covenants that, among other things, limit our ability to: consummate asset sales, incur additional debt or liens, consolidate or merge with any entity or transfer or sell all or substantially all of our assets, pay dividends or make certain other restricted payments, make investments, enter into transactions with affiliates, create dividend or other payment restrictions with respect to subsidiaries, make capital investments and alter the business we conduct. As of December 31, 2016, we were in compliance with all covenants.

The Company also has a credit line of \$16.0 million with Saudi Hollandi Bank. The credit line has an interest rate equal to the Saudi Arabia Interbank Offered Rate plus a fixed rate of 0.85% and is subject to annual renewal. Borrowings under the credit line were primarily used to fund capital expenditures related to the manufacturing facility in Jeddah, Saudi Arabia. As of December 31, 2016, letters of credit under the credit line were \$0.2 million and borrowings were \$12.3 million with an interest rate of 2.84%. As of December 31, 2015, letters of credit under the credit line were \$0.2 million and borrowings were \$12.6 million with an interest rate of 1.78%. As of December 31, 2016 and 2015, there was remaining availability on the credit line of \$3.5 million and \$3.2 million, respectively.

For additional information about our debt obligations, see Note 5, *Financing Arrangements*, to the accompanying consolidated financial statements.

### Concentrations of Credit Risk

Financial instruments, including foreign exchange contracts, and trade accounts receivable, subject us to potential credit risk. Concentration of credit risk for trade accounts receivable is limited due to the large number of customers constituting our customer base and their distribution among many industries and geographic locations. We are exposed to credit risk with respect to foreign exchange contracts in the event of non-performance by the counterparties to these financial instruments. We believe that the risk of incurring material losses related to this credit risk is remote. We do not require collateral to support the financial position of our credit risks.

### Letters of Credit

Our revolving credit facility provides up to \$50.0 million for the issuance of letters of credit, \$11.1 million of which was used at December 31, 2016. These letters of credit are issued by the bank in favor of third parties and are mainly related to insurance claims.

### Contractual Cash Obligations

The following table summarizes our obligations under debt agreements, operating leases, interest obligations, pension and other post-retirement plan obligations and purchase obligations as of December 31, 2016:

(In millions)	Total	Payment Due by Period			
		2017	2018 & 2019	2020 & 2021	Thereafter
Total debt <sup>(1)</sup>	\$ 1,274.1	\$ 18.5	\$ 27.6	\$ 13.4	\$ 1,214.6
Operating leases	77.2	20.0	26.7	15.8	14.7
Interest on long-term debt obligations <sup>(2)</sup>	338.8	55.9	108.1	107.2	67.6
Pension and post-retirement obligations <sup>(3)</sup>	54.1	5.7	11.1	12.2	25.1
Purchase obligations <sup>(4)</sup>	18.7	13.3	5.3	0.1	—
Total	\$ 1,762.9	\$ 113.4	\$ 178.8	\$ 148.7	\$ 1,322.0

(1) Total debt includes both the current and long-term portions of debt and capital lease obligations.

(2) Represents estimated contractual interest payments for all outstanding debt.

(3) Pension and post-retirement obligations relate to our U.S. and international pension and other post-retirement plans. The expected payments associated with these plans represent an actuarial estimate of future assumed payments based upon retirement and payment patterns. Due to uncertainties regarding the assumptions involved in estimating future required contributions to our pension and non-pension postretirement benefit plans, including: (i) interest rate levels, (ii) the amount and timing of asset returns and (iii) what, if any, changes may occur in pension funding legislation, the estimates in the table may differ materially from actual future payments.

(4) Purchase obligations are primarily comprised of service agreements related to telecommunication, information technology, utilities and other manufacturing plant services and certain capital commitments.

The table excludes the liability for unrecognized income tax benefits, since we cannot predict with reasonable certainty the timing of cash settlements, if any, with the respective taxing authorities. At December 31, 2016, the gross liability for unrecognized income tax benefits, including interest and penalties, totaled \$11.2 million.

### Off-Balance Sheet Arrangements

We have no material off-balance sheet arrangements as defined in Item 303(a)(4)(ii) of Regulation S-K.

### Critical Accounting Policies and Estimates

Significant accounting policies are described more fully in Note 1, *Description of Business and Summary of Significant Accounting Policies*, to the accompanying consolidated financial statements. The preparation of financial statements in conformity with U.S. generally accepted accounting principles (U.S. GAAP) requires us to make estimates and assumptions about future events that affect the amounts reported in our consolidated financial statements and accompanying notes. We base our estimates on historical experience and assumptions that we believe are reasonable considering the related facts and circumstances. The application of these critical accounting policies involves the exercise of judgment and use of assumptions for future uncertainties. Accordingly, actual results could differ significantly from these estimates. We believe that the following discussion addresses our most critical accounting policies, which are those that are the most important to the portrayal of our financial condition and results of operations and require our most difficult, subjective and complex judgments.

Description	Judgments and Uncertainties	Effect if Actual Results Differ from Assumptions
<b>Environmental Liabilities</b>		
<ul style="list-style-type: none"> <li>Based upon our estimates, we have an undiscounted accrual of \$117.3 million at December 31, 2016 for probable future environmental expenditures. Any such provision is recognized using the Company's best estimate of the amount of loss incurred, or at the lower end of an estimated range, when a single best estimate is not determinable. As of December 31, 2016, we have not accrued for costs of remediation to the lower Passaic River as we are unable to estimate a liability, if any, related to this matter. In some cases, the Company recovers a portion of the costs relating to these obligations from insurers or other third parties; however, the Company records such amounts only when they are collected.</li> </ul>	<ul style="list-style-type: none"> <li>This accrual represents our best estimate of the remaining probable costs based upon information and technology currently available. Depending upon the results of future testing, the ultimate remediation alternatives undertaken, changes in regulations, new information, newly discovered conditions and other factors, it is reasonably possible that we could incur additional costs in excess of the amount accrued. However, such additional costs, if any, cannot currently be estimated. Our estimate of this liability may be revised as new regulations or technologies are developed or additional information is obtained.</li> </ul>	<ul style="list-style-type: none"> <li>If further developments or resolution of these matters are not consistent with our assumptions and judgments, we may need to recognize a significant adjustment in a future period.</li> <li>As we progress through certain benchmarks such as completion of the remedial investigation and feasibility study, issuance of a record of decision and remedial design, additional information will become available that may require an adjustment to our existing reserves.</li> </ul>
<b>Pension and Other Post-retirement Plans</b>		
<ul style="list-style-type: none"> <li>We account for our defined benefit pension plans and other post-retirement plans in accordance with FASB ASC Topic 715, <i>Compensation — Retirement Benefits</i>. We immediately recognize actuarial gains and losses in our operating results in the year in which the gains or losses occur. In 2016, we recognized an \$8.4 million gain as a result of the recognition of these actuarial gains, which favorably impacted net income, comprehensive income and the funded status of our pension plans. This gain was mainly driven by higher than expected asset returns and updated mortality assumptions.</li> </ul>	<ul style="list-style-type: none"> <li>Asset returns and interest rates significantly affect the value of future assets and liabilities of our pension and post-retirement plans and therefore the funded status of our plans. It is difficult to predict these factors due to the volatility of market conditions.</li> <li>To develop our discount rate, we consider the yields of high-quality corporate bonds with maturities that correspond to the timing of our benefit obligations, referred to as the bond matching approach.</li> <li>To develop our expected long-term return on plan assets, we consider historical and forward looking long-term asset returns and the expected investment portfolio mix of plan assets. The weighted-average expected long-term rate of return on plan assets was 6.87% for 2016, 6.87% for 2015 and 6.86% for 2014.</li> <li>Life expectancy is a significant assumption that impacts our pension and other post-retirement benefits obligation. During 2016, we adopted the MP-2016 mortality improvement scale which was issued by the Society of Actuaries in October 2016.</li> </ul>	<ul style="list-style-type: none"> <li>The weighted average discount rates used to value our pension liabilities as of December 31, 2016 and 2015 were 3.97% and 4.10%, respectively, post-retirement liabilities were 4.04% and 4.12%, respectively. As of December 31, 2016, an increase/decrease in the discount rate of 50 basis points, holding all other assumptions constant, would have increased or decreased pre-tax income and the related pension and post-retirement liability by approximately \$22.9 million. An increase/decrease in the discount rate of 50 basis points as of December 31, 2016 would result in a change of approximately \$1.6 million in the 2017 net periodic benefit cost.</li> <li>The expected long-term return on plan assets utilized as of January 1, 2016 and 2015 was 6.87%. An increase/decrease in our expected long-term return on plan assets of one percent would result in a change of approximately \$4.6 million to 2017 net periodic benefit cost.</li> </ul>

Description	Judgments and Uncertainties	Effect if Actual Results Differ from Assumptions
<p><b>Income Taxes</b></p> <ul style="list-style-type: none"> <li data-bbox="175 270 616 738">• We account for income taxes using the asset and liability method under ASC Topic 740. Under the asset and liability method, deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. In addition, deferred tax assets are also recorded with respect to net operating losses and other tax attribute carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates in effect for the year in which those temporary differences are expected to be recovered or settled. Valuation allowances are established when realization of the benefit of deferred tax assets is not deemed to be more likely than not. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.</li> <li data-bbox="175 781 616 969">• We recognize net tax benefits under the recognition and measurement criteria of ASC Topic 740, Income Taxes, which prescribes requirements and other guidance for financial statement recognition and measurement of positions taken or expected to be taken on tax returns. We record interest and penalties related to uncertain tax positions as a component of income tax expense.</li> </ul>	<ul style="list-style-type: none"> <li data-bbox="684 270 1086 613">• The ultimate recovery of certain of our deferred tax assets is dependent on the amount and timing of taxable income that we will ultimately generate in the future and other factors such as the interpretation of tax laws. We have provided valuation allowances as of December 31, 2016, aggregating to \$19.8 million primarily against certain foreign and state net operating loss carryforwards based on our current assessment of future operating results and other factors. At December 31, 2016, the gross liability for unrecognized income tax benefits, including interest and penalties, totaled \$11.2 million.</li> </ul>	<ul style="list-style-type: none"> <li data-bbox="1151 270 1523 395">• Although management believes that the estimates and judgments discussed herein are reasonable, actual results could differ, which could result in income tax expense or benefits that could be material.</li> </ul>



Description	Judgments and Uncertainties	Effect if Actual Results Differ from Assumptions
<p><b>Goodwill</b></p> <ul style="list-style-type: none"> <li>Goodwill represents the excess of the purchase price over the fair value of the net assets of acquired companies. We follow the guidance in ASC 350, <i>Intangibles — Goodwill and Other</i>, and test goodwill for impairment at least annually, absent a triggering event that would warrant an impairment assessment. On an ongoing basis, absent any impairment indicators, we perform our goodwill impairment testing as of the first day of October of each year.</li> </ul>	<ul style="list-style-type: none"> <li>We have identified our reporting units at the operating segment level, or in most cases, one level below the operating segment level. Goodwill is allocated to the reporting units based on the estimated fair value at the date of acquisition.</li> <li>We estimated fair value using the best information available to us, including market information and discounted cash flow projections using the income approach.</li> <li>The income approach requires us to make assumptions and estimates regarding projected economic and market conditions, growth rates, operating margins and cash expenditures. Sensitivity analyses were performed around these assumptions in order to assess the reasonableness of the assumptions and the resulting estimated fair values.</li> </ul>	<ul style="list-style-type: none"> <li>If actual results are not consistent with our assumptions and estimates, we may be exposed to goodwill impairment charges.</li> <li>The fair value of the reporting unit is based on a number of subjective factors including: (a) appropriate consideration of valuation approaches, (b) the consideration of our business outlook for fiscal 2017 and beyond and (c) weighted average cost of capital (discount rate), growth rates and market multiples for our estimated cash flows.</li> <li>Based on our 2016 annual impairment test performed on October 1st, we determined one reporting unit was considered to be at risk of future impairment due to the fair value's close proximity to the carrying value. Weak operating results for the Custom Engineered Structures (CES) reporting unit, included in the Designed Structures and Solutions segment, resulted in the fair value of the reporting unit exceeding the carrying value by 8.0% as of October 1, 2016. Accordingly, we concluded that the goodwill assigned to the CES business was not impaired. Although we believe that the current assumptions and estimates are reasonable, supportable and appropriate, our continued efforts to improve the performance of this business could be impacted by negative or unforeseen changes in market factors, which could impact our existing assumptions used in the impairment test. As such, there can be no assurance that these estimates and assumptions made for the purposes of the goodwill impairment test will prove to be accurate predictions of future performance. The carrying value of our CES reporting unit included goodwill of \$108.8 million as of December 31, 2016. We will continue to closely monitor these factors along with the performance of the CES reporting unit.</li> </ul>
<p><b>Indefinite-lived Intangible Assets</b></p> <ul style="list-style-type: none"> <li>At December 31, 2016, our Consolidated Balance Sheet reflected \$100.3 million of indefinite lived trade name assets, which includes, \$33.2 million associated with the trade name acquired as part of the acquisition of GLS Corporation, \$63.1 million associated with trade names acquired as part of the ColorMatrix Group Inc. acquisition and \$4.0 million associated with the trade name acquired as part of the Gordon Composites acquisition.</li> </ul>	<ul style="list-style-type: none"> <li>We estimate the fair value of trade names using a "relief from royalty payments" approach. This approach involves two steps: (1) estimating reasonable royalty rate for the trade name and (2) applying this royalty rate to a net sales stream and discounting the resulting cash flows to determine fair value. Fair value is then compared with the carrying value of the trade name.</li> </ul>	<ul style="list-style-type: none"> <li>If actual results are not consistent with our assumptions and estimates, we may be exposed to impairment charges related to our indefinite lived trade names.</li> <li>Based on our 2016 annual impairment test, no trade names were considered at risk.</li> </ul>

### Recent and Future Adoption of Accounting Standards

Information regarding recent and future adoption of accounting standards can be found in Note 1, *Description of Business and Summary of Significant Accounting Policies*, to the consolidated financial statements and is incorporated by reference herein.

## **ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

We are exposed to certain market risks as part of our ongoing business operations, including risks from changes in interest rates on debt obligations and foreign currency exchange rates that could impact our financial condition, results of operations and cash flows. We manage our exposure to these and other market risks through regular operating and financing activities, including the use of derivative financial instruments. We intend to use these derivative financial instruments as risk management tools and not for speculative investment purposes.

*Interest rate exposure* — Interest on our revolving credit facility and senior secured term loan is based upon a Prime rate or LIBOR, plus a margin. Interest on the credit line with Saudi Hollandi Bank is based upon SAIBOR plus a fixed rate of 0.85%. There would be no material impact on our interest expense or cash flows from either a 10% increase or decrease in market rates of interest on our outstanding variable rate debt as of December 31, 2016.

*Foreign currency exposure* — We enter into intercompany lending transactions that are denominated in various foreign currencies and are subject to financial exposure from foreign exchange rate movement from the date a loan is recorded to the date it is settled or revalued. To mitigate this risk, we may enter into foreign exchange forward contracts. Gains and losses on these contracts generally offset gains and losses on the assets and liabilities being hedged.

We face translation risks related to the changes in foreign currency exchange rates. Amounts invested in our foreign operations are translated into U.S. dollars at the exchange rates in effect at the balance sheet date. The resulting translation adjustments are recorded as a component of *Accumulated other comprehensive loss* in the Shareholders' equity section of the accompanying Consolidated Balance Sheets. Net sales and expenses in our foreign operations' foreign currencies are translated into varying amounts of U.S. dollars depending upon whether the U.S. dollar weakens or strengthens against other currencies. Therefore, changes in exchange rates may either positively or negatively affect our net sales and expenses from foreign operations as expressed in U.S. dollars.

## **ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA**

### **Index to Financial Statement**

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## MANAGEMENT'S REPORT

The management of PolyOne Corporation is responsible for preparing the consolidated financial statements and disclosures included in this Annual Report on Form 10-K. The consolidated financial statements and disclosures included in this Annual Report fairly present in all material respects the consolidated financial position, results of operations, shareholders' equity and cash flows of PolyOne Corporation as of and for the year ended December 31, 2016.

Management is responsible for establishing and maintaining disclosure controls and procedures designed to ensure that the information required to be disclosed by the Company is captured and reported in a timely manner. Management has evaluated the design and operation of the Company's disclosure controls and procedures at December 31, 2016 and found them to be effective.

Management is also responsible for establishing and maintaining a system of internal control over financial reporting that is 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. Internal control over financial reporting includes policies and procedures that provide reasonable assurance that: PolyOne Corporation's accounting records accurately and fairly reflect the transactions and dispositions of the assets of the Company; unauthorized or improper acquisition, use or disposal of Company assets will be prevented or timely detected; the Company's transactions are properly recorded and reported to permit the preparation of the Company's consolidated financial statements in conformity with generally accepted accounting principles; and the Company's receipts and expenditures are made only in accordance with authorizations of management and the Board of Directors of the Company.

