Chemtura CORP

Form 10-K

February 22, 2016

U.S. SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

x ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the fiscal year ended December 31, 2015

OR

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

For the transition period from to

Commission File No. 1-15339

Chemtura Corporation

(Exact name of registrant as specified in its charter)

Delaware 52-2183153

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

1818 Market Street, Suite 3700, Philadelphia, Pennsylvania
19103
199 Benson Road, Middlebury, Connecticut
(Address of principal executive offices)
(Zip Code)

Registrant's telephone number, including area code: (203) 573-2000

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

Title of each class

Name of each exchange on which registered

Common Stock, \$0.01 par value New York Stock Exchange

Securities registered pursuant to Section 12(g) of the

Act:

NONE

Indicate by check mark whether the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes x No o

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 o No x

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 x No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes x No o

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 is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See definition of "accelerated filer," "large accelerated file" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check off):

Large accelerated filer x Accelerated filer o Non-accelerated filer o Smaller reporting company o

(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 o No x

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant, computed as of June 30, 2015, based on the value of the closing price of these shares as quoted on the New York Stock Exchange was \$1.9 billion.

The number of voting shares of Common Stock of the registrant outstanding as of January 31, 2016 was 66.1 million. Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Section 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court. Yes x No o

#### DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Proxy Statement to be delivered to shareholders in connection with the Annual Meeting of Shareholders to be held on May 5, 2016 are incorporated by reference into Part III.

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#### Note About Forward-Looking Statements

Certain statements in this report, other than purely historical information, including estimates, projections, statements relating to our business plans, objectives and expected operating results, and the assumptions upon which those statements are based, are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Forward-looking statements may appear throughout this report, including without limitation, in the following sections: "Business", "Risk Factors" and "Management's Discussion and Analysis." These forward-looking statements generally are identified by the words "believe," "project," "expect," "anticipate," "estimate," "intend," "strategy," "future," "opportunity," "should," "will," "would," "will be," "will continue," "will likely result," and similar expressions. Forward-looking statements based on current expectations and assumptions that are subject to risks and uncertainties which may cause actual results to differ materially from the forward-looking statements. A detailed discussion of risks and uncertainties that could cause actual results and events to differ materially from such forward-looking statements is included in the section entitled "Risk Factors" (See Part I, Item 1A of this Form 10-K). We undertake no obligation to update or revise publicly any forward-looking statements, whether as a result of new information, future events, or otherwise.

#### Item 1: Business

When we use the terms "Corporation," "Company," "Chemtura," "Registrant," "We," "Us" and "Our," unless otherwise indicated context otherwise requires, we are referring to Chemtura Corporation and our consolidated subsidiaries.

GENERAL

We are a leading global developer, manufacturer and marketer of performance-driven engineered industrial specialty chemicals. Most of our products are sold to industrial manufacturing customers for use as additives, ingredients or intermediates that add value to their end products. We are committed to global sustainability through "greener technology" and developing engineered chemical solutions that meet our customers' evolving needs. Our Industrial Performance Products segment is a global manufacturer and marketer of high-performance lubricant additive components, synthetic lubricant base-stocks, synthetic finished fluids, high-performing calcium sulfonate specialty greases and phosphate and polyester based fluids. This segment is also a leader in the development and production of hot cast elastomer pre-polymers. Our Industrial Engineered Products segment is a global developer and manufacturer of bromine and bromine-based products and organometallic compounds.

We are the successor to Crompton & Knowles Corporation which was incorporated in 1900 and through several acquisitions and divestitures since that time we renamed ourselves Chemtura Corporation in 2005. Our most recent focus has been on transforming our business portfolio into an operating company focused primarily on serving the global industrial specialty chemical market and on returning value to our stockholders. In 2013, we divested our antioxidants and UV stabilizers ("Antioxidants") and Consumer Products businesses, and in 2014 we divested our Chemtura AgroSolutions business. In 2015, we delivered on our commitment to improve our operations, management structure and operating efficiency which has positioned us to grow our future net sales, profitability and cash flows. Our principal executive offices are located at 1818 Market Street, Suite 3700, Philadelphia, Pennsylvania 19103 and at 199 Benson Road, Middlebury, Connecticut 06749. Our telephone numbers in Philadelphia, Pennsylvania and Middlebury, Connecticut are (215) 446-3911 and (203) 573-2000, respectively. Our Internet Web site address is www.chemtura.com. We make available free of charge on or through our Internet Web site (www.chemtura.com) our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as soon as reasonably practicable after we electronically file such material with, or furnish to, the Securities and Exchange Commission.

Our Corporate Governance Principles, Code of Business Conduct and charters of our Audit, Compensation & Governance and Environmental, Health & Safety Committees are available on our Internet Web site and free of charge to any stockholder who requests them from the Corporate Secretary at Chemtura Corporation, 199 Benson Road, Middlebury, CT 06749. The information contained on our Internet Web site is not incorporated by reference into this Annual Report on Form 10-K and should not be considered a part of this Annual Report. Financial information for each of our segments discussed below can be found in Note 16 - Business Segments in our Notes to Consolidated Financial Statements.