Management has assessed the effectiveness of PolyOne's internal control over financial reporting as of December 31, 2016 and has prepared Management's Annual Report On Internal Control Over Financial Reporting contained on page 66 of this Annual Report, which concludes that as of December 31, 2016, PolyOne's internal control over financial reporting is effective and that no material weaknesses were identified.

/s/ ROBERT M. PATTERSON

Robert M. Patterson  
Chairman, President and Chief Executive Officer

/s/ BRADLEY C. RICHARDSON

Bradley C. Richardson  
Executive Vice President, Chief Financial Officer

February 16, 2017

## **REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

### **The Board of Directors and Shareholders of PolyOne Corporation**

We have audited PolyOne Corporation's internal control over financial reporting as of December 31, 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). PolyOne Corporation'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 "Management's Annual Report on 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, PolyOne Corporation maintained, in all material respects, effective internal control over financial reporting as of December 31, 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 PolyOne Corporation as of December 31, 2016 and 2015, and the related consolidated statements of income, comprehensive income, shareholders' equity and cash flows for each of the three years in the period ended December 31, 2016 and our report dated February 16, 2017 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Cleveland, Ohio  
February 16, 2017

## **REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

### **The Board of Directors and Shareholders of PolyOne Corporation**

We have audited the accompanying consolidated balance sheets of PolyOne Corporation as of December 31, 2016 and 2015, and the related consolidated statements of income, comprehensive income, shareholders' equity and cash flows for each of the three years in the period ended December 31, 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 PolyOne Corporation at December 31, 2016 and 2015, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 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), PolyOne Corporation's internal control over financial reporting as of December 31, 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 16, 2017 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Cleveland, Ohio  
February 16, 2017

Consolidated Statements of Income

(In millions, except per share data)	Year Ended December 31,		
	2016	2015	2014
Sales	\$ 3,339.8	\$ 3,377.6	\$ 3,835.5
Cost of sales	2,633.6	2,696.1	3,127.6
Gross margin	706.2	681.5	707.9
Selling and administrative expense	424.3	430.6	552.8
Operating income	281.9	250.9	155.1
Interest expense, net	(59.8)	(64.1)	(62.2)
Debt extinguishment costs	(0.4)	(16.4)	—
Other income (expense), net	0.6	(2.7)	(4.5)
Income from continuing operations, before income taxes	222.3	167.7	88.4
Income tax expense	(57.3)	(23.0)	(11.2)
Net income from continuing operations	165.0	144.7	77.2
Income from discontinued operations, net of income taxes	—	—	1.2
Net income	165.0	144.7	78.4
Net loss (income) attributable to noncontrolling interests	0.2	(0.1)	0.8
Net income attributable to PolyOne common shareholders	\$ 165.2	\$ 144.6	\$ 79.2
Earnings per share attributable to PolyOne common shareholders - basic:			
Continuing operations	\$ 1.97	\$ 1.65	\$ 0.85
Discontinued operations	—	—	0.01
Total	\$ 1.97	\$ 1.65	\$ 0.86
Earnings per share attributable to PolyOne common shareholders - diluted:			
Continuing operations	\$ 1.95	\$ 1.63	\$ 0.83
Discontinued operations	—	—	0.02
Total	\$ 1.95	\$ 1.63	\$ 0.85
Cash dividends declared per common share	\$ 0.495	\$ 0.420	\$ 0.340
Weighted-average number of common shares outstanding:			
Basic	83.9	87.8	92.3
Diluted	84.6	88.7	93.5

The accompanying notes to the consolidated financial statements are an integral part of these statements.



## Consolidated Statements of Comprehensive Income

(In millions)	Year Ended December 31,		
	2016	2015	2014
Net income	\$ 165.0	\$ 144.7	\$ 78.4
Other comprehensive loss:			
Translation adjustments	(23.0)	(29.1)	(27.5)
Unrealized gain on available-for-sale securities	0.1	0.1	—
Total other comprehensive loss	(22.9)	(29.0)	(27.5)
Total comprehensive income	142.1	115.7	50.9
Comprehensive loss (income) attributable to noncontrolling interests	0.2	(0.1)	0.8
Comprehensive income attributable to PolyOne common shareholders	<u>\$ 142.3</u>	<u>\$ 115.6</u>	<u>\$ 51.7</u>

*The accompanying notes to the consolidated financial statements are an integral part of these statements.*

## Consolidated Balance Sheets

(In millions, except par value per share)	Year Ended December 31,	
	2016	2015
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 226.7	\$ 279.8
Accounts receivable, net	363.7	347.0
Inventories, net	312.4	287.0
Other current assets	46.7	47.0
<b>Total current assets</b>	<b>949.5</b>	<b>960.8</b>
Property, net	607.7	583.5
Goodwill	677.4	597.7
Intangible assets, net	363.5	344.6
Other non-current assets	125.2	108.5
<b>Total assets</b>	<b>\$ 2,723.3</b>	<b>\$ 2,595.1</b>
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>		
Current liabilities:		
Short-term and current portion of long-term debt	\$ 18.5	\$ 18.6
Accounts payable	361.5	351.6
Accrued expenses and other liabilities	129.6	127.9
<b>Total current liabilities</b>	<b>509.6</b>	<b>498.1</b>
Long-term debt	1,239.8	1,128.0
Pension and other post-retirement benefits	63.1	77.5
Deferred income taxes	43.1	33.8
Other non-current liabilities	142.2	152.5
<b>Total non-current liabilities</b>	<b>1,488.2</b>	<b>1,391.8</b>
<b>SHAREHOLDERS' EQUITY</b>		
Preferred stock, 40.0 shares authorized, no shares issued	—	—
Common Shares, \$0.01 par, 400.0 shares authorized, 122.2 shares issued	1.2	1.2
Additional paid-in capital	1,157.1	1,155.6
Retained earnings	491.2	367.1
Common shares held in treasury, at cost, 39.6 shares in 2016 and 36.9 shares in 2015	(830.6)	(748.4)
Accumulated other comprehensive loss	(94.2)	(71.3)
<b>Total PolyOne shareholders' equity</b>	<b>724.7</b>	<b>704.2</b>
Noncontrolling interest	0.8	1.0
<b>Total equity</b>	<b>725.5</b>	<b>705.2</b>
<b>Total liabilities and equity</b>	<b>\$ 2,723.3</b>	<b>\$ 2,595.1</b>

The accompanying notes to the consolidated financial statements are an integral part of these statements.

## Consolidated Statements of Cash Flows

(In millions)	Year Ended December 31,		
	2016	2015	2014
<b>Operating activities</b>			
Net income	\$ 165.0	\$ 144.7	\$ 78.4
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	100.5	98.1	100.8
Accelerated depreciation and fixed asset charges associated with restructuring activities	5.4	17.6	33.0
Deferred income tax expense (benefit)	10.5	(27.4)	(45.2)
Debt extinguishment costs	0.4	16.4	—
Share-based compensation expense	8.4	9.1	14.2
Gain on sale of business	—	—	(1.2)
Changes in assets and liabilities, net of the effect of acquisitions:			
(Increase) decrease in accounts receivable	(17.6)	42.6	24.4
Decrease in inventories	0.8	21.4	28.4
Increase (decrease) in accounts payable	12.4	(8.3)	(15.2)
(Decrease) increase in pension and other post-retirement benefits	(43.2)	(24.6)	30.0
Decrease in accrued expenses and other assets and liabilities - net	(21.3)	(62.4)	(39.2)
Net cash provided by operating activities	221.3	227.2	208.4
<b>Investing activities</b>			
Capital expenditures	(84.2)	(91.2)	(92.8)
Business acquisitions, net of cash acquired	(164.2)	(18.3)	(47.2)
Sale of and proceeds from other assets	13.0	3.0	28.2
Net cash used by investing activities	(235.4)	(106.5)	(111.8)
<b>Financing activities</b>			
Repayment of long-term debt	(6.0)	(365.3)	(8.0)
Premium on early extinguishment of long-term debt	—	(13.4)	—
Net proceeds from long-term debt	100.0	547.3	—
Debt financing costs	(2.0)	(6.0)	—
Borrowings under credit facilities	1,031.9	891.3	168.6
Repayments under credit facilities	(1,032.7)	(936.8)	(122.8)
Purchase of common shares for treasury	(86.2)	(156.1)	(233.2)
Exercise of share awards	1.2	4.3	6.9
Cash dividends paid	(40.2)	(35.7)	(29.9)
Net cash used by financing activities	(34.0)	(70.4)	(218.4)
Effect of exchange rate changes on cash	(5.0)	(9.1)	(4.8)
(Decrease) increase in cash and cash equivalents	(53.1)	41.2	(126.6)
Cash and cash equivalents at beginning of year	279.8	238.6	365.2
<b>Cash and cash equivalents at end of year</b>	<b>\$ 226.7</b>	<b>\$ 279.8</b>	<b>\$ 238.6</b>

The accompanying notes to the consolidated financial statements are an integral part of these statements.

## Consolidated Statements of Shareholders' Equity

(In millions)	Common Shares		Shareholders' Equity							
	Common Shares	Common Shares Held in Treasury	Common Shares	Additional Paid-in Capital	Retained Earnings	Common Shares Held in Treasury	Accumulated Other Comprehensive Loss	Total PolyOne shareholders' equity	Non-controlling Interests	Total equity
Balance at January 1, 2014	122.2	(27.1)	\$ 1.2	\$ 1,149.8	\$ 211.6	\$ (371.0)	\$ (14.8)	\$ 976.8	\$ 1.7	\$ 978.5
Net income (loss)					79.2			79.2	(0.8)	78.4
Other comprehensive loss							(27.5)	(27.5)		(27.5)
Cash dividends declared					(31.1)			(31.1)		(31.1)
Repurchase of common shares		(6.3)				(233.2)		(233.2)		(233.2)
Share-based compensation and exercise of awards		0.5		5.6		6.5		12.1		12.1
Balance at December 31, 2014	122.2	(32.9)	\$ 1.2	\$ 1,155.4	\$ 259.7	\$ (597.7)	\$ (42.3)	\$ 776.3	\$ 0.9	\$ 777.2
Net income					144.6			144.6	0.1	144.7
Other comprehensive loss							(29.0)	(29.0)		(29.0)
Cash dividends declared					(37.2)			(37.2)		(37.2)
Repurchase of common shares		(4.5)				(156.1)		(156.1)		(156.1)
Share-based compensation and exercise of awards		0.5		0.2		5.4		5.6		5.6
Balance at December 31, 2015	122.2	(36.9)	\$ 1.2	\$ 1,155.6	\$ 367.1	\$ (748.4)	\$ (71.3)	\$ 704.2	\$ 1.0	\$ 705.2
Net income (loss)					165.2			165.2	(0.2)	165.0
Other comprehensive loss							(22.9)	(22.9)		(22.9)
Cash dividends declared					(41.1)			(41.1)		(41.1)
Repurchase of common shares		(3.0)				(86.2)		(86.2)		(86.2)
Share-based compensation and exercise of awards		0.3		1.5		4.0		5.5		5.5
Balance at December 31, 2016	122.2	(39.6)	\$ 1.2	\$ 1,157.1	\$ 491.2	\$ (830.6)	\$ (94.2)	\$ 724.7	\$ 0.8	\$ 725.5

The accompanying notes to the consolidated financial statements are an integral part of these statements.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

### Note 1 — DESCRIPTION OF BUSINESS AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

#### Description of Business

We are a premier provider of specialized polymer materials, services and solutions with operations in specialty engineered materials, color and additive systems, plastic sheet and packaging solutions, and polymer distribution. We are also a highly specialized developer and manufacturer of performance enhancing additives, liquid colorants, and fluoropolymer and silicone colorants. Headquartered in Avon Lake, Ohio, we have employees at manufacturing sites and distribution facilities in North America, South America, Europe, Asia and Africa. We provide value to our customers through our ability to link our knowledge of polymers and formulation technology with our manufacturing and supply chain to provide value added solutions to designers, assemblers and processors of plastics (our customers). When used in these notes to the consolidated financial statements, the terms “we,” “us,” “our,” “PolyOne” and the “Company” mean PolyOne Corporation and its consolidated subsidiaries.

Our operations are located primarily in North America, South America, Europe and Asia. Our operations are reported in five reportable segments: Color, Additives and Inks; Specialty Engineered Materials; Designed Structures and Solutions; Performance Products and Solutions; and PolyOne Distribution. See Note 14, *Segment Information*, for more information.

#### Accounting Standards Adopted

In May 2015, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update 2015-07, *Disclosures for Investments in Certain Entities that Calculate Net Asset Value per Share (or its Equivalent)* (ASU 2015-07). ASU 2015-07 amended Accounting Standards Codification (ASC) 820, *Fair Value Measurements*, and removed the requirement to categorize within the fair value hierarchy all investments for which fair value is measured using the net asset value (NAV) per share. The amendment also limits certain disclosures for investments for which the entity has elected to measure at fair value using the NAV per share. We adopted this standard as of December 31, 2016 and reflected the required retrospective application to the disclosures in Note 10, *Employee Benefit Plans*.

#### Accounting Standards Not Yet Adopted

In May 2014, the FASB issued Auditing Standards Update 2014-09, *Revenue from Contracts with Customers* (ASU 2014-09). Under this standard, a company recognizes 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 or services. The standard implements a five-step process for customer contract revenue recognition that focuses on transfer of control.

We are analyzing the impact of the standard on our contract portfolio and reviewing our current accounting policies and practices to identify potential differences that would result from applying the requirements of the new standard. Entities can transition to the standard either retrospectively or as a cumulative-effect adjustment as of the date of adoption. The implementation team is currently assessing the adoption method and impact that ASU 2014-09, along with the subsequent updates and clarifications, will have on our Consolidated Financial Statements. The Company will adopt ASU 2014-09 no later than the required date of January 1, 2018.

In July 2015, the FASB issued Accounting Standards Update 2015-11, *Inventory (Topic 300): Simplifying the Measurement of Inventory* (ASU 2015-11), which applies to inventory measured using first-in, first out (FIFO) or average cost. This update requires that an entity should measure inventory that is within scope at the lower of cost and net realizable value, which is the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation. This update is effective for annual and interim periods beginning after December 15, 2016, and should be applied prospectively with early adoption permitted at the beginning of an interim or annual reporting period. The Company will adopt ASU 2015-11 no later than the required date of January 1, 2017. We do not expect this standard to have a material impact on our Consolidated Financial Statements.

In February 2016, the FASB issued Accounting Standards Update 2016-02, *Leases (Topic 842)* (ASU 2016-02), 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 Company will adopt ASU 2016-02 no later than the required date of January 1, 2019. We are currently assessing the impact this standard will have on our Consolidated Financial Statements.

In March 2016, the FASB issued Accounting Standards Update 2016-09, *Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting* (ASU 2016-09), which simplifies the accounting for share-based payment transactions. This update requires that excess tax benefits and tax deficiencies be recognized as income tax expense or benefit in the Consolidated Statements of Income rather than additional paid-in capital. Additionally, the excess tax benefits will be classified along with other income tax cash flows as an operating activity, rather than a financing activity, on the Statement of Cash Flows. Further, the update allows an entity to make a policy election to recognize forfeitures as they occur or estimate the number of awards expected to be forfeited. ASU 2016-09 is effective for annual and interim periods beginning after December 15, 2016, and should be applied prospectively, with certain cumulative effect adjustments. The Company will adopt ASU 2016-09 no later than the required date of January 1, 2017. Upon adoption, we will assess the impact of any share price movement on the income tax expense or benefit recognized, but we do not expect this standard to have a material impact on our Consolidated Financial Statements.

In June 2016, the FASB issued Accounting Standards Update 2016-13, *Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments* (ASU 2016-13), which requires the allowance recorded for trade receivables to be measured by expected loss rather than incurred loss. Expected loss measurement will be based on historical experience, current conditions and reasonable and supportable forecasts. The Company will adopt ASU 2016-13 no later than the required date of January 1, 2020. We do not expect this standard to have a material impact on our Consolidated Financial Statements.

In October 2016, the FASB issued Accounting Standards Update 2016-16, *Income Taxes (Topic 740), Intra-Entity Transfers of Assets Other Than Inventory* (ASU 2016-16), which requires companies to recognize the income tax effects of intercompany sales or transfers of assets, other than inventory, in the income statement as income tax expense (or benefit) in the period the sale or transfer occurs. There would be no material impact on our Consolidated Financial Statements from intercompany transactions completed as of December 31, 2016. We will continue to assess the impact of ASU 2016-16 on future transactions and the Company will adopt ASU 2016-16 no later than the required date of January 1, 2018.

In January 2017, the FASB issued Auditing Standards Update 2017-04, *Intangibles - Goodwill and Other (Topic 350): Simplifying the Accounting for Goodwill Impairment*. This standard removes the second step of the goodwill impairment test, where a determination of the fair value of individual assets and liabilities of a reporting unit were needed to measure the goodwill impairment. Under this updated standard, goodwill impairment will now be the amount by which a reporting unit's carrying value exceeds its fair value, not to exceed the carrying amount of goodwill. We will adopt this update for any impairment test performed after January 1, 2017 as permitted under the standard.