#### **OUR COMPETITIVE STRENGTHS**

We believe our key competitive strengths are:

Our Key Businesses Have Industry Leading Positions: Our key businesses and many of our products hold leading positions within the various industries they serve. We believe our scale and global reach in product development and marketing provide us with advantages over many of our smaller competitors.

#### **B**road Diversified Business:

Geographic Diversity. Our worldwide manufacturing, sales and marketing network enables us to serve the needs of both local and global customers worldwide. As of December 31, 2015, we operated 20 manufacturing facilities in 11 countries. For the year ended December 31, 2015, 46% of our net sales were generated in the United States and Canada, 29% from Europe and Africa, 21% from Asia/Pacific and 4% from Latin America. We market and sell our products in approximately 90 countries, providing the opportunity to develop new markets for our products in higher-growth regions. We have built upon our historical strength in the United States and Europe to expand our business geographically, thereby diversifying our exposure to many different economies.

#### **GEOGRAPHIC INFORMATION**

Product and Industry Diversity. We are comprised of a number of distinct businesses based on different chemistries, each of which is subject to a set of varied industry trends. Additionally, the product lines of each of our businesses serve a variety of industries and applications, thereby providing us with further diversification.

Diversified Customer Base. We have a large and diverse global customer base in a broad array of industries and applications. No single customer comprises more than ten percent of our consolidated 2015 net sales. Unique Industry Positions: We believe our businesses possess significant differentiation within their respective industry segments. Some of our businesses are vertically integrated into key feedstocks or have long lead time product

registrations or technical and formulatory know-how. We believe these attributes are difficult to replicate and allow us to attract customers looking for consistent performance, reliability and cost-effective results, and are distinct competitive advantages. Examples include:

Our Industrial Performance Products segment participates in a production joint venture that produces cost competitive alkylated diphenylamine, a building block for our Naugalube® antioxidants used in lubricants, and develops urethane systems, the production of which is enhanced by our technical and formulatory know-how that permits us to engineer our products to meet specific customer needs.

Our Industrial Engineered Products segment has a strong diversified position in bromine with an extensive brine field operation in South Arkansas and long-term strategic sourcing agreements that provide access to Dead Sea and additional South Arkansas bromine. Bromine is used as a building block for products such as flame retardants used in automotive, electronics, building and construction, and brominated derivatives used in pharmaceutical, agriculture, and energy-based industry segments. Our high-purity organometallics products are based on more than 50 years of innovation and safe handling and provide state of the art solutions to rapidly developing new applications such as the chemical vapor deposition of metal oxide layers in electronics and photovoltaics, pharmaceutical synthesis reagents and next generation polymerization catalysts.

Well Positioned to Expand in the Faster Growing Regions: Our businesses' product portfolios have positioned us to benefit from high-growth regions in the future. We derived 25% of our revenues during 2015 from the faster growing regions of Asia/Pacific and Latin America. Despite current economic uncertainty in the faster growing regions, we will continue to build our presence in these regions as we believe that their polymer production will increase, their manufacturing of electronic products will expand and their automotive industries will build vehicles that have to meet emission standards such that they can be exported to western markets. There are a limited number of suppliers that can supply the products or provide the technical support that customers in these regions require, giving us the opportunity to capture this growth in demand for our products. We have completed the construction of a multi-purpose manufacturing plant in China which has commenced production of high-performance specialty greases and synthetic lubricants and is expected to commence production of high-performance urethane products in early 2016.

#### **OUR STRATEGY**

Our primary goal is to create value for our stakeholders by driving profitable revenue growth while continuing to manage our costs. We will develop and engineer new products, processes and applications, leverage our global scale for regional growth and manage our portfolio of industrial specialty chemical businesses. Our efforts are directed by the following key business strategies:

Technology-Driven Growth through Industry Focused Innovation. As an industrial specialty chemical developer and manufacturer, our competitive strength lies in continually developing and engineering new products and processes that meet our customers' changing needs. We are investing in innovation to strengthen our new product pipelines and to reduce the cost of our products and will license or acquire technologies to supplement these initiatives. We focus on the development of products that are sustainable, meet ecological concerns and capitalize on growth trends in the industries we serve.

Growth Expansion in Faster-Growing Regions through Building Global Scale. We are building our local presence in the faster-growing regions through sales representation, technical development centers, joint ventures and local manufacturing. We empower our regional teams to serve their growing customer base and will supplement these efforts through bolt-on acquisitions that fulfill our goals for our portfolio. We leverage our global scale by sharing service functions and technologies that no one region or business could replicate on its own while utilizing our regional presence to lower raw material costs.

Performance-Driven Culture. We believe we have outstanding people who can deliver superior performance under strong, experienced leaders who instill a culture of accountability. We expect accountability on safety, environmental stewardship, compliance with laws, customer commitments and performance. We are focused on understanding the needs of our customers and meeting such needs by efficiently executing their orders and delivering technology-based solutions that meet their requirements to earn the position as their preferred supplier. We measure our performance against benchmarks and metrics using statistical analysis and drive operational excellence through continuous improvement.

Portfolio and Cost Management. We will continue to build upon our strengths as an industrial specialty chemical company through organic growth complemented by acquisition or merger to expand our global industrial specialty chemical portfolio to maximize their value. As we grow, we may conclude to divest portfolio businesses too. We are intent that any Chemtura portfolio business must have sustainable competitive advantages in the industries and applications it serves and can leverage its technology, scale and customer intimacy required to drive profitable growth at returns in excess of its cost of capital. The ability to leverage global demographic and technology trends combined with our in-depth knowledge and expertise will provide our portfolio businesses with the "right to play" in their chosen

applications. We will continue to drive value-accreting growth fueled by our focus on innovation and the faster-growing

/

regions. We will continue to increase the differentiation of our products while pruning or exiting under-performing products, driving continuous improvement and managing costs.

### Our Business and Segments

Information as to the sales, operating income, depreciation and amortization, assets and capital expenditures attributable to each of our business segments during each of our last three fiscal years, as well as certain geographic information, is set forth in Note 16 - Business Segments in our Notes to Consolidated Financial Statements. The table below illustrates the Industrial Performance Products and Industrial Engineered Products segments net sales

for the year ended December 31, 2015 as well as these segments and segments and segments are segmental. Performance Products		nent's major products, end-use markets and brands.  Industrial  Engineered Products			
2015 Net Sales	\$886 million		\$722 million		
Key Products	<ul><li>Synthetic Lubricants</li><li>Synthetic Basestocks</li><li>Specialty Greases</li></ul>	<ul><li>Lubricant Additives</li><li>Urethanes</li></ul>	<ul><li>Brominated Performance Products</li><li>Flame Retardants</li></ul>	<ul><li>Fumigants</li><li>Organometallics</li></ul>	
Major End-Use Markets					
	<ul> <li>Adhesives</li> </ul>	General Industrial		<ul> <li>Pharmaceuticals</li> </ul>	
	• Automotive	• Lubricants	• Building and Construction	<ul><li>Polymerization Catalysts</li></ul>	
	<ul> <li>Aviation</li> </ul>	• Marine	<ul> <li>Coatings</li> </ul>	• Energy	
	<ul><li>Building and Construction</li></ul>	• Mining	• Consumer Durables	- Mercury Control	
	<ul><li>Coatings</li><li>Consumer Products</li><li>Energy</li></ul>	<ul><li>Packaging</li><li>Refrigeration</li><li>Sealants</li></ul>	<ul><li>Electronics</li><li>Furniture</li><li>Fine Chemical</li><li>Fumigants</li><li>Oil and Gas Exploration</li></ul>	<ul><li>Oilfield</li><li>Photovoltaic</li><li>Paints and Coatings</li><li>Polymerization</li><li>Transportation</li></ul>	
Key Brands					
•	Adiprene®	Naugalube®	Axion®	Ongard®	
	Anderol®	Reolube®	DayStar <sup>TM</sup>	Pyrobloc®	
	Durad®	Royco®	Emerald Innovation®	Reofos®	
	Everest® Fomrez®	Synton® Vibrathane®	Firemaster® Fyrebloc <sup>TM</sup>	Smokebloc® Thermoguard®	
	Hatcol®	Witcobond®	GeoBrom®	Timonox®	
	Hybase®	" Iteobolide	Kronitex®	1 IIIIOIIOA	
	Lobase®		Meth-o-Gas®		

#### **Industrial Performance Products**

The Industrial Performance Products segment develops, manufactures and markets specialty performance chemicals, formulations and polymers. Industrial Performance Products include:

synthetic base-stocks and petroleum additives that enable engine and machine protection through friction reduction, thermal and oxidative stabilization, detergency, corrosion inhibition, and wear protection in transportation and industrial lubricating fluids and greases;

specialty synthetic finished lubricants and greases for aviation, marine, refrigeration, power generation and general industrial applications;

thermoset and thermoplastic urethane polymers engineered to provide superior performance properties in a broad range of industrial and recreational applications; and

polyester polyols for cast polyurethane pre-polymers, flexible polyurethane foams and water-based polyurethane dispersions used in various types of coatings such as wood floor finishes, glass fiber coatings and textile treatments.

These products are supplied to our customers globally through diverse sales channels including selected distribution channel partners.

The Industrial Performance Products segment had net sales of \$886 million for 2015, \$987 million for 2014 and \$979 million for 2013. This segment represented 51%, 45% and 44% of our total net sales in 2015, 2014 and 2013, respectively. The major product offerings of this segment are described below and in the table above. Petroleum Additives

We are a global manufacturer and marketer of high-performance base-stocks, additive components, finished synthetic lubricants and specialty greases. Our position along multiple parts of the value chain provides us with unique insight into industry needs and requirements, enabling us to design and develop differentiated solutions for our "blue-chip" customer base.