### **Consolidation and Basis of Presentation**

The consolidated financial statements include the accounts of PolyOne and its subsidiaries. All majority-owned affiliates over which we have control are consolidated. Transactions with related parties, including joint ventures, are in the ordinary course of business.

### **Reclassifications**

Certain reclassifications of the prior period amounts and presentation have been made to conform to the presentation for the current period.

### **Use of Estimates**

Preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions in certain circumstances that affect amounts reported in the accompanying consolidated financial statements and notes. Actual results could differ from these estimates.

### **Cash and Cash Equivalents**

We consider all highly liquid investments purchased with a maturity of less than three months to be cash equivalents. Cash equivalents are stated at cost, which approximates fair value.

### **Allowance for Doubtful Accounts**

We evaluate the collectability of receivables based on a combination of factors. We regularly analyze significant customer accounts and, when we become aware of a specific customer's inability to meet its financial obligations to us, such as in the case of a bankruptcy filing or deterioration in the customer's operating results or financial position, we record a specific allowance for bad debt to reduce the related receivable to the amount we reasonably believe is collectible. We also record bad debt allowances for all other customers based on a variety of factors

including the length of time the receivables are past due, the financial health of the customer, economic conditions and historical experience. In estimating the allowances, we take into consideration the existence of credit insurance. If circumstances related to specific customers change, our estimates of the recoverability of receivables could be adjusted further. Accounts receivable balances are written off against the allowance for doubtful accounts after a final determination of uncollectability has been made. The allowance for doubtful accounts was \$2.6 million and \$3.0 million as of December 31, 2016 and 2015, respectively.

### **Inventories**

External purchases of raw materials and finished goods are valued at weighted average cost. Manufactured finished goods are stated at the lower of cost or market using the first-in, first-out (FIFO) method.

### **Long-lived Assets**

Property, plant and equipment is carried at cost, net of depreciation and amortization that is computed using the straight-line method over the estimated useful lives of the assets, which generally ranges from three to 15 years for machinery and equipment and up to 40 years for buildings. During 2016, 2015 and 2014, we depreciated certain assets associated with closing manufacturing locations over a shortened life (through a cease-use date). Software is amortized over periods not exceeding 10 years. Property, plant and equipment is generally depreciated on accelerated methods for income tax purposes. We expense repair and maintenance costs as incurred. We capitalize replacements and betterments that increase the estimated useful life of an asset.

We retain fully depreciated assets in property and accumulated depreciation accounts until we remove them from service. In the case of sale, retirement or disposal, the asset cost and related accumulated depreciation balance is removed from the respective account, and the resulting net amount, less any proceeds, is included as a component of income from continuing operations in the accompanying Consolidated Statements of Income.

We account for operating and capital leases under the provisions of FASB Accounting Standards Codification (ASC) Topic 840, *Leases*.

Finite-lived intangible assets, which consist primarily of customer relationships, patents and technology are amortized over their estimated useful lives. The remaining useful lives range up to 20 years.

We assess the recoverability of long-lived assets when events or changes in circumstances indicate that we may not be able to recover the assets' carrying amount. We measure the recoverability of assets to be held and used by a comparison of the carrying amount of the asset to the expected future undiscounted cash flows associated with the asset. We measure the amount of impairment of long-lived assets as the amount by which the carrying value of the asset exceeds the fair value of the asset, which is generally determined based on projected discounted future cash flows or appraised values. No such impairments were recognized during 2016, 2015 or 2014.

### **Goodwill and Indefinite Lived Intangible Assets**

Goodwill is the excess of the purchase price paid over the fair value of the net assets of the acquired business. Goodwill is tested for impairment at the reporting unit level. Our reporting units have been identified at the operating segment level, or in most cases, one level below the operating segment level. Goodwill is allocated to the reporting units based on the estimated fair value at the date of acquisition.

Our annual measurement date for testing impairment of goodwill and indefinite-lived intangibles is October 1. We completed our testing of impairment as of October 1, noting no impairment in 2016, 2015 or 2014. Additionally, as noted within our "Critical Accounting Policies and Estimates" section of Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations", our Customer Engineered Services reporting unit, which is included in our Designed Structures and Solutions segment, is at-risk of future impairment. The future occurrence of a potential indicator of impairment would require an interim assessment for some or all of the reporting units prior to the next required annual assessment on October 1, 2017. Refer to Note 16, *Fair Value*, for further discussion of our approach for assessing the fair value of goodwill.

### **Litigation Reserves**

FASB ASC Topic 450, *Contingencies*, requires that we accrue for loss contingencies associated with outstanding litigation, claims and assessments for which management has determined it is probable that a loss contingency exists and the amount of loss can be reasonably estimated. We recognize expense associated with professional fees related to litigation claims and assessments as incurred. Refer to Note 11, *Commitments and Contingencies*, for further information.



## Derivative Financial Instruments

FASB ASC Topic 815, *Derivative and Hedging*, requires that all derivative financial instruments, such as foreign exchange contracts, be recognized in the financial statements and measured at fair value, regardless of the purpose or intent in holding them.

We are exposed to foreign currency changes in the normal course of business. We have established policies and procedures that manage this exposure through the use of financial instruments. By policy, we do not enter into these instruments for trading purposes or speculation. These instruments are not designated as hedges and, as a result, are adjusted to fair value, with the resulting gains and losses recognized in the accompanying Consolidated Statements of Income immediately.

## Pension and Other Post-retirement Plans

We account for our pensions and other post-retirement benefits in accordance with FASB ASC Topic 715, *Compensation — Retirement Benefits*. We immediately recognize actuarial gains and losses in our operating results in the year in which the gains or losses occur. Refer to Note 10, *Employee Benefit Plans*, for more information.

## Accumulated Other Comprehensive Loss

Changes in accumulated other comprehensive loss in 2016, 2015 and 2014 were as follows:

(In millions)	Cumulative Translation Adjustment	Pension and other post-retirement benefits	Unrealized gain in available-for-sale securities	Total
Balance at January 1, 2014	\$ (20.2)	\$ 5.2	\$ 0.2	\$ (14.8)
Translation adjustments	(27.5)	—	—	(27.5)
Balance at December 31, 2014	(47.7)	5.2	0.2	(42.3)
Translation adjustments	(29.1)	—	—	(29.1)
Unrecognized gain on available-for-sale securities	—	—	0.1	0.1
Balance at December 31, 2015	(76.8)	5.2	0.3	(71.3)
Translation adjustments	(23.0)	—	—	(23.0)
Unrecognized gain on available-for-sale securities	—	—	0.1	0.1
Balance at December 31, 2016	<u>\$ (99.8)</u>	<u>\$ 5.2</u>	<u>\$ 0.4</u>	<u>\$ (94.2)</u>

## Fair Value of Financial Instruments

FASB ASC Topic 820, *Fair Value Measurements and Disclosures*, requires disclosures of the fair value of financial instruments. The estimated fair values of financial instruments were principally based on market prices where such prices were available and, where unavailable, fair values were estimated based on market prices of similar instruments. See Note 16, *Fair Value*, for further discussion.

## Foreign Currency Translation

Revenues and expenses are translated at average currency exchange rates during the related period. Assets and liabilities of foreign subsidiaries are translated using the exchange rate at the end of the period. The resulting translation adjustments are recorded as accumulated other comprehensive income or loss. Gains and losses resulting from foreign currency transactions, including intercompany transactions that are not considered permanent investments, are included in *Other income (expense), net* in the accompanying Consolidated Statements of Income.

## Revenue Recognition

We recognize revenue when the revenue is realized or realizable and has been earned. We recognize revenue when a firm sales agreement is in place, shipment has occurred and collectability is reasonably assured.

## Shipping and Handling Costs

Shipping and handling costs are included in cost of sales.

## Research and Development Expense

Research and development costs of \$54.5 million in 2016, \$53.0 million in 2015 and \$53.4 million in 2014, are charged to expense as incurred.

## Environmental Costs

We expense costs that are associated with managing hazardous substances and pollution in ongoing operations on a current basis. Costs associated with environmental contamination are accrued when it becomes probable that a liability has been incurred and our proportionate share of the cost can be reasonably estimated. Any such provision is recognized using the Company's best estimate of the amount of loss incurred, or at the lower end of an estimated range, when a single best estimate is not determinable. In some cases, the Company may be able to recover a portion of the costs relating to these obligations from insurers or other third parties; however, the Company records such amounts only when it is probable that they will be collected.

## Share-Based Compensation

We account for share-based compensation under the provisions of FASB ASC Topic 718, *Compensation — Stock Compensation*, which requires us to estimate the fair value of share-based awards on the date of grant. The value of the portion of the award that is ultimately expected to vest is recognized as expense over the requisite service periods in the accompanying Consolidated Statements of Income. As of December 31, 2016, we had one active share-based employee compensation plan, which is described more fully in Note 13, *Share-Based Compensation*.

## Income Taxes

Deferred income tax liabilities and assets are determined based upon the differences between the financial reporting and tax basis of assets and liabilities and are measured using the tax rate and laws currently in effect. In accordance with FASB ASC Topic 740, *Income Taxes*, we evaluate our deferred income taxes to determine whether a valuation allowance should be established against the deferred tax assets or whether the valuation allowance should be reduced based on consideration of all available evidence, both positive and negative, using a "more likely than not" standard.

## Note 2 — BUSINESS COMBINATIONS

### 2016 Significant Acquisitions

On January 29, 2016, the Company completed the acquisition of certain technologies and assets from Kraton Performance Polymers, Inc. (Kraton), to expand its global footprint and expertise in thermoplastic elastomer (TPE) innovation and design, for approximately \$72.8 million. The results of operations of Kraton are included in the Company's Consolidated Statements of Income for the period subsequent to the date of the acquisition and are reported in the Specialty Engineered Materials segment. The purchase price allocation for Kraton is final.

On July 26, 2016, the Company completed the acquisition of substantially all of the assets of Gordon Composites, Inc. (Gordon Composites), Polystrand, Inc. (Polystrand) and Gordon Holdings, Inc. (Gordon Holdings). Gordon Composites develops high strength profiles and laminates for use in vertical and crossbow archery, sports and recreation equipment, prosthetics and office furniture systems. Polystrand operates in the advanced area of continuous reinforced thermoplastic composite technology space, a next generation material science that delivers the high strength and lightweight characteristics of composites, further enhanced with the design flexibility to form more complex shapes. The purchase price was \$85.5 million and the results of operations of the acquired businesses are included in the Company's Consolidated Statements of Income for the period subsequent to the date of the acquisition and are reported in the Specialty Engineered Materials segment. The preliminary purchase price allocation is subject to change and not yet finalized.

The purchase price allocation for the acquisitions of Gordon Composites, Polystrand and Kraton resulted in goodwill of \$74.9 million, \$41.3 million in intangible assets, \$31.7 million in property, plant and equipment, \$27.8 million in inventory and \$17.4 million of capital lease obligations. Goodwill, intangible assets and property, plant and equipment recognized as a result of these acquisitions are deductible for tax purposes. Sales and operating income for Gordon Composites, Polystrand and Kraton recognized in the results of operations, subsequent to the acquisition date, were \$48.7 million and \$4.8 million, respectively, for the year ended December 31, 2016.

The fair value of the intangible assets acquired during the year ended December 31, 2016, including their estimated useful lives and valuation methodology are as follows:

(in millions)	Fair Value	Useful Life	Valuation Method
Customer relationships	\$ 17.7	8-20	Multi-period excess earnings
Patents, technology and other	19.6	7-20	Relief-from-royalty; lost income method
Indefinite-lived trade names	4.0	N/A	Relief-from-royalty
Total	<u>\$ 41.3</u>		

### Note 3 — GOODWILL AND INTANGIBLE ASSETS

The total purchase price associated with acquisitions is allocated to the fair value of assets acquired and liabilities assumed based on their fair values at the acquisition date, with excess amounts recorded as goodwill.

Goodwill as of December 31, 2016 and 2015, and changes in the carrying amount of goodwill by segment were as follows:

(In millions)	Specialty Engineered Materials	Color, Additives and Inks	Designed Structures and Solutions	Performance Products and Solutions	PolyOne Distribution	Total
Goodwill, gross at January 1, 2015	\$ 111.6	\$ 349.8	\$ 144.7	\$ 186.2	\$ 1.6	\$ 793.9
Accumulated impairment losses	(12.2)	(16.1)	—	(175.0)	—	(203.3)
Goodwill, net at January 1, 2015	99.4	333.7	144.7	11.2	1.6	590.6
Acquisitions of businesses	—	8.6	—	—	—	8.6
Currency translation	(1.4)	(0.1)	—	—	—	(1.5)
Balance at December 31, 2015	98.0	342.2	144.7	11.2	1.6	597.7
Acquisitions of businesses	74.9	4.5	—	—	—	79.4
Currency translation	0.6	(0.3)	—	—	—	0.3
Balance at December 31, 2016	<u>\$ 173.5</u>	<u>\$ 346.4</u>	<u>\$ 144.7</u>	<u>\$ 11.2</u>	<u>\$ 1.6</u>	<u>\$ 677.4</u>

At December 31, 2016, PolyOne had \$100.3 million of indefinite-lived intangible assets that are not subject to amortization, consisting of a trade name of \$33.2 million acquired as part of the acquisition of GLS Corporation (GLS), trade names of \$63.1 million acquired as part of the acquisition of ColorMatrix Group, Inc. (ColorMatrix) and a trade name of \$4.0 million acquired as part of the acquisition of Gordon Composites.

Indefinite and finite-lived intangible assets consisted of the following:

(In millions)	As of December 31, 2016			
	Acquisition Cost	Accumulated Amortization	Currency Translation	Net
Customer relationships	\$ 217.1	\$ (52.2)	\$ (0.3)	\$ 164.6
Patents, technology and other	156.6	(57.6)	(0.4)	98.6
Indefinite-lived trade names	100.3	—	—	100.3
Total	<u>\$ 474.0</u>	<u>\$ (109.8)</u>	<u>\$ (0.7)</u>	<u>\$ 363.5</u>

(In millions)	As of December 31, 2015			
	Acquisition Cost	Accumulated Amortization	Currency Translation	Net
Customer relationships	\$ 199.4	\$ (42.1)	\$ —	\$ 157.3
Patents, technology and other	137.0	(45.7)	(0.3)	91.0
Indefinite-lived trade names	96.3	—	—	96.3
Total	<u>\$ 432.7</u>	<u>\$ (87.8)</u>	<u>\$ (0.3)</u>	<u>\$ 344.6</u>

Amortization of finite-lived intangible assets for the years ended December 31, 2016, 2015 and 2014 was \$22.0 million, \$19.9 million and \$19.2 million, respectively.

We expect finite-lived intangibles amortization expense for the next five years as follows:

	2017	2018	2019	2020	2021
Expected amortization expense	\$22.9	\$22.9	\$22.9	\$19.5	\$18.5

#### Note 4 — EMPLOYEE SEPARATION AND RESTRUCTURING COSTS

Employee separation and restructuring charges recognized in 2016, 2015 and 2014 were as follows:

(In millions)	2016	2015	2014
Cost of goods sold	\$ 7.0	\$ 27.0	\$ 54.0
Selling and administrative expenses	12.0	14.9	40.1
Total employee separation and restructuring charges	<u>\$ 19.0</u>	<u>\$ 41.9</u>	<u>\$ 94.1</u>

These charges are primarily associated with the current Designed Structures and Solutions (DSS) segment and the former Spartech Corporation (Spartech) businesses, which are further detailed below.

In the second half of 2015, PolyOne determined it would close two manufacturing facilities within the DSS segment and take other corporate actions to reduce administrative costs. These actions were taken as a result of Designed Structures and Solutions' declining results and near term outlook. During the years ended December 31, 2016 and 2015, we recognized charges of \$10.0 million and \$17.1 million, respectively. Total costs for these actions to-date has been \$27.1 million, which includes \$8.0 million of severance costs, \$13.5 million of asset-related charges, including accelerated depreciation of \$9.3 million, and \$5.6 million of other ongoing costs associated with exiting these plants and transferring equipment. Of the total charges, approximately \$13.6 million were cash costs. These actions are substantially complete as of December 31, 2016.

In addition to the actions noted above, we recognized \$9.0 million of charges during 2016, primarily related to restructuring actions taken at other North American locations.

In June 2014, PolyOne determined it would close its Diadema and Joinville, Brazil facilities that were acquired in 2011 with the acquisition of Uniplen Industria de Polimeros Ltda. These actions were taken to streamline operations and improve our financial performance in Brazil. We recognized \$1.3 million and \$17.0 million related to these actions in 2015 and 2014, respectively. Total costs of \$18.3 million in connection with these actions include \$11.2 million of asset-related charges, including accelerated depreciation, \$2.7 million of severance and \$4.4 million of other associated costs. Of the total charges, approximately \$7.0 million were cash costs.

During 2014, in addition to the actions noted above, we recognized \$17.4 million of employee separation and restructuring costs primarily in Europe related to the closure of our Bendorf, Germany manufacturing plant along with other reductions in force across Europe.