Our specialty synthetic lubricant base-stocks, including high-viscosity SYNTON® polyalphaolefins, REOLUBE® phosphate esters, and a broad portfolio of HATCOL® esters, are used in automotive, aviation, refrigeration, hydraulic systems and various industrial applications. These synthetic base-stocks offer performance benefits versus non-synthetic base-stocks, especially when operating under extreme conditions of temperature or load. Benefits of our synthetic base-stocks include improved thermal stability, oxidative stability, and lower volatility, providing extended drain intervals and reduced oil consumption. Additionally, REOLUBE® phosphate esters provide fire-resistant capability that allows the safe operation of equipment under high-risk situations, such as in nuclear power plants. Our specialty additive components, such as NAUGALUBE® alkylated diphenylamine antioxidants, play a critical role in meeting rising regulatory mandated automotive standards for engine performance and emissions as well as consumer demand for improved fuel economy and longer service intervals. Our oil-soluble HYBASE® and LOBASE® calcium sulfonate surfactants enable lubricants to keep car, truck and ship engines clean with minimal wear by providing detergency and corrosion protection properties. Additionally, we market a specially-developed overbased magnesium sulfonate detergent to prevent corrosion in turbines which burn heavy fuels for electrical power generation.

Our ANDEROL® and ROYCO® branded specialty and synthetic finished lubricants come with extensive original equipment manufacturer approvals for the aerospace & defense and industrial markets. Additionally, ROYCO® lubricants are approved under the specifications of U.S. military agencies and approving bodies including the US Department of Defense and the Society of Automotive Engineers. We manufacture and sell calcium sulfonate specialty greases and phosphate ester-based fluids for extreme temperature applications, thereby increasing machine durability under harsh conditions. In addition to our branded lubricants, we also manufacture private label finished lubricants for key customers.

#### Urethanes

We are a leading global supplier of a broad range of low-free monomer and high-performance conventional cast urethane pre-polymers, thermoplastic polyurethanes, custom curatives and urethane chemicals serving a variety of industries. We serve our customers in each region with a dedicated technical team, which, together with our product and formulation development capabilities, allow us to differentiate ourselves in these markets by tailoring our products to the specialized needs of each customer application.

Cast polyurethane products produced from our ADIPRENE® and VIBRATHANE® urethane pre-polymers offer high durability, abrasion resistance, cut resistance, high temperature resistance and chemical resistance for performance-oriented applications. These characteristics allow us to market our urethane pre-polymers for customer applications where such performance qualities are critical, such as oil field pipeline cleaning pigs, industrial printing rolls, mining machinery, semiconductor polishing pads, solid industrial tires and wheels, sporting goods and roller coaster wheels.

Our ULTRALAST® thermoplastic polyurethane ("TPU") polymers can be used in a variety of high performance applications in the oil and gas, mining, construction, and sports equipment industries. ULTRALAST® TPU offers not only superior dynamic properties and longer component life in harsh environments, but also certain processing advantages for our customers.

Our urethane chemicals business consists primarily of two product lines. FOMREZ® polyester polyols serve as raw materials for our pre-polymer line of products and are also utilized in industrial applications such as flexible foam for seating. WITCOBOND® polyurethane dispersions serve a more diverse customer base and are primarily utilized for

glass fiber sizing, wood floor coatings and ballistics protection applications.

#### **Industrial Engineered Products**

We are a global leader in manufacturing and selling engineered specialty chemicals utilized in the plastics, agriculture, fine chemicals, oil and gas, building and construction, insulation, electronics, mercury control, solar energy, pharmaceutical and automotive industries. Our products include catalyst components, surface treatments, flame retardants and an extensive bromine based product line used as agricultural and pharmaceutical intermediates, completion fluids for oil and gas extraction and mercury control products for coal fired power stations. These products are sold across the entire value chain ranging from direct sales to monomer producers, polymer manufacturers, compounders and fabricators, fine chemical and pharmaceutical manufacturers, photovoltaic panel and LED producers, oilfield service and electricity generation companies to industry distributors.

The Industrial Engineered Products segment had net sales of \$722 million for 2015, \$800 million for 2014 and \$803 million for 2013. This segment represented 41%, 37% and 36% of our total net sales in 2015, 2014 and 2013, respectively. The major product offerings of this segment are described below and in the table above. Great Lakes Solutions

Great Lakes Solutions is a leading global manufacturer and marketer of bromine, bromine intermediates and flame retardant products and solutions. We deliver sustainable value to our customers and shareholders through industry diversification, fire safety advocacy and business excellence. Our flame retardant products are used in applications such as electronic components, electrical enclosures and building products, including insulation and furniture foam, and automotive, while bromine and bromine intermediates are used in the manufacture of a wide variety of industrial and consumer products and energy producing industries.

Fire kills thousands of people each year throughout the world, but many are spared because fires are slowed or never start due to the use of flame retardants. Great Lakes Solutions is a leading global producer of safe and cost-efficient flame retardants, which reduce or eliminate the flammability of a wide variety of combustible materials. Our additives help stop fire before it starts by resisting ignition and slowing the rate of combustion and are used in a wide variety of applications, including flexible and rigid foams, fabrics and furniture, auto interiors and under the hood, circuit boards and electrical connectors, computer cabinetry and wiring in building and construction. We work tirelessly to advocate for increased fire safety standards in new and developing economies and, for more than 40 years, we have helped our customers by providing the broadest portfolio of flame retardant products and solutions. We continue to offer new products with exceptional performance along with environmentally friendly characteristics leading to enhanced long-term sustainability. Our leading products include the Emerald Innovation® Series, Firemaster® bromine-based flame retardants; Kronitex®, Reofos® phosphorus-based flame retardants; Fyrebloc<sup>TM</sup> flame retardants; Fire Shield® LSFR, Ongard®, Oncor<sup>TM</sup>, Pyrobloc®, Smokebloc®, Thermoguard® / Timonox® / Trutint® antimony-based flame retardants/synergists; and PetCat® antimony-based catalysts.