In 2013, PolyOne determined it would close seven former Spartech manufacturing facilities and one administrative office and relocate operations to other PolyOne facilities. The closure of these manufacturing facilities was part of the Company's efforts to improve service, on time delivery and quality as we align assets with our customers' needs. In addition to these actions, PolyOne incurred severance costs related to former Spartech executives and other employees, as well as fixed asset-related charges and other ongoing costs associated with restructuring actions that were underway prior to PolyOne's acquisition of Spartech.

From the date of the Spartech acquisition to December 31, 2015, the Company incurred \$123.4 million of charges in connection with the 2013 Spartech actions. Costs include \$47.2 million of asset-related charges, including accelerated depreciation and asset write-offs, and total cash charges of \$76.2 million, including \$25.9 million for severance and \$50.3 million of other associated costs. Of the total cash charges, approximately \$64.0 million relates to manufacturing realignment actions initiated by PolyOne. We recognized \$19.6 million and \$59.7 million related to these actions and incurred \$15.9 million and \$44.8 million of cash payments during the years ended December 31, 2015 and 2014, respectively. There were no charges related to the Spartech actions during the year ended December 31, 2016 as these actions were complete as of December 31, 2015.

## Note 5 — FINANCING ARRANGEMENTS

Total debt consisted of the following:

As of December 31, 2016 (In millions)	Principal Amount	Unamortized discount and debt issuance cost	Net debt
Senior secured term loan due 2022	\$ 644.0	\$ 8.7	\$ 635.3
5.250% senior notes due 2023	600.0	7.1	592.9
Other debt <sup>(1)</sup>	30.1	—	30.1
Total long-term debt	\$ 1,274.1	\$ 15.8	\$ 1,258.3
Less short-term and current portion of long-term debt	18.5	—	18.5
Total long-term debt, net of current portion	\$ 1,255.6	\$ 15.8	\$ 1,239.8

As of December 31, 2015 (In millions)	Principal Amount	Unamortized discount and debt issuance cost	Net debt
Senior secured term loan due 2022	\$ 550.0	\$ 8.6	\$ 541.4
5.250% senior notes due 2023	600.0	8.3	591.7
Other debt <sup>(1)</sup>	13.5	—	13.5
Total long-term debt	\$ 1,163.5	\$ 16.9	\$ 1,146.6
Less short-term and current portion of long-term debt	18.6	—	18.6
Total long-term debt, net of current portion	\$ 1,144.9	\$ 16.9	\$ 1,128.0

(1) Other debt includes capital lease obligations of \$17.8 million and \$0.4 million as of December 31, 2016 and 2015, respectively.

On November 12, 2015, PolyOne entered into a senior secured term loan having an aggregate principal amount of \$550.0 million. On June 15, 2016, the Company entered into an amendment to its senior secured term loan. Under the terms of the amended senior secured term loan, the margin was reduced by 25 basis points to 275 basis points. At the Company's discretion, interest is based upon (i) a margin rate of 275 basis points plus the 1-, 2-, 3-, or 6-month LIBOR, subject to a floor of 75 basis points or (ii) a margin rate of 175 basis points plus a Prime rate, subject to a floor of 175 basis points. In connection with the amendment, the Company recognized \$0.4 million of *Debt extinguishment costs* in our Consolidated Statements of Income. On August 3, 2016, the Company increased the senior secured term loan due 2022 by \$100.0 million in connection with the acquisition of substantially all of the assets of Gordon Composites, Polystrand and Gordon Holdings. Repayments in the amount of one percent of the aggregate principal amount as of August 3, 2016 are payable annually, while the remaining balance matures on November 12, 2022. The total aggregate principal repayments as of December 31, 2016 was \$6.0 million. The weighted average annual interest rate for the senior secured term loan for the years ended December 31, 2016 and 2015 was 3.61% and 3.75%, respectively.

PolyOne has outstanding \$600.0 million aggregate principal amount of senior notes, which mature on March 15, 2023. The senior notes bear an interest rate of 5.25% per year, payable semi-annually, in arrears, on March 15 and September 15 of each year.

The Company maintains a senior secured revolving credit facility, which matures on March 1, 2018, which provides a maximum borrowing facility size of \$400.0 million, subject to a borrowing base with advances against certain U.S. and Canadian accounts receivable, inventory and other assets as specified in the agreement. We have the option to increase the availability under the facility to \$450.0 million, subject to meeting certain requirements and obtaining commitments for such increase. The revolving credit facility has a U.S. and a Canadian line of credit. Currently there are no borrowings on the U.S. or Canadian portion of the facility. Advances under the U.S. portion of our revolving credit facility bear interest, at the Company's option, at a Base Rate or a LIBOR Rate plus an applicable margin. The Base Rate is a fluctuating rate equal to the greater of (i) the Federal Funds Rate plus one-half percent, (ii) the prevailing LIBOR Rate plus one percent, and (iii) the prevailing Prime Rate. The applicable margins vary based on the Company's daily average excess availability during the previous quarter. The weighted average annual interest rate under this facility for the year ended December 31, 2016 and 2015 were 3.15% and 2.46%, respectively. As of December 31, 2016 and 2015, we had no borrowings under our revolving credit facility, which had availability of \$382.7 million and \$338.7 million, respectively.

The agreements governing our revolving credit facility and our senior secured term loan, and the indentures and credit agreements governing other debt, contain a number of customary financial and restrictive covenants that, among other things, limit our ability to: consummate asset sales, incur additional debt or liens, consolidate or merge with any entity or transfer or sell all or substantially all of our assets, pay dividends or make certain other restricted payments, make

investments, enter into transactions with affiliates, create dividend or other payment restrictions with respect to subsidiaries, make capital investments and alter the business we conduct. As of December 31, 2016, we were in compliance with all covenants.

The Company also has a credit line of \$16.0 million with Saudi Hollandi Bank. The credit line has an interest rate equal to the Saudi Arabia Interbank Offered Rate plus a fixed rate of 0.85% and is subject to annual renewal. Borrowings under the credit line were primarily used to fund capital expenditures related to the manufacturing facility in Jeddah, Saudi Arabia. As of December 31, 2016, letters of credit under the credit line were \$0.2 million and borrowings were \$12.3 million with an interest rate of 2.84%. As of December 31, 2015, letters of credit under the credit line were \$0.2 million and borrowings were \$12.6 million with an interest rate of 1.78%. As of December 31, 2016 and 2015, there was remaining availability on the credit line of \$3.5 million and \$3.2 million, respectively.

Aggregate maturities of the principal amount of debt for the next five years and thereafter are as follows:

<b>(In millions)</b>	
2017	\$ 18.5
2018	20.9
2019	6.7
2020	6.7
2021	6.7
Thereafter	1,214.6
Aggregate maturities	<u>\$ 1,274.1</u>

Included in *Interest expense, net* for the years ended December 31, 2016, 2015 and 2014 was interest income of \$0.8 million, \$1.0 million and \$1.1 million, respectively. Total interest paid on debt was \$56.3 million in 2016, \$65.9 million in 2015 and \$59.8 million in 2014.

#### **Note 6 — LEASING ARRANGEMENTS**

We lease certain manufacturing facilities, warehouse space, machinery and equipment, automobiles, railcars, computers and software under operating leases. Rent expense from continuing operations was \$27.0 million in 2016, \$27.1 million in 2015 and \$30.4 million in 2014.

Future minimum lease payments under non-cancelable operating leases with initial lease terms longer than one year as of December 31, 2016 are as follows:

<b>(In millions)</b>	
2017	\$ 20.0
2018	14.8
2019	11.9
2020	9.4
2021	6.4
Thereafter	14.7
Total	<u>\$ 77.2</u>

#### **Note 7 — INVENTORIES, NET**

Components of *Inventories, net* are as follows:

<b>(In millions)</b>	<b>December 31, 2016</b>	<b>December 31, 2015</b>
Finished products	\$ 197.4	\$ 172.7
Work in process	5.8	5.0
Raw materials and supplies	109.2	109.3
Inventories, net	<u>\$ 312.4</u>	<u>\$ 287.0</u>

## Note 8 — PROPERTY, NET

Components of *Property, net* are as follows:

(In millions)	December 31, 2016	December 31, 2015
Land and land improvements <sup>(1)</sup>	\$ 49.0	\$ 46.9
Buildings <sup>(2)</sup>	335.5	318.3
Machinery and equipment	1,159.9	1,104.7
Property, gross	1,544.4	1,469.9
Less accumulated depreciation and amortization	(936.7)	(886.4)
Property, net	\$ 607.7	\$ 583.5

(1) Land and land improvements include properties under capital leases of \$1.8 million as of December 31, 2016. As of December 31, 2015, the value of the land and land improvements associated with properties under capital leases was less than \$0.1 million.

(2) Buildings include properties under capital leases of \$16.9 million and \$0.5 million as of December 31, 2016 and 2015, respectively.

Depreciation expense from continuing operations was \$82.0 million in 2016, \$84.4 million in 2015 and \$104.7 million in 2014. Included in depreciation expense from continuing operations was accelerated depreciation of \$3.5 million, \$6.2 million and \$23.1 million during 2016, 2015 and 2014, respectively, related to restructuring actions.

## Note 9 — OTHER BALANCE SHEET LIABILITIES

Other liabilities at December 31, 2016 and 2015 consist of the following:

(In millions)	Accrued expenses and other liabilities		Other non-current liabilities	
	December 31, 2016	December 31, 2015	December 31, 2016	December 31, 2015
Employment costs	\$ 76.4	\$ 76.8	\$ 21.7	\$ 21.7
Environmental liabilities	8.8	10.2	108.5	109.7
Accrued taxes	5.5	4.2	—	—
Pension and other post-employment benefits	5.6	5.7	—	—
Accrued interest	12.1	12.1	—	—
Dividends payable	11.3	10.3	—	—
Unrecognized tax benefits	0.2	1.5	9.3	14.2
Other	9.7	7.1	2.7	6.9
Total	\$ 129.6	\$ 127.9	\$ 142.2	\$ 152.5

## Note 10 — EMPLOYEE BENEFIT PLANS

We recognize actuarial gains and losses in our operating results in the year in which the gains or losses occur. These gains and losses are generally only measured annually as of December 31 and, accordingly, are recorded during the fourth quarter of each year. We recognized a benefit of \$8.4 million in the fourth quarter of 2016 related to the actuarial gain during the year. We recognized a charge of \$11.6 million and \$56.5 million in the fourth quarter of 2015 and 2014, respectively, related to the actuarial losses during the year.

All U.S. qualified defined benefit pension plans are frozen, no longer accrue benefits and are closed to new participants. We have foreign pension plans that accrue benefits. The plans generally provide benefit payments using a formula that is based upon employee compensation and length of service.

The following tables present the change in benefit obligation, change in plan assets and components of funded status for defined benefit pension and post-retirement health care benefit plans.

(In millions)	Pension Benefits		Health Care Benefits	
	2016	2015	2016	2015
Change in benefit obligation:				
Projected benefit obligation — beginning of year	\$ 527.4	\$ 576.8	\$ 11.8	\$ 16.6
Service cost	1.0	1.7	—	—
Interest cost	20.7	21.3	0.5	0.6
Actuarial gain	(2.0)	(18.3)	(0.6)	(3.6)
Benefits paid	(43.2)	(51.9)	(1.0)	(1.2)
Other	(0.9)	(2.2)	0.1	(0.6)
Projected benefit obligation — end of year	\$ 503.0	\$ 527.4	\$ 10.8	\$ 11.8
Projected salary increases	(1.7)	(1.7)	—	—
Accumulated benefit obligation	\$ 501.3	\$ 525.7	\$ 10.8	\$ 11.8
Change in plan assets:				
Plan assets — beginning of year	\$ 456.0	\$ 484.0	\$ —	\$ —
Actual return on plan assets	37.1	(1.2)	—	—
Company contributions	24.7	25.8	1.0	1.2
Benefits paid	(43.2)	(51.9)	(1.0)	(1.2)
Other	(0.3)	(0.7)	—	—
Plan assets — end of year	\$ 474.3	\$ 456.0	\$ —	\$ —
Unfunded status at end of year	\$ (28.7)	\$ (71.4)	\$ (10.8)	\$ (11.8)

Amounts included in the accompanying Consolidated Balance Sheets as of December 31 are as follows:

(In millions)	Pension Benefits		Health Care Benefits	
	2016	2015	2016	2015
Non-current assets	\$ 29.2	\$ —	\$ —	\$ —
Accrued expenses and other liabilities	\$ 4.4	\$ 4.4	\$ 1.2	\$ 1.3
Other non-current liabilities	\$ 53.5	\$ 67.0	\$ 9.6	\$ 10.5

As of December 31, 2016 and 2015, we had plans with total projected and accumulated benefit obligations in excess of the related plan assets as follows:

(In millions)	Pension Benefits		Health Care Benefits	
	2016	2015	2016	2015
Projected benefit obligation	\$ 62.4	\$ 527.4	\$ 10.8	\$ 11.8
Accumulated benefit obligation	\$ 60.7	\$ 525.7	\$ 10.8	\$ 11.8
Fair value of plan assets	\$ 4.5	\$ 456.0	\$ —	\$ —

Weighted-average assumptions used to determine benefit obligations at December 31:

	Pension Benefits		Health Care Benefits	
	2016	2015	2016	2015
Discount rate	3.97%	4.10%	4.04%	4.12%
Assumed health care cost trend rates at December 31:				
Health care cost trend rate assumed for next year	N/A	N/A	6.52%	6.69%
Rate to which the cost trend rate is assumed to decline (the ultimate trend rate)	N/A	N/A	4.50%	4.50%
Year that the rate reaches the ultimate trend rate	N/A	N/A	2027	2027



The following table summarizes the components of net periodic benefit cost or gain that was recognized during each of the years in the three-year period ended December 31, 2016.

(In millions)	Pension Benefits			Health Care Benefits		
	2016	2015	2014	2016	2015	2014
Components of net periodic benefit costs (gains):						
Service cost	\$ 1.0	\$ 1.7	\$ 1.6	\$ —	\$ —	\$ —
Interest cost	20.7	21.3	24.9	0.5	0.6	0.7
Expected return on plan assets	(31.4)	(32.7)	(32.2)	—	—	—
Mark-to-market actuarial net (gains) losses	(7.8)	15.2	55.2	(0.6)	(3.6)	1.3
Net periodic (benefit) cost	<u>\$ (17.5)</u>	<u>\$ 5.5</u>	<u>\$ 49.5</u>	<u>\$ (0.1)</u>	<u>\$ (3.0)</u>	<u>\$ 2.0</u>

In 2016, we recognized an \$8.4 million mark-to-market gain that was primarily a result of actual asset returns that were \$5.7 million higher than our assumed returns and updated mortality assumptions. Partially offsetting these gains was the decrease in our year end discount rates, from 4.10% to 3.97%.

In 2015, we recognized an \$11.6 million mark-to-market charge that was primarily a result of actual asset returns that were \$33.9 million lower than our assumed returns. Partially offsetting the lower asset returns was the increase in our year end discount rates, from 3.88% to 4.10%, and updated mortality assumptions.

Weighted-average assumptions used to determine net periodic benefit cost for the years ended December 31:

	Pension Benefits			Health Care Benefits		
	2016	2015	2014	2016	2015	2014
Discount rate*	4.10%	3.88%	4.83%	4.12%	3.75%	4.38%
Expected long-term return on plan assets*	6.87%	6.87%	6.86%	—%	—%	—%
Assumed health care cost trend rates at December 31:						
Health care cost trend rate assumed for next year	N/A	N/A	N/A	6.69%	6.88%	7.02%
Rate to which the cost trend rate is assumed to decline (the ultimate trend rate)	N/A	N/A	N/A	4.50%	4.50%	4.50%
Year that the rate reaches the ultimate trend rate	N/A	N/A	N/A	2027	2027	2027

\* The mark-to-market component of net periodic costs is determined based on discount rates as of year-end and actual asset returns during the year.

The expected long-term rate of return on pension assets was determined after considering the historical and forward looking long-term asset returns by asset category and the expected investment portfolio mix.

Our pension investment strategy is to diversify the portfolio among asset categories to enhance the portfolio's risk-adjusted return as well as insulate it from exposure to changes in interest rates. Our asset mix considers the duration of plan liabilities, historical and expected returns of the investments, and the funded status of the plan. The pension asset allocation is reviewed and actively managed based on the funded status of the plan. As the funded status of the plan increases, the asset allocation is adjusted to increase the mix of fixed income investments and match the duration of those investments with the duration of the plan liabilities. Based on the current funded status of the plan, our pension asset investment allocation guidelines are to invest 70% to 80% in fixed income securities and 20% to 30% in equity securities. The plan keeps a minimal amount of cash available to fund benefit payments. These alternative investments may include funds of multiple asset investment strategies and funds of hedge funds.