Great Lakes Solutions is one of the world's leading manufacturers of bromine and bromine intermediates which are utilized in many industries including agrochemicals, pharmaceuticals, fine chemicals, butyl rubber, polymers and biocides. Bromine and bromine based intermediates serve as building blocks for developing and engineering highly complex organic molecules that meet specific performance, environmental and quality requirements. Our expertise in bromine and bromine based chemicals, both in the lab and in full scale production, is built on a foundation of over 60 years of innovation and continuous improvement. Our state of the art Naugatuck Research Campus is staffed by a team of highly experienced scientists skilled in a wide array of synthetic methods and chemical manufacturing processes. We also operate multi-purpose, flexible pilot facilities that enable us to readily scale up new products and processes from grams to tonnes before the commitment to full scale production. While primarily focused on providing the highest quality and most reliable bromine and brominated intermediate products, our technology team also provides custom synthesis and process development services to customers seeking a development partner. With access to the world's two main sources of bromine and a modern bromine ISO tank fleet with in-house maintenance capability, Great Lakes Solutions is positioned as the supplier of choice.

Great Lakes Solutions' high quality, solids-free clear brine fluids are an important part of oil exploration and development which are used in the preparation of well equipment for production including insertion of liners, screens, packers and other equipment. Bromide fluids are unique in that they are high density fluids that are suitable for deepwater production and also for high temperature and high pressure oil and gas formations. They allow for well pressure control and help to protect the formation so that oil and gas production is both efficient and economical. Our

specialty brine fluids are available in a wide range of densities to meet the unique pressure characteristics of each well and meet the stringent requirements of the oil and gas industry. Bromide fluids are also used for deepwater fracturing operations in order to provide the necessary pressure in the well to successfully fracture the geological formation area that supplies oil and gas to the wellbore so that higher volumes flow to the production piping.

Rounding out our portfolio, our GeoBrom® line of bromine and bromine derivative products is another example of environmentally friendly innovation where we deploy our technology expertise to provide a solution to controlling mercury emissions from coal-fired power stations. Great Lakes Solutions has a strong position in the United States for bromine production based on access to quality brine resources in areas of South Arkansas which can be economically developed to manufacture high quality bromine for sale to customers or for use to manufacture products like GeoBrom® mercury control solutions.

Great Lakes Solutions is a global business with expanding footprint and services. Through our strategic geographic and operational initiatives, we have significantly expanded our ISO fleet capabilities. We are backwardly integrated to brine, a primary source of bromine and since 2009 we have invested a significant amount of capital in infrastructure to redeploy our assets to produce new sustainable innovative brominated flame retardants and increase the efficiency and reliability of our plants and pipelines. Great Lakes Solutions is well-positioned to support not only growth of our traditional industry segments but also to provide security of supply with expansion capability to our mercury control customers. Operational excellence initiatives are being designed to bring an improved, cost-competitive and service-oriented footprint to our customers globally.

#### Organometallics

Organometallics are a special group of metals containing organic chemicals which play a significant role in a variety of industrial applications. Organometallics are essential catalyst components used to initiate the polymerization reactions that transform monomers into polymers and cure certain paints. They are also used as precursors in glass coatings, chemical vapor deposition agents in the production of semiconductors, LEDs and photovoltaic panels, as well as reagents used in the production of pharmaceutical intermediates.

Building on more than 50 years' experience, Chemtura Organometallics Specialties ("OMS") recently embarked on a series of infrastructure investments, enhanced our portfolio of world-class products and renewed our commitment to delivering customer value. The result is a leaner OMS business and stronger global partner for the development, manufacture and marketing of an impressive array of specialty organometallic products.

Leveraging our history of strength, OMS is poised for a future of growth in a range of high-performance products that serve the fastest growing organometallics applications, such as Ziegler-Natta and single-site catalyst systems, high-brightness LED and semiconductors, photovoltaic (solar panels), pharmaceuticals and fine chemicals, coating catalysts and PVC stabilizer precursors.

#### PREVIOUSLY DIVESTED BUSINESSES

#### Chemtura AgroSolutions Business

In November 2014, we sold our Chemtura AgroSolutions business to Platform Specialty Products Corporation ("Platform"). Under the terms of the sale, we retained most of the property, plant and equipment used to manufacture products for the Chemtura AgroSolutions business and will continue to manufacture products for Platform under several supply agreements and a tolling agreement (collectively, the "supply agreements") with minimum terms between two and four years. The supply agreements include contractual obligations to continue to supply for a period of up to 2 years after the termination of the supply agreement. In alignment with the change in the nature of operations, we changed the name of this segment from Chemtura AgroSolutions to Agrochemical Manufacturing.

This divestiture did not meet the criteria to be reported as a discontinued operation due to the continuing involvement in the supply agreements. Therefore, the results of our continuing operations for each of the periods covered in this report include the results of the Chemtura AgroSolutions business through the date of sale as well as the results of the Agrochemical Manufacturing business associated with the post-closing supply agreements from the date of sale through December 31, 2015.

The Agrochemical Manufacturing segment since the date of sale reflects the supply of products to Platform in accordance with the terms of the supply agreements. Contemporaneous with the sale, we no longer market the Chemtura AgroSolutions business products to third parties.

Information related to the sale of our Chemtura AgroSolutions business and financial information related to the Agrochemical Manufacturing segment can be found in Note 2 - Divestitures and Note 16 - Business Segments in our Notes to Consolidated Financial Statements.

Divestitures Reported as Discontinued Operations

In December 2013, we sold our subsidiaries that constituted our Consumer Products business to KIK Custom Products Inc. ("KIK"). The assets of those subsidiaries included dedicated manufacturing plants in the U.S. and South Africa. The Consumer Products business developed, manufactured and sold pool and spa cleaning and treatment products and household cleaner products.

In April 2013, we sold our Antioxidant business to SK Blue Holdings, Ltd. ("SK"), an affiliate of SK Capital Partners III, L.P. The sale included dedicated manufacturing plants in the U.S., France, and Germany, and joint venture interests in the Kingdom of Saudi Arabia and Korea. The Antioxidant business was a worldwide manufacturer and supplier of plastic antioxidants used to strengthen polymers and polymer parts as well as protect polymer parts from the harmful effects of UV light.

For further discussion of these divestitures, see Note 2 - Divestitures in our Notes to Consolidated Financial Statements.

Sources of Raw Materials

Hydrocarbon-based and inorganic chemicals constitute the majority of the raw materials required to manufacture our products. These materials are generally available from a number of sources. We use significant amounts of chemicals derived from ethylene, propylene, benzene, iso-and, n-butane and n-Octene as well as ethyl and butylchlorides, palm and coconut oil, methanol, phosphorus and urea. In addition, chlorine, caustic, other petrochemicals and metals like tin, aluminum and zinc represent some key materials used in our chemical manufacturing processes. Major requirements for key raw materials are purchased typically pursuant to multi-year contracts. Large increases in the cost of such key raw materials, as well as natural gas, which powers some of our key production facilities, could adversely affect our operating margins if we are not able to pass the higher costs on to our customers through higher sales prices. While temporary shortages of raw materials we use may occur occasionally, key raw materials have generally been available. However, there can be no assurance that unforeseen developments (including markets and political and regulatory conditions) will not affect our raw material supplies, their continuing availability and their cost. For additional information related to these risks, see Item 1A. - Risk Factors.

Seasonal Business

No material portion of our Industrial Performance Products or Industrial Engineered Products business is significantly seasonal.

**Employees** 

We had approximately 2,500 full time employees at December 31, 2015.

Backlog

We do not consider backlog to be a significant indicator of the level of future sales activity. In general, we do not manufacture our products against a backlog of orders. Production and inventory levels are based on the level of incoming orders as well as projections of future demand. Therefore, we believe that backlog information is not material to understanding our overall business and should not be considered a reliable indicator of our ability to achieve any particular level of sales or financial performance.

**Competitive Conditions** 

The breadth of our product offering provides multiple channels for growth and mitigates our dependence on any one market or end-use application. We sell our products in approximately 90 countries. This worldwide presence reduces our exposure to any one country's or region's economy although a majority of our sales are in North America and Europe

We have a broad customer base and believe that our products, many of which we customize for the specific needs of our customers, allow us to enhance customer loyalty and attract customers that value product innovation and reliable supply.

Product performance, quality, price and technical and customer service are all important factors in competing in substantially all of our businesses.

We face significant competition in many of the industries in which we operate due to the trends toward global expansion and consolidation by competitors. Some of our existing competitors are larger than we are and may have more resources and better access to capital markets for continued expansion or new product development than we do. Some of our competitors also have

a greater product range, are more vertically integrated or have better distribution capability than we do for specific products or geographical areas.

### Research and Development

All of our businesses conduct research and development activities to increase competitiveness. Our businesses conduct research and development activities to develop new and optimize existing production technologies, as well as to develop commercially viable new products and applications while also maintaining existing product registrations required by regulatory agencies and customers around the world. Our research and development expense totaled \$20 million in 2015, \$36 million in 2014 and \$40 million in 2013.

#### **Intellectual Property and Licenses**

We attach great importance to patents and trademarks in order to protect our investment in research and development, manufacturing and marketing. Our policy is to seek wide protection for significant products and process developments on our major applications. We also seek to register trademarks extensively as a means of protecting the brand names of our products.

We have approximately 900 United States and foreign granted patents and pending patent applications and approximately 1,000 United States and foreign registered and pending trademarks. Patents, trademarks, trade secrets in the nature of know-how, formulations, and manufacturing techniques assist us in maintaining the competitive position of certain of our products. Our intellectual property is of particular importance to a number of specialty chemicals we manufacture and sell. However, we do business in countries where protection may be limited and difficult to enforce. We are licensed to use certain patents and technology owned by other companies, including some foreign companies, to manufacture products complementary to our own products, for which we pay royalties in amounts not considered material, in the aggregate, to our consolidated results.

Neither our business as a whole nor any particular segment is materially dependent upon any one particular patent, trademark, copyright or trade secret.