The fair values of pension plan assets at December 31, 2016 and 2015, by asset category, are as follows:

<b>Fair Value of Plan Assets at December 31, 2016</b>				
(In millions)	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total Investments (at Fair Value)
<b>Asset category</b>				
Cash	\$ 7.0	\$ —	\$ —	\$ 7.0
Other	—	—	4.5	4.5
Total	<u>\$ 7.0</u>	<u>\$ —</u>	<u>\$ 4.5</u>	11.5
Investments measured at NAV:				
Common collective funds:				
United States equity				45.5
International equity				37.1
Global equity				27.6
Fixed income				352.6
Total common collective funds				<u>462.8</u>
Total investments at fair value				<u>\$ 474.3</u>

#### 2016 Pension Plan Assets

Other assets are primarily insurance contracts for international plans. The U.S. equity common collective funds are predominately invested in equity securities actively traded in public markets. The international and global equity common collective funds have broadly diversified investments across economic sectors and focus on low volatility, long-term investments. The fixed income common collective funds consist primarily of publicly traded United States fixed interest obligations (principally investment grade bonds and government securities).

<b>Fair Value of Plan Assets at December 31, 2015</b>				
(In millions)	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total Investments (at Fair Value)
<b>Asset category</b>				
Cash	\$ 3.6	\$ —	\$ —	\$ 3.6
Equities	15.8	—	—	15.8
Registered investment companies:				
Non-U.S. equity	38.8	—	—	38.8
United States treasuries	87.3	—	—	87.3
Fixed income securities	137.9	34.9	—	172.8
Other	—	—	4.8	4.8
Total	<u>\$ 283.4</u>	<u>\$ 34.9</u>	<u>\$ 4.8</u>	323.1
Investments measured at NAV:				
Common collective funds:				
Short-term investments				3.4
United States equity				53.1
Fixed income				76.4
Total common collective funds				<u>132.9</u>
Total investments at fair value				<u>\$ 456.0</u>

## 2015 Pension Plan Assets

Equities represent U.S. publicly-traded equity securities of companies, varying in size, with a focus on growth and value. The registered investment company non-US equity funds invest in underlying securities that are actively traded in public, non-US markets. The United States treasuries and fixed income securities consist of publicly traded United States and non-United States fixed interest obligations (principally corporate and government bonds and debentures). Other assets are primarily insurance contracts for international plans. Short-term investments in common collective funds represent cash and other short-term investments. The U.S. equity and fixed income common collective funds are invested in equity and investment grade fixed income securities, respectively, and these securities are actively traded in public markets.

Level 1 assets are valued based on quoted market prices. Level 2 investments are valued based on quoted market prices and/or other market data for the same or comparable instruments and transactions of the underlying fixed income investments. The insurance contracts included in the other asset category are valued at the transacted price. Common collective funds are valued at the net asset value of units held by the fund at year end. The unit value is determined by the total value of fund assets divided by the total number of units of the fund owned.

The estimated future benefit payments for our pension and health care plans are as follows:

(In millions)	Pension Benefits	Health Care Benefits
2017	\$ 39.2	\$ 1.2
2018	38.9	1.1
2019	37.9	1.1
2020	37.8	1.0
2021	38.0	1.0
2022 through 2026	172.4	3.9

We currently estimate that 2017 employer contributions will be \$4.4 million to all qualified and non-qualified pension plans and \$1.2 million to all healthcare benefit plans.

PolyOne sponsors various voluntary retirement savings plans (RSP). Under the provisions of the plans, eligible employees receive defined Company contributions and are eligible for Company matching contributions based on their eligible earnings contributed to the plan. In addition, we may make discretionary contributions to the plans for eligible employees based on a specific percentage of each employee's compensation.

Following are our contributions to the RSP:

(In millions)	2016	2015	2014
Retirement savings match	\$ 10.5	\$ 9.9	\$ 9.7
Retirement benefit contribution	3.9	4.1	4.0
Total contributions	<u>\$ 14.4</u>	<u>\$ 14.0</u>	<u>\$ 13.7</u>

## Note 11 — COMMITMENTS AND CONTINGENCIES

**Environmental** — We have been notified by federal and state environmental agencies and by private parties that we may be a potentially responsible party (PRP) in connection with the environmental investigation and remediation of certain sites. While government agencies frequently assert that PRPs are jointly and severally liable at these sites, in our experience, the interim and final allocations of liability costs are generally made based on the relative contribution of waste. We may also initiate corrective and preventive environmental projects of our own to ensure safe and lawful activities at our operations. We believe that compliance with current governmental regulations at all levels will not have a material adverse effect on our financial position, results of operations or cash flows.

In September 2007, we were informed of rulings by the United States District Court for the Western District of Kentucky on several pending motions in the case of Westlake Vinyls, Inc. v. Goodrich Corporation, et al., which had been pending since 2003. The Court held that PolyOne must pay the remediation costs at the former Goodrich Corporation Calvert City facility (now largely owned and operated by Westlake Vinyls), together with certain defense costs of Goodrich Corporation. The rulings also provided that PolyOne can seek indemnification for contamination attributable to Westlake Vinyls.

The environmental obligation at the site arose as a result of an agreement between The B.F. Goodrich Company (n/k/a Goodrich Corporation) and our predecessor, The Geon Company, at the time of the initial public offering in 1993, by which The Geon Company became a public company, to indemnify Goodrich Corporation for environmental costs at the site. At the time, neither PolyOne nor The Geon Company ever owned or operated the

facility. Following the Court rulings, the parties to the litigation entered into settlement negotiations and agreed to settle all claims regarding past environmental costs incurred at the site. The settlement agreement provides a mechanism to pursue allocation of future remediation costs at the Calvert City site to Westlake Vinyls. While we do not currently assume any allocation of costs in our current accrual, we will adjust our accrual, in the future, consistent with any such future allocation of costs.

A remedial investigation and feasibility study (RIFS) is underway at Calvert City. During the third quarter of 2013, we submitted a remedial investigation report to the United States Environmental Protection Agency (USEPA). The USEPA required certain changes to the remedial investigation report and provided a final report in the third quarter of 2015. Additionally, in the third quarter of 2015, the USEPA assumed responsibility for the completion of the feasibility study. In 2016, the USEPA conducted additional site investigations from which results are still being reviewed. We continue to pursue available insurance coverage related to this matter and recognize gains as we receive reimbursement. No receivable has been recognized for future recoveries.

On March 13, 2013, PolyOne acquired Spartech. One of Spartech's subsidiaries, Franklin-Burlington Plastics, Inc. (Franklin-Burlington), operated a plastic resin compounding facility in Kearny, New Jersey, located adjacent to the Passaic River. The USEPA has requested that companies located in the area of the lower Passaic River, including Franklin-Burlington, cooperate in an investigation of contamination of approximately 17 miles of the lower Passaic River (the lower Passaic River Study Area). In response, Franklin-Burlington and approximately 70 other companies (collectively, the Cooperating Parties) agreed, pursuant to an Administrative Order on Consent (AOC) with the USEPA, to assume responsibility for development of a RIFS of the lower Passaic River Study Area. The RIFS costs are exclusive of any costs that may ultimately be required to remediate the lower Passaic River Study Area or costs associated with natural resource damages that may be assessed. By agreeing to bear a portion of the cost of the RIFS, Franklin-Burlington did not admit to any liability or agree to bear any such remediation or natural resource damage costs.

In February 2015, the Cooperating Parties submitted to the USEPA a remedial investigation report for the lower Passaic River Study Area. In March 2015, Franklin-Burlington, along with nine other PRPs, submitted a de minimis settlement petition to the USEPA, asserting the ten entities contributed little or no impact to the lower Passaic River and seeking a meeting to commence settlement discussions. In April 2015, the Cooperating Parties submitted a feasibility study to the USEPA. The feasibility study does not contemplate who is responsible for remediation nor does it determine how such costs will be allocated to PRPs. The Cooperating Parties are currently revising their RIFS, which has not yet been approved by the USEPA, as part of continuing technical discussions with the USEPA.

On March 4, 2016, the USEPA issued a Record of Decision selecting a remedy for an eight-mile portion of the lower Passaic River Study Area at an estimated and discounted cost of \$1.4 billion. On March 31, 2016, the USEPA sent a Notice of Potential Liability (the Notice) to over 100 companies, including Franklin-Burlington, and several municipalities for this eight-mile portion, in which the USEPA stated it intended to negotiate an AOC for Remedial Design with Occidental Chemical Corporation (OCC) and, upon signature, planned to negotiate a consent decree with other major PRPs to perform remedial actions. The Notice did not identify the "other major PRPs." Further, the Notice communicated that the USEPA will provide to certain parties separate notice of the opportunity to discuss a cash-out settlement at a later date. On September 30, 2016, the USEPA reached an agreement with OCC, which orders OCC to perform the remedial design for the lower eight mile portion of the Passaic River.

Based on the currently available information, we have found no evidence that Franklin-Burlington contributed any of the primary contaminants of concern to the lower Passaic River. Any allocation to Franklin-Burlington, including a final resolution of our de minimis petition or other opportunity for cash-out settlement, or further appropriate legal actions has not been determined. As a result of these uncertainties, we are unable to estimate a liability, if any, related to this matter. As of December 31, 2016, we have not accrued for costs of remediation related to the lower Passaic River.

Our Consolidated Balance Sheet includes accruals totaling \$117.3 million and \$119.9 million as of December 31, 2016 and 2015, respectively, based on our estimates of probable future environmental expenditures relating to previously contaminated sites. These undiscounted amounts are included in *Accrued expenses and other liabilities* and *Other non-current liabilities* on the accompanying Consolidated Balance Sheets. The accruals represent our best estimate of probable future costs that we can reasonably estimate, based upon currently available information and technology and our view of the most likely remedy. Depending upon the results of future testing, completion and results of remedial investigation and feasibility studies, the ultimate remediation alternatives undertaken, changes in regulations, technology development, new information, newly discovered conditions and other factors, it is reasonably possible that we could incur additional costs in excess of the amount accrued at December 31, 2016. However, such additional costs, if any, cannot be currently estimated.

The following table details the changes in the environmental accrued liabilities:

(In millions)	2016	2015	2014
Balance at beginning of the year	\$ 119.9	\$ 121.1	\$ 125.9
Environmental expenses	8.3	9.3	10.3
Net cash payments	(11.0)	(9.8)	(14.7)
Currency translation and other	0.1	(0.7)	(0.4)
Balance at end of year	<u>\$ 117.3</u>	<u>\$ 119.9</u>	<u>\$ 121.1</u>

Included in *Cost of sales* in the accompanying Consolidated Statements of Income are insurance recoveries received for previously incurred environmental costs of \$6.1 million, \$3.5 million and \$3.7 million in 2016, 2015 and 2014, respectively. Such insurance recoveries are recognized as a gain when received.

**Other Litigation** — We are involved in various pending or threatened claims, lawsuits and administrative proceedings, all arising from the ordinary course of business concerning commercial, product liability, employment and environmental matters that seek remedies or damages. We believe that the probability is remote that losses in excess of the amounts we have accrued would be materially adverse to our financial position, results of operations or cash flows.

## Note 12 — INCOME TAXES

Income from continuing operations, before income taxes is summarized below based on the geographic location of the operation to which such earnings are attributable.

Income from continuing operations, before income taxes consists of the following:

(In millions)	2016	2015	2014
Domestic	\$ 122.7	\$ 93.8	\$ 53.5
Foreign	99.6	73.9	34.9
Income from continuing operations, before income taxes	<u>\$ 222.3</u>	<u>\$ 167.7</u>	<u>\$ 88.4</u>

A summary of income tax expense (benefit) from continuing operations is as follows:

(In millions)	2016	2015	2014
Current income tax expense:			
Domestic	\$ 24.3	\$ 23.8	\$ 39.2
Foreign	22.5	26.6	17.2
Total current income tax expense:	\$ 46.8	\$ 50.4	\$ 56.4
Deferred income tax expense (benefit):			
Domestic	\$ 6.0	\$ (28.6)	\$ (41.3)
Foreign	4.5	1.2	(3.9)
Total deferred income tax expense (benefit)	\$ 10.5	\$ (27.4)	\$ (45.2)
Total income tax expense	<u>\$ 57.3</u>	<u>\$ 23.0</u>	<u>\$ 11.2</u>

A reconciliation of the U.S. federal statutory tax rate to the consolidated effective income tax rate along with a description of significant or unusual reconciling items is included below.

	2016	2015	2014
Income tax expense at 35%	35.0%	35.0%	35.0%
Foreign tax rate differential	(5.2)	(5.0)	(5.7)
State and local tax, net	2.1	2.7	2.8
Tax benefits on certain foreign investments	(2.0)	(0.7)	(17.0)
Domestic production activities deduction	(1.6)	(2.0)	(2.5)
Amended prior period tax returns	(1.4)	(18.3)	(2.3)
Uncertain tax positions	(1.3)	0.6	1.0
Permanent tax differences	0.3	1.8	(2.1)
U.S. credit for research activities	(0.5)	(0.7)	(1.2)
Changes in valuation allowances	0.4	0.3	7.8
Settlements	—	—	(3.1)
Effective income tax rate	<u>25.8%</u>	<u>13.7%</u>	<u>12.7%</u>

The effective tax rates for all periods differed from the U.S. federal statutory tax rate as a result of permanent items, state and local income taxes, differences in foreign tax rates and certain unusual items. Permanent items primarily consist of income or expense not taxable or deductible. Significant or unusual items impacting the effective income tax rate are described below.

#### 2015 Significant items

Amending U.S. federal income tax returns for 2004 through 2012 to use foreign tax credits decreased the effective tax rate by 18.3% (\$30.7 million).

Uncertain tax positions increased the effective tax rate by 0.6% (\$1.0 million). The reversal of an uncertain tax position due to the expiration of the statute of limitations decreased the effective tax rate by 5.9% (\$9.9 million). A foreign court ruling, which settled an uncertain position taken in a prior year, increased the effective tax rate by 4.7% (\$7.9 million). Other unfavorable uncertain tax positions more than offset the net decrease in the effective tax rate of these two items.

#### 2014 Significant items

Tax benefits on certain foreign investments decreased the effective tax rate by 17.0% (\$15.0 million) related to the write-off of our investment in certain Brazil subsidiaries for tax purposes and operating losses primarily as a result of restructuring actions to close certain Brazil facilities discussed in Note 4, *Employee Separation and Restructuring Costs*.

Permanent tax differences decreased the effective tax rate by 2.1% (\$1.9 million) primarily related to foreign tax law changes and the utilization of foreign tax credits.

Changes in valuation allowances increased the effective tax rate by 7.8% (\$6.9 million) primarily related to certain Brazilian subsidiaries as a result of cumulative operating losses.

Components of our deferred tax assets (liabilities) as of December 31, 2016 and 2015 were as follows:

(In millions)	2016	2015
<b>Deferred tax assets:</b>		
Pension and other post-retirement benefits	\$ 12.5	\$ 29.7
Employment costs	34.3	34.7
Environmental reserves	45.1	45.8
Net operating loss carryforwards	28.8	33.3
Foreign tax credit carryforwards	23.0	37.4
Other, net	33.5	22.3
Gross deferred tax assets	\$ 177.2	\$ 203.2
Valuation allowances	(19.8)	(19.3)
Total deferred tax assets, net of valuation allowances	\$ 157.4	\$ 183.9
<b>Deferred tax liabilities:</b>		
Property, plant and equipment	\$ (52.6)	\$ (60.3)
Goodwill and intangibles	(136.9)	(135.8)
Other, net	(1.8)	(7.2)
Total deferred tax liabilities	\$ (191.3)	\$ (203.3)
Net deferred tax liabilities	\$ (33.9)	\$ (19.4)
<b>Consolidated Balance Sheets:</b>		
Non-current deferred income tax assets	\$ 9.2	\$ 14.4
Non-current deferred income tax liabilities	\$ (43.1)	\$ (33.8)

As of December 31, 2016, the Company had \$23.0 million of U.S. foreign tax credit carryforwards that expire between 2018 and 2025. The Company plans to utilize all U.S. foreign tax credits prior to the expiration period.

As of December 31, 2016, we had gross state net operating loss carryforwards of \$173.2 million that expire between 2017 and 2032. Various foreign subsidiaries have gross net operating loss carryforwards totaling \$85.2 million that expire between 2017 and 2036 with limited exceptions that have indefinite carryforward periods. We have provided valuation allowances of \$17.5 million against certain foreign and state net operating loss carryforwards that are expected to expire prior to utilization. In addition, we have valuation allowances of \$2.3 million against other net deferred tax assets.

No provision has been made for income taxes on undistributed earnings of consolidated non-U.S. subsidiaries of \$336.9 million as of December 31, 2016, because our intention is to reinvest indefinitely undistributed earnings of our foreign subsidiaries. It is not practicable to estimate the additional income taxes and applicable foreign withholding taxes that would be payable on the remittance of such undistributed earnings.

We made worldwide income tax payments of \$50.3 million and received refunds of \$2.4 million in 2016. We made worldwide income tax payments of \$57.7 million and \$70.0 million in 2015 and 2014, respectively, and received refunds of \$2.6 million and \$4.2 million in 2015 and 2014, respectively. Payments made in 2014 included U.S. federal tax payments related to 2013 U.S. federal income of \$9.7 million.

The Company records provisions for uncertain tax positions in accordance with ASC Topic 740, *Income Taxes*. A reconciliation of unrecognized tax benefits is as follows:

(In millions)	Unrecognized Tax Benefits		
	2016	2015	2014
Balance as of January 1,	\$ 12.5	\$ 28.6	\$ 15.2
Increases as a result of positions taken during current year	0.3	0.5	1.2
Increases as a result of positions taken for prior years	1.2	12.6	3.8
Balance related to acquired businesses	—	—	14.2
Reductions for tax positions of prior years	—	—	(2.3)
Decreases as a result of lapse of statute of limitations	(5.4)	(13.1)	—
Decreases relating to settlements with taxing authorities	(0.3)	(15.3)	(2.3)
Other, net	(0.4)	(0.8)	(1.2)
Balance as of December 31	\$ 7.9	\$ 12.5	\$ 28.6

We recognize interest and penalties related to uncertain tax positions in the provision for income taxes. As of December 31, 2016 and 2015, we had \$3.3 million and \$4.5 million accrued for interest and penalties, respectively.

Although the timing and outcome of tax settlements are uncertain, it is reasonably possible that during the next twelve months a reduction in unrecognized tax benefits may occur up to \$0.7 million based on the outcome of tax examinations and the expiration of statutes of limitations.

If all unrecognized tax benefits were recognized, the net impact on the provision for income tax expense would be a benefit of \$5.8 million.

The Company is currently being audited by federal, state and foreign taxing jurisdictions. With the exception of amended tax returns for 2004 to 2012, which are limited in scope to foreign tax credits, we are no longer subject to U.S. federal income tax examinations for periods preceding 2013. With limited exceptions, we are no longer subject to state tax and foreign tax examinations for periods preceding 2012.

### Note 13 — SHARE-BASED COMPENSATION

Share-based compensation cost is based on the value of the portion of share-based payment awards that are ultimately expected to vest during the period. Share-based compensation cost recognized in the accompanying Consolidated Statements of Income includes compensation cost for share-based payment awards based on the grant date fair value estimated in accordance with the provision of FASB ASC Topic 718, *Compensation — Stock Compensation*. Share-based compensation expense is based on awards expected to vest and therefore has been reduced for estimated forfeitures.

### Equity and Performance Incentive Plans

The PolyOne Corporation 2010 Equity and Performance Incentive Plan (2010 EPIP), as amended and restated in 2015, reserved 6.2 million common shares for the award of a variety of share-based compensation alternatives, including non-qualified stock options, incentive stock options, restricted stock, restricted stock units (RSUs), performance shares, performance units and stock appreciation rights (SARs). It is anticipated that all share-based grants and awards that are earned and exercised will be issued from PolyOne common shares that are held in treasury.

Share-based compensation is included in *Selling and administrative expense* in the accompanying Consolidated Statements of Income. A summary of compensation expense by type of award follows:

(In millions)	2016	2015	2014
Stock appreciation rights	\$ 3.6	\$ 4.4	\$ 5.5
Performance shares	—	0.5	0.7
Restricted stock units	4.8	4.2	8.0
Total share-based compensation	<u>\$ 8.4</u>	<u>\$ 9.1</u>	<u>\$ 14.2</u>

### Stock Appreciation Rights

During the years ended December 31, 2016, 2015 and 2014, the total number of SARs granted were 0.5 million, 0.3 million and 0.3 million, respectively. Awards vest in one-third increments upon the later of the attainment of time-based vesting over a three-year service period and stock price targets. Awards granted in 2016, 2015 and 2014 are subject to an appreciation cap of 200% of the base price. Outstanding SARs have contractual terms ranging from seven to ten years from the date of the grant.

The SARs were valued using a Monte Carlo simulation method as the vesting is dependent on the achievement of certain stock price targets. The SARs have time and market-based vesting conditions but vest no earlier than their three year graded vesting schedule. The expected term is an output from the Monte Carlo model, and are derived from employee exercise assumptions that are based on PolyOne historical exercise experience. The expected volatility was determined based on the average weekly volatility for our common shares for the contractual life of the awards. The expected dividend assumption was determined based upon PolyOne's dividend yield at the time of grant. The risk-free rate of return was based on available yields on U.S. Treasury bills of the same duration as the contractual life of the awards. Forfeitures were estimated at 3% per year based on our historical experience.

The following is a summary of the weighted average assumptions related to the grants issued during 2016, 2015 and 2014:

	2016	2015	2014
Expected volatility	41.0%	43.0%	48.0%
Expected dividends	1.92%	1.05%	0.91%
Expected term (in years)	6.7	6.5	6.4
Risk-free rate	1.90%	1.95%	2.94%
Value of SARs granted	\$8.29	\$13.94	\$14.05

A summary of SAR activity for 2016 is presented below:

Stock Appreciation Rights		Weighted-Average Exercise Price Per Share	Weighted-Average Remaining Contractual Term	Aggregate Intrinsic Value
(In millions, except per share data)	Shares			
Outstanding as of January 1, 2016	1.5	\$ 25.49	6.75	\$ 13.1
Granted	0.5	24.98	—	
Exercised	(0.2)	12.35	—	
Outstanding as of December 31, 2016	1.8	\$ 25.73	6.68	\$ 14.3
Vested and exercisable as of December 31, 2016	1.0	\$ 21.63	5.21	\$ 11.3

The total intrinsic value of SARs exercised during 2016, 2015 and 2014 was \$2.8 million, \$9.7 million and \$15.0 million, respectively. As of December 31, 2016, there was \$2.1 million of total unrecognized compensation cost related to SARs, which is expected to be recognized over the weighted average remaining vesting period of 22 months.

### Restricted Stock Units

RSUs represent contingent rights to receive one common share at a future date provided certain vesting criteria are met.

During 2016, 2015 and 2014, the total number of RSUs granted were 0.2 million, 0.1 million and 0.2 million, respectively. These RSUs, which vest on the third anniversary of the grant date, were granted to executives and other key employees. Compensation expense is measured on the grant date using the quoted market price of our common shares and is recognized on a straight-line basis over the requisite service period.



As of December 31, 2016, 0.5 million RSUs remain unvested with a weighted-average grant date fair value of \$32.86. Unrecognized compensation cost for RSUs at December 31, 2016 was \$5.4 million, which is expected to be recognized over the weighted average remaining vesting period of 22 months.

#### **Note 14 — SEGMENT INFORMATION**

A segment is a component of an enterprise whose operating results are regularly reviewed by the enterprise's chief operating decision maker to make decisions about resources to be allocated to the segment and assess its performance, and for which discrete financial information is available.

Operating income is the primary measure that is reported to our chief operating decision maker for purposes of allocating resources to the segments and assessing their performance. Operating income at the segment level does not include: corporate general and administrative expenses that are not allocated to segments; intersegment sales and profit eliminations; charges related to specific strategic initiatives such as the consolidation of operations; restructuring activities, including employee separation costs resulting from personnel reduction programs, plant closure and phase-in costs; executive separation agreements; share-based compensation costs; asset impairments; environmental remediation costs and other liabilities for facilities no longer owned or closed in prior years; gains and losses on the divestiture of joint ventures and equity investments; actuarial gains and losses associated with our pension and other post-retirement benefit plans; and certain other items that are not included in the measure of segment profit or loss that is reported to and reviewed by our chief operating decision maker. These costs are included in *Corporate and eliminations*.

Segment assets are primarily customer receivables, inventories, net property, plant and equipment, intangible assets and goodwill. Intersegment sales are generally accounted for at prices that approximate those for similar transactions with unaffiliated customers. *Corporate and eliminations* assets and liabilities primarily include cash, debt, pension and other employee benefits, environmental liabilities, retained assets and liabilities of discontinued operations, and other unallocated corporate assets and liabilities. The accounting policies of each segment are consistent with those described in Note 1, *Description of Business and Summary of Significant Accounting Policies*.

The following is a description of each of our five reportable segments.

##### **Color, Additives and Inks**

Color, Additives and Inks is a leading provider of specialized custom color and additive concentrates in solid and liquid form for thermoplastics, dispersions for thermosets, as well as specialty inks, plastisols, and vinyl slush molding solutions. Color and additive solutions include an innovative array of colors, special effects and performance-enhancing and eco-friendly solutions. When combined with polymer resins, our solutions help customers achieve differentiated specialized colors and effects targeted at the demands of today's highly design-oriented consumer and industrial end markets. Our additive concentrates encompass a wide variety of performance and process enhancing characteristics and are commonly categorized by the function that they perform, including UV light stabilization and blocking, antimicrobial, anti-static, blowing or foaming, antioxidant, lubricant, oxygen and visible light blocking and productivity enhancement. Our colorant and additives concentrates are used in a broad range of polymers, including those used in medical and pharmaceutical devices, food packaging, personal care and cosmetics, transportation, building products, wire and cable markets. We also provide custom-formulated liquid systems that meet a variety of customer needs and chemistries, including polyester, vinyl, natural rubber and latex, polyurethane and silicone. Our offerings also include proprietary inks and latexes for diversified markets such as recreational and athletic apparel, construction and filtration, outdoor furniture and healthcare. Our liquid polymer coatings and additives are largely based on vinyl and are used in a variety of markets, including building and construction, consumer, healthcare, industrial, packaging, textiles, appliances, transportation, and wire and cable. Color, Additives and Inks has manufacturing, sales and service facilities located throughout North America, South America, Europe, Asia and Africa.

##### **Specialty Engineered Materials**

Specialty Engineered Materials is a leading provider of specialty polymer formulations, services and solutions for designers, assemblers and processors of thermoplastic materials across a wide variety of markets and end-use applications. Our product portfolio, which we believe to be one of the most diverse in our industry, includes specialty formulated high-performance polymer materials that are manufactured using thermoplastic resins and elastomers, which are then combined with advanced polymer additives, reinforcement, filler, colorant and/or biomaterial technologies. We also have what we believe is the broadest composite platform of solutions, which include a full range of products from long glass and carbon fiber technology to thermoset and thermoplastic composites. These solutions meet a wide variety of unique customer requirements for light weighting. Our technical and market expertise enables us to expand the performance range and structural properties of traditional engineering-grade

thermoplastic resins to meet evolving customer needs. Specialty Engineered Materials has manufacturing, sales and service facilities located throughout North America, Europe, and Asia. Our product development and application reach is further enhanced by the capabilities of our Innovation Centers in the United States, Germany and China, which produce and evaluate prototype and sample parts to help assess end-use performance and guide product development. Our manufacturing capabilities are targeted at meeting our customers' demand for speed, flexibility and critical quality.

### **Designed Structures and Solutions**

The Designed Structures and Solutions segment was created on March 13, 2013, as a result of the acquisition of Spartech Corporation (Spartech). PolyOne's Designed Structures and Solutions segment utilizes a variety of polymers, specialty additives and processing technologies to produce a complete portfolio of sheet, custom rollstock and specialty film, laminate and acrylic solutions. Our solutions can be engineered to provide structural or functional performance in an application or design and visual aesthetics to meet our customers' needs. Our offerings also include a wide range of sustainable, cost-effective stock and custom packaging solutions for various industry processes used in the food, medical and consumer markets. In addition to packaging, we also work closely with customers to provide solutions for transportation, building and construction, healthcare and consumer markets. Designed Structures and Solutions has manufacturing, sales and service facilities located throughout North America.

### **Performance Products and Solutions**

Performance Products and Solutions is comprised of the Geon Performance Materials (Geon) and Producer Services business units. The Geon business delivers an array of products and services for vinyl molding and extrusion processors located in North America and Asia. The Geon™ brand name carries strong recognition globally. Geon's products are sold to manufacturers of durable plastic parts and consumer-oriented products. We also offer a wide range of services including materials testing, component analysis, custom formulation development, colorant and additive services, part design assistance, structural analysis, process simulations, mold design and flow analysis and extruder screw design. Vinyl is used across a broad range of markets and applications, including, but not limited to: healthcare, wire and cable, building and construction, consumer and recreational products and transportation and packaging. The Producer Services business unit offers contract manufacturing and outsourced polymer manufacturing services to resin producers and polymer marketers, primarily in the United States and Mexico, as well as its own proprietary formulations for certain applications. As a strategic and integrated supply chain partner, Producer Services offers resin producers a capital-efficient way to effectively develop custom products for niche markets by leveraging its extensive process technology expertise, broad manufacturing capabilities and geographic locations.

### **PolyOne Distribution**

The PolyOne Distribution business distributes more than 4,000 grades of engineering and commodity grade resins, including PolyOne-produced solutions, principally to the North American and Asian markets. These products are sold to over 6,500 custom injection molders and extruders who, in turn, convert them into plastic parts that are sold to end-users in a wide range of industries. Representing over 25 major suppliers, we offer our customers a broad product portfolio, just-in-time delivery from multiple stocking locations and local technical support. Recent expansion in Central America and Asia have bolstered PolyOne Distribution's ability to serve the specialized needs of customers globally.

Financial information by reportable segment is as follows:

Year Ended December 31, 2016 (In millions)	Sales to External Customers	Intersegment Sales	Total Sales	Operating Income	Depreciation and Amortization <sup>(1)</sup>	Capital Expenditures	Total Assets
Color, Additives and Inks	\$ 778.9	\$ 18.8	\$ 797.7	\$ 127.5	\$ 40.2	\$ 20.6	\$ 919.1
Specialty Engineered Materials	516.4	49.4	565.8	81.1	18.3	19.4	539.0
Designed Structures and Solutions	401.2	0.5	401.7	(3.8)	22.3	18.6	442.9
Performance Products and Solutions	589.2	79.3	668.5	74.4	15.0	12.4	238.6
PolyOne Distribution	1,054.1	16.9	1,071.0	68.2	0.7	0.2	206.9
Corporate and eliminations	—	(164.9)	(164.9)	(65.5)	7.5	13.0	376.8
<b>Total</b>	<b>\$ 3,339.8</b>	<b>\$ —</b>	<b>\$ 3,339.8</b>	<b>\$ 281.9</b>	<b>\$ 104.0</b>	<b>\$ 84.2</b>	<b>\$ 2,723.3</b>

(1) Corporate and eliminations includes accelerated depreciation associated with restructuring actions of \$3.5 million.

Year Ended December 31, 2015 (In millions)	Sales to External Customers	Intersegment Sales	Total Sales	Operating Income	Depreciation and Amortization <sup>(1)</sup>	Capital Expenditures	Total Assets
Color, Additives and Inks	\$ 801.2	\$ 9.5	\$ 810.7	\$ 135.4	\$ 40.7	\$ 27.3	\$ 939.5
Specialty Engineered Materials	493.1	49.7	542.8	79.6	15.2	17.7	353.4
Designed Structures and Solutions	448.8	4.7	453.5	13.8	22.2	18.4	449.5
Performance Products and Solutions	615.8	78.3	694.1	57.4	15.5	9.8	237.4
PolyOne Distribution	1,018.7	15.4	1,034.1	68.0	0.7	0.4	200.0
Corporate and eliminations	—	(157.6)	(157.6)	(103.3)	10.0	17.6	415.3
<b>Total</b>	<b>\$ 3,377.6</b>	<b>\$ —</b>	<b>\$ 3,377.6</b>	<b>\$ 250.9</b>	<b>\$ 104.3</b>	<b>\$ 91.2</b>	<b>\$ 2,595.1</b>

(1) Corporate and eliminations includes accelerated depreciation associated with restructuring actions of \$6.2 million.

Year Ended December 31, 2014 (In millions)	Sales to External Customers	Intersegment Sales	Total Sales	Operating Income	Depreciation and Amortization <sup>(1)</sup>	Capital Expenditures	Total Assets
Color, Additives and Inks	\$ 835.0	\$ 15.8	\$ 850.8	\$ 124.9	\$ 39.7	\$ 28.1	\$ 934.2
Specialty Engineered Materials	555.2	43.1	598.3	72.4	16.0	15.2	370.1
Designed Structures and Solutions	616.5	1.0	617.5	45.1	23.4	25.6	490.1
Performance Products and Solutions	728.2	88.4	816.6	63.1	16.9	15.2	265.5
PolyOne Distribution	1,100.6	13.8	1,114.4	68.2	0.6	0.1	214.2
Corporate and eliminations	—	(162.1)	(162.1)	(218.6)	27.3	8.6	392.2
<b>Total</b>	<b>\$ 3,835.5</b>	<b>\$ —</b>	<b>\$ 3,835.5</b>	<b>\$ 155.1</b>	<b>\$ 123.9</b>	<b>\$ 92.8</b>	<b>\$ 2,666.3</b>

(1) Corporate and eliminations includes accelerated depreciation associated with restructuring actions of \$23.1 million.