### Regulatory Matters

Chemical companies are subject to extensive environmental laws and regulations concerning, among other things, emissions to the air, discharges to land, surface, subsurface strata and water and the generation, handling, storage, transportation, treatment and disposal of hazardous waste and other materials. Chemical companies are also subject to other federal, state, local and foreign laws and regulations regarding health and safety matters.

Environmental Health and Safety Regulation - We believe that our business, operations and facilities are being operated in substantial compliance, in all material respects, with applicable environmental, health and safety laws and regulations, many of which provide for substantial fines and criminal sanctions for violations. The ongoing operations of chemical manufacturing plants, however, entail risks in these areas and there can be no assurance that material costs or liabilities will not be incurred. In addition, future developments of environmental, health and safety laws and regulations and related enforcement policies, could bring into question the handling, manufacture, use, emission or disposal of substances or pollutants at facilities we own, use or control. These developments could involve potential significant expenditures in our manufacture, use or disposal of certain products or wastes. To meet changing permitting and regulatory standards, we may be required to make significant site or operational modifications, potentially involving substantial expenditures and reduction or suspension of certain operations. In 2015, we incurred \$13 million of costs for capital projects and \$54 million for operating and maintenance costs related to environmental, health and safety programs at our facilities. In 2016, we expect to incur approximately \$15 million of costs for capital projects and \$53 million for operating and maintenance costs related to environmental, health and safety programs at our facilities. During 2015, we paid \$14 million to remediate previously utilized waste disposal sites and current and past facilities. We expect to spend approximately \$15 million during 2016 to remediate such waste disposal sites and current and former facilities.

#### Item 1A: Risk Factors

The most significant risks that could materially and adversely affect our financial condition, results of operations or cash flows include, but are not limited to, the factors described below. Except as otherwise indicated, these factors may or may not occur and we cannot predict the likelihood of any such factor occurring.

We operate on an international scale and are exposed to risks in the countries in which we have significant operations or interests.

We are dependent, in large part, on the economies of the countries in which we manufacture and market our products. Of our 2015 net sales, 46% were to customers in the United States and Canada, 29% to Europe and Africa, 21% to the Asia/Pacific region and 4% to Latin America. As such, we are subject to risks inherent in multinational operations. Those risks include:

compliance with U.S. laws affecting operations outside of the United States, such as Office of Foreign Assets Control trade sanction regulations and anti-boycott regulations;

compliance with anti-corruption laws, including Foreign Corrupt Practices Act and U.K. Bribery Act;

compliance with antitrust and competition laws, data privacy laws, and a variety of other local, national and multi-national regulations and laws in multiple regimes;

changes in tax laws, interpretation of tax laws and tax audit outcomes;

fluctuations or devaluations in currency values, especially in emerging markets;

changes in capital controls, including currency exchange controls, government currency policies or other limits on our ability to import raw materials or finished product or repatriate cash from outside the United States;

changes in local regulations and laws, the uncertainty of enforcement of remedies in foreign jurisdictions, and foreign ownership restrictions and the potential for nationalization or expropriation of property or other resources; discriminatory or conflicting fiscal policies;

increased sovereign risk, such as default by or deterioration in the economies and credit worthiness of local governments;

varying abilities to enforce intellectual property and contractual rights;

greater risk of uncollectible accounts and longer collection cycles:

design and implementation of effective control environment processes across our diverse operations and employee base; and

imposition of more or new tariffs, quotas, trade barriers, and similar restrictions on our sales or regulations, taxes or policies that might negatively affect our sales.

In addition, political and economic changes or volatility, geopolitical regional conflicts, terrorist activity, political unrest, civil strife, acts of war, public corruption, expropriation and other economic or political uncertainties could interrupt and negatively affect our business operations or customer demand. A slowdown in economic growth or high unemployment in some emerging markets could constrain consumer spending, and declining consumer purchasing power could adversely impact our profitability. Continued instability in the banking and governmental sectors of certain countries in the European Union and in emerging markets could adversely affect us. All of these factors could result in increased costs or decreased revenues, and could materially and adversely affect our product sales, financial condition and results of operations.

Increases in the price of the raw materials or energy utilized for our products may have a material adverse effect on our operating results.

We purchase significant amounts of raw materials and energy for our businesses. The cost of these raw materials and energy, in the aggregate, represents a substantial portion of our operating expenses. The prices and availability of the raw materials we utilize vary with market conditions and may be highly volatile. From time to time in the past, we have experienced significant cost increases in purchase of raw materials and energy which has had a negative impact on our operating results.

Although we have attempted, and will continue to attempt, to match increases in the prices of raw materials or energy with corresponding increases in sales prices for the products produced with these materials, we may not be able to immediately raise product prices, if at all. Ultimately, our ability to pass on increases in the cost of raw materials or energy to customers is highly dependent upon market conditions. Specifically, there is a risk that raising prices charged to our customers could result in a loss of sales volume. In the past, we have not always been able to pass on

increases in the prices of raw materials and energy to our customers, in whole or in part, and there will likely be periods in the future when we will not be able to pass on these price increases. Reactions by our customers and competitors to our price increases could cause us to reevaluate and possibly reverse such price increases, which would negatively affect operating results.