Our sales are primarily to customers in the United States, Canada, Mexico, Europe, South America and Asia, and the majority of our assets are located in these same geographic areas. Following is a summary of sales and long-lived assets based on the geographic areas where the sales originated and where the assets are located:

(In millions)	2016	2015	2014
<b>Sales:</b>			
United States	\$ 2,148.3	\$ 2,239.5	\$ 2,585.5
Europe	415.2	421.8	505.6
Canada	258.4	241.3	277.4
Asia	266.9	249.6	257.3
Mexico	233.7	209.7	178.4
South America	17.3	15.7	31.3
<b>Total Sales</b>	<b>\$ 3,339.8</b>	<b>\$ 3,377.6</b>	<b>\$ 3,835.5</b>
<b>Long lived assets:</b>			
United States	\$ 449.7	\$ 418.1	\$ 421.1
Europe	86.6	88.5	90.0
Canada	7.2	6.9	12.8
Asia	44.6	45.7	45.2
Mexico	18.5	19.4	19.7
South America	1.1	4.9	7.9
<b>Total Long lived assets</b>	<b>\$ 607.7</b>	<b>\$ 583.5</b>	<b>\$ 596.7</b>

#### Note 15 — COMMON SHARE DATA

Weighted-average shares used in computing net income per share are as follows:

(In millions)	2016	2015	2014
Weighted-average shares — basic:	83.9	87.8	92.3
Plus dilutive impact of share-based compensation	0.7	0.9	1.2
<b>Weighted-average shares — diluted:</b>	<b>84.6</b>	<b>88.7</b>	<b>93.5</b>

Outstanding share-based awards with exercise prices greater than the average price of the common shares are anti-dilutive and are not included in the computation of diluted net income per share. The number of anti-dilutive options and awards was 0.2 million and 0.4 million at December 31, 2016 and 2014, respectively. Less than 0.1 million options and awards were anti-dilutive for the computation of diluted earnings per common share at December 31, 2015.

We purchased 3.0 million, 4.5 million and 6.3 million shares in 2016, 2015 and 2014, respectively, at an aggregate cost of \$86.2 million, \$156.1 million and \$233.2 million, respectively.

#### Note 16 — FAIR VALUE

Fair value is measured based on an exit price, representing the amount that would be received to sell an asset or paid to satisfy a liability in an orderly transaction between market participants. Fair value is a market-based measurement that is determined based on assumptions that market participants would use in pricing an asset or liability. As a basis for considering such assumptions, a fair value hierarchy is established, which categorizes the inputs used in measuring fair value as follows: (Level 1) observable inputs such as quoted prices in active markets; (Level 2) inputs, other than the quoted prices in active markets, that are observable either directly or indirectly; and (Level 3) unobservable inputs in which there is little or no market data, which require the reporting entity to develop its own assumptions.

The estimated fair value of PolyOne's debt instruments at December 31, 2016 and 2015 was \$1,272.1 million and \$1,136.2 million, respectively, compared to carrying values of \$1,258.3 million and \$1,146.6 million as of December 31, 2016 and 2015, respectively. The fair value of PolyOne's debt instruments was estimated using prevailing market interest rates on debt with similar creditworthiness, terms and maturities and represent Level 2 measurements within the fair value hierarchy.

In accordance with the provisions of FASB ASC Topic 350, *Intangibles — Goodwill and Other*, we assess the fair value of goodwill on an annual basis or at an interim date if potential impairment indicators are present. The implied fair value of goodwill is determined based on significant unobservable inputs. Accordingly, these inputs fall within Level 3 of the fair value hierarchy. We use an income approach to estimate the fair value of our reporting units. The income approach uses a reporting unit's projection of estimated operating results and cash flows that is discounted

using a weighted-average cost of capital that is determined based on current market conditions. The projection uses management's best estimates of economic and market conditions over the projected period including growth rates in sales, costs and number of units, estimates of future expected changes in operating margins and cash expenditures. Other significant estimates and assumptions include terminal value growth rates, terminal value margin rates, future capital expenditures and changes in future working capital requirements. We validate our estimates of fair value under the income approach by considering the implied control premium and conclude whether the implied control premium is reasonable based on other recent market transactions. No impairment charges were required in 2016, 2015 or 2014.

Indefinite-lived intangible assets primarily consist of the GLS, ColorMatrix and Gordon Composites trade names. Indefinite-lived intangible assets are tested for impairment annually at the same time we test goodwill for impairment. The implied fair value of indefinite-lived intangible assets is determined based on significant unobservable inputs, as summarized below. Accordingly, these inputs fall within Level 3 of the fair value hierarchy. The fair value of the trade names is calculated using a "relief from royalty" methodology. This approach involves two steps (1) estimating reasonable royalty rates for the trade name and (2) applying this royalty rate to a net sales stream and discounting the resulting cash flows to determine fair value. This fair value is then compared with the carrying value of the trade name. No impairment charges were required in 2016, 2015 or 2014.

### Note 17 — SELECTED QUARTERLY FINANCIAL DATA (UNAUDITED)

(In millions, except per share data)	2016 Quarters				2015 Quarters			
	Fourth <sup>(2)</sup>	Third <sup>(3)</sup>	Second <sup>(4)</sup>	First <sup>(5)</sup>	Fourth <sup>(6)</sup>	Third <sup>(7)</sup>	Second <sup>(8)</sup>	First <sup>(9)</sup>
Sales	\$ 787.7	\$ 843.6	\$ 861.5	\$ 847.0	\$ 775.8	\$ 841.6	\$ 887.1	\$ 873.1
Gross Margin	155.3	173.1	192.3	185.5	156.9	169.1	185.7	169.8
Operating income	57.9	71.2	81.5	71.3	31.3	69.2	80.3	70.1
Net income	33.7	42.3	50.0	39.0	3.0	44.5	67.0	30.2
Net income attributable to PolyOne shareholders	\$ 33.8	\$ 42.3	\$ 50.0	\$ 39.1	\$ 3.1	\$ 44.5	\$ 66.8	\$ 30.2
Net income from continuing operations per common share attributable to PolyOne common shareholders: <sup>(1)</sup>								
Basic earnings per share	\$ 0.41	\$ 0.50	\$ 0.59	\$ 0.46	\$ 0.04	\$ 0.51	\$ 0.75	\$ 0.34
Diluted earnings per share	\$ 0.40	\$ 0.50	\$ 0.59	\$ 0.46	\$ 0.04	\$ 0.50	\$ 0.74	\$ 0.34

- (1) Per share amounts for the quarter and the full year have been computed separately. The sum of the quarterly amounts may not equal the annual amounts presented because of differences in the average shares outstanding during each period.
- (2) Included for the fourth quarter 2016 are: 1) a mark-to-market pension and other post-retirement gain of \$8.4 million, 2) employee separation and restructuring costs of \$2.5 million and 3) environmental remediation costs of \$2.2 million.
- (3) Included for the third quarter 2016 are: 1) employee separation and restructuring costs of \$4.6 million, 2) acquisition related costs and adjustments of \$2.5 million and 3) environmental remediation costs of \$2.3 million.
- (4) Included for the second quarter 2016 are: 1) employee separation and restructuring costs of \$4.8 million, 2) environmental remediation costs of \$2.1 million and 3) a gain related to the reimbursement of previously incurred environmental costs of \$5.3 million.
- (5) Included for the first quarter 2016 are employee separation and restructuring costs of \$7.1 million.
- (6) Included for the fourth quarter 2015 are: 1) a mark-to-market pension and other post-retirement charge of \$11.6 million, 2) employee separation and restructuring costs of \$10.1 million and 3) \$16.4 million of debt extinguishment costs primarily due to the repayment in full of \$316.6 million aggregate principal amount of our 7.375% senior notes due 2020.
- (7) Included for the third quarter 2015 are: 1) employee separation and restructuring costs of \$13.7 million and 2) a \$7.5 million benefit related to the reversal of an uncertain tax position due to the expiration of the statute of limitations.
- (8) Included for the second quarter 2015 are: 1) employee separation and restructuring costs of \$7.5 million and 2) a \$26.0 million tax benefit as a result of amending U.S. federal income tax returns from 2005 to 2012 to use foreign tax credits.
- (9) Included for the first quarter 2015 are employee separation and restructuring costs of \$10.6 million.

## **ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE**

None.

### **ITEM 9A. CONTROLS AND PROCEDURES**

#### **Disclosure controls and procedures**

PolyOne's management, with the participation of the Chief Executive Officer and the Chief Financial Officer, has evaluated the effectiveness of the design and operation of PolyOne's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934) as of December 31, 2016. Based on this evaluation, the Chief Executive Officer and the Chief Financial Officer have concluded that our disclosure controls and procedures were effective as of December 31, 2016.

#### **Management's Annual Report On Internal Control Over Financial Reporting**

The following report is provided by management in respect of PolyOne's internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934):

1. PolyOne's management is responsible for establishing and maintaining adequate internal control over financial reporting.
2. Under the supervision of and with participation of PolyOne's management, including the Chief Executive Officer and the Chief Financial Officer, we conducted an evaluation of the effectiveness of internal control over financial reporting as of December 31, 2016 based on the guidelines established in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) (2013 Framework). Management believes that the COSO framework is a suitable framework for its evaluation of financial reporting because it is free from bias, permits reasonably consistent qualitative and quantitative measurements of PolyOne's internal control over financial reporting, is sufficiently complete so that those relevant factors that would alter a conclusion about the effectiveness of PolyOne's internal control over financial reporting are not omitted and is relevant to an evaluation of internal control over financial reporting.
3. Based on the results of our evaluation, management has concluded that such internal control over financial reporting was effective as of December 31, 2016. There were no material weaknesses in internal control over financial reporting identified by management. The results of management's assessment were reviewed with our Audit Committee.
4. Ernst & Young LLP, who audited the consolidated financial statements of PolyOne for the year ended December 31, 2016, also issued an attestation report on PolyOne's internal control over financial reporting under Auditing Standard No. 5 of the Public Company Accounting Oversight Board. This attestation report is set forth on page 34 of this Annual Report on Form 10-K and is incorporated by reference into this Item 9A.

#### **Changes in internal control over financial reporting**

There were no changes in the Company's internal control over financial reporting that occurred during the quarter ended December 31, 2016 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

#### **Limitations in internal control over financial reporting**

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.

### **ITEM 9B. OTHER INFORMATION**

None.

### PART III

#### **ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE**

The information regarding PolyOne's directors, including the identification of the audit committee and audit committee financial experts, is incorporated by reference to the information contained in PolyOne's Proxy Statement with respect to the 2017 Annual Meeting of Shareholders (2017 Proxy Statement). Information concerning executive officers is contained in Part I of this Annual Report on Form 10-K under the heading "Executive Officers of the Registrant."

The information regarding Section 16(a) beneficial ownership reporting compliance is incorporated by reference to the material under the heading "Section 16(a) Beneficial Ownership Reporting Compliance" in the 2017 Proxy Statement.

The information regarding any changes in procedures by which shareholders may recommend nominees to PolyOne's Board of Directors is incorporated by reference to the information contained in the 2017 Proxy Statement.

PolyOne has adopted a code of ethics that applies to its principal executive officer, principal financial officer and principal accounting officer. PolyOne's code of ethics is posted under the Investor Relations tab of its website at [www.polyone.com](http://www.polyone.com). PolyOne will post any amendments to, or waivers of, its code of ethics that apply to its principal executive officer, principal financial officer and principal accounting officer on its website.

#### **ITEM 11. EXECUTIVE COMPENSATION**

The information regarding executive officer and director compensation is incorporated by reference to the information contained in the 2017 Proxy Statement.

The information regarding compensation committee interlocks and insider participation and the compensation committee report is incorporated by reference to the information contained in the 2017 Proxy Statement.

#### **ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED SHAREHOLDER MATTER**

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	1,792,671	\$25.73	1,577,686 <sup>(1)</sup>
Equity compensation plans not approved by security holders	—	—	—
<b>Total</b>	<b>1,792,671</b>	<b>\$25.73</b>	<b>1,577,686</b>

<sup>(1)</sup> In addition to options, warrants and rights, the Amended and Restated PolyOne Corporation 2010 Equity and Performance Incentive Plan (the Restated 2010 EPIP) authorizes the issuance of restricted stock, RSUs, performance shares and awards to Non-Employee Directors. The Restated 2010 EPIP limits the total number of shares that may be issued as one or more of these types of awards to 2.6 million. On May 14, 2015 our shareholders approved an amendment to this plan whereby, among other provisions, a total of 6.2 million common shares are reserved for grant under the Restated 2010 EPIP.

#### **ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE**

The information regarding certain relationships and related transactions and director independence is incorporated by reference to the information contained in the 2017 Proxy Statement.

#### **ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES**

Information regarding fees paid to and services provided by PolyOne's independent registered public accounting firm and the pre-approval policies and procedures of the audit committee is incorporated by reference to the information contained in the 2017 Proxy Statement.

## **PART IV**

### **ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES**

#### (a)(1) Financial Statements:

The following consolidated financial statements of PolyOne Corporation are included in Item 8:

Consolidated Statements of Income for the years ended December 31, 2016, 2015 and 2014

Consolidated Statements of Comprehensive Income for the years ended December 31, 2016, 2015 and 2014

Consolidated Balance Sheets at December 31, 2016 and 2015

Consolidated Statements of Cash Flows for the years ended December 31, 2016, 2015 and 2014

Consolidated Statements of Shareholders' Equity for the years ended December 31, 2016, 2015 and 2014

Notes to Consolidated Financial Statements

All other schedules for which provision is made in Regulation S-X of the SEC are not required under the related instructions or are inapplicable and, therefore, have been omitted.

#### (a)(3) Exhibits.

Refer to the Exhibit Index, which is incorporated by reference herein.



## 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.

### POLYONE CORPORATION

February 16, 2017

BY:           /S/ BRADLEY C. RICHARDSON          

Bradley C. Richardson  
Executive Vice President, Chief Financial Officer  
(Principal Financial and 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 indicated and on the dates indicated.

<u>Signature and Title</u>		
<u>/S/ ROBERT M. PATTERSON</u> Robert M. Patterson	Chairman, President and Chief Executive Officer and Director (Principal Executive Officer)	Date: February 16, 2017
<u>/S/ BRADLEY C. RICHARDSON</u> Bradley C. Richardson	Executive Vice President, Chief Financial Officer (Principal Financial and Accounting Officer)	Date: February 16, 2017
<u>/S/ RICHARD H. FEARON</u> Richard H. Fearon	Director	Date: February 16, 2017
<u>/S/ GREGORY J. GOFF</u> Gregory J. Goff	Director	Date: February 16, 2017
<u>/S/ WILLIAM R. JELLISON</u> William R. Jellison	Director	Date: February 16, 2017
<u>/S/ SANDRA BEACH LIN</u> Sandra Beach Lin	Director	Date: February 16, 2017
<u>/S/ RICHARD A. LORRAINE</u> Richard A. Lorraine	Director	Date: February 16, 2017
<u>/S/ WILLIAM H. POWELL</u> William H. Powell	Director	Date: February 16, 2017
<u>/S/ KERRY J. PREETE</u> Kerry J. Preete	Director	Date: February 16, 2017
<u>/S/ FARAH M. WALTERS</u> Farah M. Walters	Director	Date: February 16, 2017
<u>/S/ WILLIAM A. WULFSOHN</u> William A. Wulfsohn	Director	Date: February 16, 2017

## EXHIBIT INDEX

Exhibit No.	Exhibit Description
2.1†	Purchase Agreement, dated as of February 28, 2011, by and among PolyOne Corporation, 1997 Chloralkali Venture, LLC, Olin Corporation and Olin SunBelt II, Inc. (incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed March 3, 2011, SEC File No. 1-16091)
2.2†	Agreement and Plan of Merger, dated October 23, 2012, by and among PolyOne Corporation, 2012 RedHawk, Inc., 2012 RedHawk, LLC and Spartech Corporation (Incorporated by reference to Exhibit 2.1 to PolyOne Corporation's current report on Form 8-K filed on October 24, 2012, SEC File No. 1-16091)
2.3†	Asset Purchase Agreement, dated as of March 25, 2013, by and between PolyOne Corporation and Mexichem Specialty Resins Inc. (incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed March 27, 2013, SEC File No. 1-16091)
3.1	Articles of Incorporation (incorporated by reference to Exhibit 3(i) to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2000, SEC File No. 1-16091)
3.2	Amendment to the Second Article of the Articles of Incorporation, as filed with the Ohio Secretary of State, November 25, 2003 (incorporated by reference to Exhibit 3.1a to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2003, SEC File No. 1-16091)
3.3	Regulations (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on July 17, 2009, SEC File No. 1-16091)
4.1	Indenture, dated February 28, 2013, between PolyOne Corporation and Wells Fargo Bank, National Association, as trustee (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on March 5, 2013, SEC File No. 1-16091)
10.1	Amended and Restated Credit Agreement, dated March 1, 2013, among the Company, PolyOne Canada and certain other subsidiaries of the Company, Wells Fargo Capital Finance, LLC, as administrative agent, Bank of America, N.A. and U.S. Bank National Association, as syndication agents, PNC Bank National Association and KeyBank National Association, as documentation agents, and Wells Fargo Capital Finance, LLC and Merrill, Lynch, Pierce, Fenner & Smith Incorporated, as joint lead arrangers and bookrunners (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on March 5, 2013, SEC File No. 1-16091)
10.2	First Amendment to Amended and Restated Credit Agreement, dated as of March 28, 2014, among the Company, PolyOne Canada Inc. and certain other subsidiaries of the Company, Wells Fargo Capital Finance, LLC, as administrative agent, and the lenders party thereto (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2015, SEC File No. 1-16091)
10.3	Second Amendment to Amended and Restated Credit Agreement, dated as of June 3, 2015, among the Company, PolyOne Canada Inc. and certain other subsidiaries of the Company, Wells Fargo Capital Finance, LLC, as administrative agent, and the lenders party thereto (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2015, SEC File No. 1-16091)
10.4	Third Amendment to Amended and Restated Credit Agreement, dated as of June 30, 2015, among the Company, PolyOne Canada Inc. and certain other subsidiaries of the Company, Wells Fargo Capital Finance, LLC, as administrative agent, and the lenders party thereto (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2015, SEC File No. 1-16091)
10.5	Fourth Amendment to Amended and Restated Credit Agreement and Release, dated November 12, 2015, by and among PolyOne Corporation, the subsidiaries of PolyOne Corporation party thereto, Wells Fargo Capital Finance, LLC, as agent, and the lenders party thereto (incorporated by reference to Exhibit 10.5 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2015, SEC File No. 1-16091)
10.6	Fifth Amendment to Amended and Restated Credit Agreement, dated as of April 19, 2016, among the Company, PolyOne Canada Inc. and certain other subsidiaries of the Company, Wells Fargo Capital Finance, LLC, as administrative agent, and the lenders party thereto (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2016, SEC File No. 16091)
10.7	Credit Agreement, dated November 12, 2015, by and among PolyOne Corporation, as borrower, Citibank, N.A., as administrative agent, each of Citigroup Global Markets Inc., Wells Fargo Securities LLC, Goldman, Sachs & Co., HSBC Securities (USA) Inc. and Morgan Stanley & Co. LLC, as joint-lead arrangers and joint-book managers, Jefferies Finance LLC, KeyBanc Capital Markets Inc. and SunTrust Robinson Humphrey, Inc., as co-managers, and several other commercial lending institutions that are parties thereto (incorporated by reference to Exhibit 10.6 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2015, SEC File No. 1-16091)
10.8	Amendment Agreement No. 1 to the Credit Agreement, dated as of June 15, 2016, among the Company, certain subsidiaries of the Company, Citibank, N.A., as administrative agent, and the additional lender party thereto (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2016, SEC File No. 16091)
10.9	Amendment Agreement No. 2, dated August 3, 2016, by and among PolyOne Corporation, the subsidiaries of PolyOne Corporation party thereto, Citibank, N.A. as administrative agent, and the lenders party thereto (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on August 5, 2016, SEC File No. 1-16091)
10.10+	Form of 2011 Award Agreement under the 2010 Equity and Performance Incentive Plan (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2011, SEC File No. 1-16091)
10.11+	Amended and Restated PolyOne Corporation 2010 Equity and Performance Incentive Plan (incorporated by reference to Appendix B to the Company's definitive proxy statement on Schedule 14A filed on April 3, 2015, SEC File No. 1-16091)
10.12+	Amended and Restated PolyOne Senior Executive Annual Incentive Plan (incorporated by reference to Appendix C to the Company's definitive proxy statement on Schedule 14A filed on April 3, 2015, SEC File No. 1-16091)
10.13+	Form of Grant of Stock-Settled Stock Appreciation Rights under the 2010 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2010, SEC File No. 1-16091)

<b>Exhibit No.</b>	<b>Exhibit Description</b>
10.14+	Amended and Restated Deferred Compensation Plan for Non-Employee Directors (as amended and restated effective May 20, 2014) (incorporated by reference to Exhibit 10.7 of the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2014, SEC File No. 1-16091)
10.15+	Form of Management Continuity Agreement for Executive Officers prior to 2011 (incorporated by reference to Exhibit 10.13 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2007, SEC File No. 1-16091)
10.16+	Form of Management Continuity Agreement for Executive Officers after 2011 (incorporated by reference to Exhibit 10.12 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2013, SEC File No. 1-16091)
10.17+	Schedule of Executive Officers with Management Continuity Agreements**
10.18+	PolyOne Supplemental Retirement Benefit Plan (As Amended and Restated Effective January 1, 2014) (incorporated by reference to Exhibit 10.14 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2013, SEC file No. 1-16091)
10.19+	Amended and Restated Letter Agreement, dated as of March 6, 2014, between the Company and Stephen D. Newlin, originally effective as of February 13, 2006 (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2014, SEC File No. 1-16091)
10.20	Amendment to the Letter Agreement between the Company and Stephen D. Newlin, dated February 10, 2016 (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2016, SEC File No. 1-16091)
10.21+	Assumption of Liabilities and Indemnification Agreement, dated March 1, 1993, amended and restated by Amended and Restated Assumption of Liabilities and Indemnification Agreement, dated April 27, 1993 (incorporated by reference to Exhibit 10.14 to The Geon Company's Annual Report on Form 10-K for the fiscal year ended December 31, 1996, SEC File No. 1-11804)
10.22+	Unconditional and Continuing Guaranty, between the Company and Olin Corporation and Sunbelt Chlor Alkali Partnership (incorporated by reference to Exhibit 10(c) to The Geon Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 1996, SEC File No. 1-11804)
10.23+	PolyOne Corporation 2008 Equity and Performance Incentive Plan (incorporated herein by reference to Appendix A to the Registrant's proxy statement on Schedule 14A (SEC File No. 1-16091), filed on March 25, 2008)
10.24+	Executive Severance Plan, as amended and restated effective May 15, 2014 (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2014, SEC File No. 1-16091)
10.25+	Form of 2012 Award Agreement under the PolyOne Corporation 2010 Equity and Performance Incentive Plan, as amended (incorporated by reference to Exhibit 10.38 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2012, SEC File No. 1-16091)
10.26+	Form of 2013 Award Agreement under the PolyOne Corporation 2010 Equity and Performance Incentive Plan, as amended (incorporated by reference to Exhibit 10.27 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2013, SEC File No. 1-16091)
10.27+	Form of Director and Officer Indemnification Agreement (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on July 5, 2006, SEC File No. 1-16091)
10.28+	Form of 2014 Award Agreement under the PolyOne Corporation 2010 Equity and Performance Incentive Plan, as amended (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2014, SEC File No. 1-16091)
21.1	Subsidiaries of the Company**
23.1	Consent of Independent Registered Public Accounting Firm - Ernst & Young LLP**
31.1	Certification of Robert M. Patterson, Chairman, President and Chief Executive Officer, pursuant to SEC Rules 13a-14(a) and 15d-14(a), adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**
31.2	Certification of Bradley C. Richardson, Executive Vice President and Chief Financial Officer, pursuant to SEC Rules 13a-14(a) and 15d-14(a), adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**
32.1	Certification pursuant to 18 U.S.C. § 1350, adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, as signed by Robert M. Patterson, Chairman, President and Chief Executive Officer**
32.2	Certification pursuant to 18 U.S.C. § 1350, adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, as signed by Bradley C. Richardson, Executive Vice President and Chief Financial Officer**
101 .INS	XBRL Instance Document**
101 .SCH	XBRL Taxonomy Extension Schema Document**
101 .CAL	XBRL Taxonomy Extension Calculation Linkbase Document**
101 .LAB	XBRL Taxonomy Extension Label Linkbase Document**
101 .PRE	XBRL Taxonomy Extension Presentation Linkbase Document**
101 .DEF	XBRL Taxonomy Definition Linkbase Document**

+ Indicates management contract or compensatory plan, contract or arrangement in which one or more directors or executive officers of the Registrant may be participants

† The exhibits and schedules have been omitted pursuant to Item 601(b)(2) of Regulation S-K and will be provided to the Securities and Exchange Commission upon request.

\*\* Filed herewith.

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## CERTIFICATION

I, Robert M. Patterson, certify that:

1. I have reviewed this Annual Report on Form 10-K of PolyOne Corporation;
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(s) 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 fiscal quarter (the registrant's fourth fiscal 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(s) 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.

/s/ Robert M. Patterson

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Robert M. Patterson  
Chairman, President and Chief Executive Officer

February 16, 2017

## CERTIFICATION

I, Bradley C. Richardson, certify that:

1. I have reviewed this Annual Report on Form 10-K of PolyOne Corporation;
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(s) 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 fiscal quarter (the registrant's fourth fiscal 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(s) 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.

/s/ Bradley C. Richardson

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Bradley C. Richardson  
Executive Vice President, Chief Financial Officer

February 16, 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 on Form 10-K of PolyOne Corporation (the "Company") for the year ended December 31, 2016, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Robert M. Patterson, Chairman, President and Chief Executive Officer of the Company, do hereby certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to my 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.

/s/ Robert M. Patterson

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Robert M. Patterson  
Chairman, President and Chief Executive Officer

February 16, 2017

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

**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 on Form 10-K of PolyOne Corporation (the "Company") for the year ended December 31, 2016, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Bradley C. Richardson, Executive Vice President and Chief Financial Officer of the Company, do hereby certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to my 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.

/s/ Bradley C. Richardson

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Bradley C. Richardson  
Executive Vice President, Chief Financial Officer

February 16, 2017

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

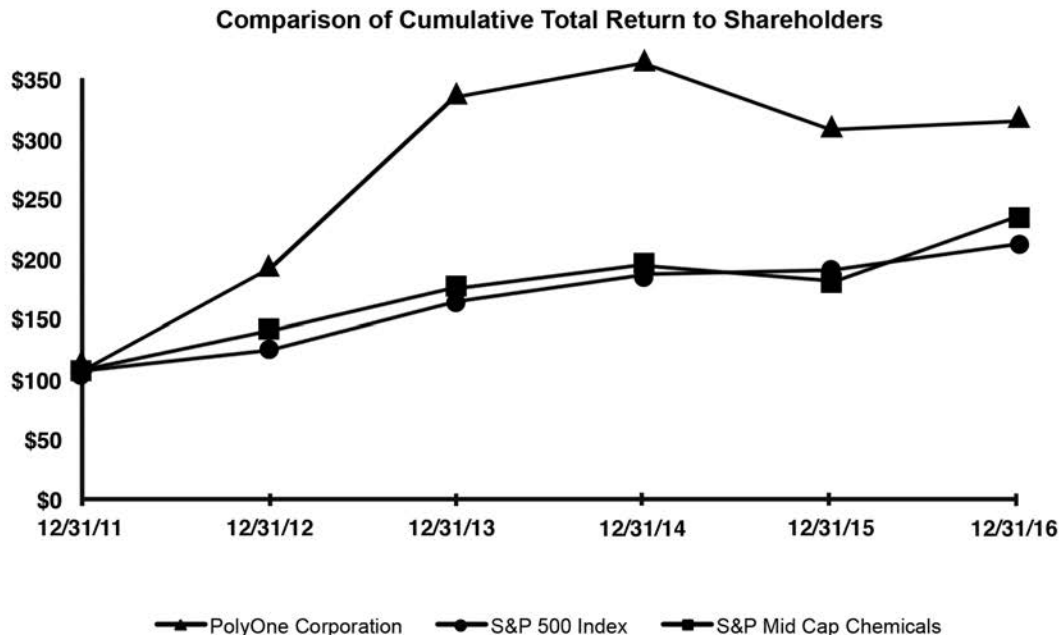
**POLYONE CORPORATION**



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## PolyOne Stock Performance

The following is a graph that compares the cumulative total shareholder returns for PolyOne's common shares, the S&P 500 index and the S&P Mid Cap Chemicals index, with dividends assumed to be reinvested when received. The graph assumes the investing of \$100 from December 31, 2011 through December 31, 2016. The S&P Mid Cap Chemicals index includes a broad range of chemical manufacturers. Because of the relationship of PolyOne's business within the chemical industry, comparison with this broader index is appropriate.



### STOCK EXCHANGE LISTING

PolyOne's Common Stock is listed on the New York Stock Exchange, Symbol: POL.

### SHAREHOLDER INQUIRIES

If you have any questions concerning your account as a shareholder, name or address changes, inquiries regarding stock certificates, or if you need tax information regarding your account, please contact our transfer agent:

Wells Fargo Shareowner Services  
1110 Centre Pointe Curve, Suite 101  
Mendota Heights, MN 55120-4100  
Phone: 1-855-598-2815  
or 1-651-450-4064  
www.shareowneronline.com

**Additional information about PolyOne, including current and historic copies of Annual Reports on Form 10-K and other reports filed with the Securities and Exchange Commission, is available online at [www.polyone.com](http://www.polyone.com) or free of charge from:**

Investor Affairs Administrator  
PolyOne Corporation  
33587 Walker Road  
Avon Lake, Ohio 44012  
Phone: 440-930-1000

### ANNUAL MEETING

The annual meeting of shareholders of PolyOne will be held May 11, 2017 at 9:00 a.m. at PolyOne's Corporate headquarters, 33587 Walker Road, Avon Lake, Ohio. The meeting notice and proxy materials were mailed to shareholders with this annual report. PolyOne urges all shareholders to vote their proxies so that they can participate in the decisions at the annual meeting.

### FINANCIAL INFORMATION

Security analysts and representatives of financial institutions are invited to contact:

Eric R. Swanson  
Director, Investor Relations  
Phone: 440-930-1018  
Email: [eric.swanson@polyone.com](mailto:eric.swanson@polyone.com)

### AUDITORS

Ernst & Young LLP  
950 Main Ave., Suite 1800  
Cleveland, OH 44113

### INTERNET ACCESS

Information on PolyOne's products and services, news releases, corporate governance, EDGAR filings, Reports on Forms 10-K and 10-Q, etc. as well as an electronic version of this annual report, are available on the Internet at [www.polyone.com](http://www.polyone.com).



PolyOne Corporation Board of Directors (Left to Right): Gregory J. Goff, William H. Powell, Sandra B. Lin, Richard A. Lorraine, William A. Wulfsohn, Robert M. Patterson, Farah M. Walters, Richard H. Fearon, William R. Jellison, and Kerry J. Preete. Not pictured: Kim Ann Mink

## CORPORATE OFFICERS

### ROBERT M. PATTERSON

Chairman, President and Chief Executive Officer

### BRADLEY C. RICHARDSON

Executive Vice President, Chief Financial Officer

### RICHARD N. ALTICE

Senior Vice President, President of Designed Structures and Solutions

### MARK D. CRIST

Senior Vice President, President of Distribution

### GIUSEPPE Di SALVO

Vice President, Corporate Controller

### CATHY K. DODD

Vice President, Marketing

### MICHAEL A. GARRATT

Senior Vice President, Chief Commercial Officer

### AVERY L. JOHNSON

Vice President, Tax

### HOLGER KRONIMUS

Vice President, Europe, General Manager, Engineered Materials, Europe

### LISA K. KUNKLE

Senior Vice President, General Counsel and Secretary

### M. JOHN MIDEA, JR.

Senior Vice President, Global Operations and Process Improvement

### DR. CHRISTOPHER J. MURPHY

Vice President, Research and Development, Chief Innovation Officer

### CRAIG M. NIKRANT

Senior Vice President, President of Specialty Engineered Materials

### JOEL RATHBUN

Senior Vice President, Mergers & Acquisitions

### JOÃO JOSÉ

**SAN MARTIN NETO**  
Senior Vice President, Chief Human Resources Officer

### KURT C. SCHUERING

Vice President, Global Key Account Management

### JAMES N. SLOAN

Vice President, Treasurer

### JOHN V. VAN HULLE

Senior Vice President, President of Color, Additives and Inks

### DONALD K. WISEMAN

Senior Vice President, President of Performance Products and Solutions

## BOARD OF DIRECTORS

### ROBERT M. PATTERSON

Chairman, President and Chief Executive Officer, PolyOne Corporation  
Committee: 3

### RICHARD H. FEARON

Lead Director, PolyOne Corporation  
Vice Chairman and Chief Financial and Planning Officer, Eaton  
Committees: 1, 4\*

### GREGORY J. GOFF

Chairman, President and Chief Executive Officer, Tesoro Corporation and Chairman and Chief Executive Officer, Tesoro Logistics  
Committees: 3\*, 4

### WILLIAM R. JELLISON

Retired Vice President, Chief Financial Officer, Stryker Corporation  
Committee: 1

### SANDRA B. LIN

Retired President, Chief Executive Officer and Director, Calisolar Inc. (now Silcor Materials)  
Committees: 1, 3

### RICHARD A. LORRAINE

Retired Senior Vice President and Chief Financial Officer, Eastman Chemical Company  
Committees: 1\*, 4

### KIM ANN MINK

Chairman, President and Chief Executive Officer, Innophos Holdings, Inc.  
Committee: 3

### WILLIAM H. POWELL

Retired Chairman and Chief Executive Officer, National Starch and Chemical Company  
Committee: 2\*

### KERRY J. PREETE

Executive Vice President, Global Strategy, Monsanto Company  
Committees: 2, 3

### FARAH M. WALTERS

President and Chief Executive Officer, QualHealth, LLC  
Committees: 2, 4

### WILLIAM A. WULFSOHN

Chairman and Chief Executive Officer, Ashland Global Holdings, Inc.  
Committees: 1, 2

#### COMMITTEES

1. Audit
2. Compensation
3. Environmental, Health and Safety
4. Nominating & Governance

\* Denotes Chairperson





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ANNUAL REPORT 2016