Any disruption in the availability of the raw materials or energy utilized for our products may have a material adverse effect on our operating results.

Across our businesses, there are a limited number of suppliers for some of our raw materials and utilities and, in some cases, the number of sources for and availability of raw materials and utilities is specific to the particular geographic region in which a facility is located. It is also common in the chemical industries for a facility to have a sole, dedicated source for its utilities, such as steam, electricity and gas. Having a sole or limited number of suppliers may result in our having limited negotiating power, particularly during times of rising raw material costs. Having a sole source supplier also increases the vulnerability and severity of disruptions in the supply of raw materials. Even where we have multiple suppliers for a raw material or utility, these suppliers may not make up for the loss of a major supplier. Moreover, any new supply agreements we enter into may not have terms as favorable as those contained in our current supply agreements. For some of our products, the facilities or distribution channels of raw material and utility suppliers and our production facilities form an integrated system, which limits our ability to negotiate favorable terms in supply agreements.

In addition, as part of an increased trend towards vertical integration in the chemicals industry, other chemical companies are purchasing raw material suppliers. This is further reducing the available suppliers for certain raw materials.

If one or more of our significant raw material or utility suppliers were unable to meet its obligations under present supply arrangements, raw materials may become unavailable within the geographic area from which they are now sourced, or supplies may otherwise be constrained or disrupted, our businesses could be forced to incur increased costs for our raw materials or utilities, which would have a direct negative impact on plant operations and may adversely affect our results of operations and financial condition.

Production facilities are subject to operating risks that may adversely affect our financial condition, results of operations and cash flows.

We are dependent on the continued operation of our production facilities. Such production facilities are subject to hazards inherent in the manufacturing and marketing of chemical products, which include chemical spills, pipeline or storage tank leaks and ruptures, discharges or releases of toxic or hazardous substances or gases and exposure to hazardous substances related to the manufacturing, storage and transportation of dangerous chemicals.

Disruptions at any of our facilities could be caused by maintenance outages; prolonged power failures or reductions; explosions or fires; a breakdown, failure or substandard performance of any of our equipment; the effect of noncompliance with material environmental requirements or permits; disruptions in the transportation infrastructure, including railroad tracks, ports, bridges, tunnels or roads; fires, floods, earthquakes, hurricanes or other catastrophic disasters; an act of terrorism; cyber-attack on operating systems; or other operational problems.

Any prolonged disruption in operations at any of our facilities could cause significant lost production. Losses related to any such disruption in operations may be either uninsured or underinsured. Moreover, we could incur significantly higher costs and longer lead times associated with distributing our products to our customers during the time that it takes for us to reopen or replace a damaged facility. If any of these events were to occur, it could cause our customers to seek other suppliers and could have a material adverse effect on our business, financial condition, operating results and cash flows.

Many potential hazards can cause bodily injury and loss of life, severe damage to or destruction of property and equipment and environmental damage, and may result in suspension of operations and the imposition of civil or criminal penalties and liabilities. Furthermore, we are subject to present and future claims with respect to workplace exposure, including workers compensation, exposure of persons located nearby our premises as well as other matters. In addition, we are subject to various claims and litigation in the ordinary course of business.

We maintain property, business interruption, products liability and casualty insurance policies which we believe are in accordance with customary industry practices, as well as insurance policies covering other types of risks, but we are not fully insured against all potential hazards and risks incident to our business. Each of these insurance policies is subject to customary exclusions, deductibles and coverage limits, in accordance with industry standards and practices. As a result of market conditions, premiums and deductibles for certain insurance policies can increase substantially and, in some instances, certain insurance may become unavailable or available only for reduced amounts or terms of coverage. If we were to incur a significant liability for which we were not fully insured, it could have a material

adverse effect on our business, results of operations, financial condition and liquidity.

Maintenance, expansion and refurbishment of our facilities or the construction of new facilities involve significant risks.

Our facilities may require periodic upgrading and improvement. Any unexpected operational or mechanical failure, including failure associated with breakdowns and forced outages, could reduce our facilities' production capacity below expected levels which would reduce our revenues. Unanticipated capital expenditures associated with maintaining, upgrading or repairing our facilities may also reduce profitability.

If we make any major modifications to our facilities, we may be required to install the best available control technology or to achieve the lowest achievable discharge or emissions rates as such terms are defined under applicable law. Any such modifications likely would result in substantial additional capital expenditures and may prolong the time necessary to bring the facility on line. We may also choose to refurbish or upgrade our facilities based on our assessment that such activity will provide adequate financial returns. However, such activities require time for development and capital expenditures before commencement of commercial operations, and key assumptions underpinning a decision to make such an investment may prove incorrect, including assumptions regarding construction costs and timing which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Finally, the construction of new manufacturing facilities entails a number of risks, including the ability to begin production within the cost and timeframe estimated and to attract a sufficient number of skilled workers to meet the needs of the new facility. Additionally, our assessment of the projected benefits associated with the construction of new manufacturing facilities is subject to a number of estimates and assumptions, which in turn are subject to significant economic, competitive and other uncertainties that are beyond our control. If we experience delays or increased costs, our estimates and assumptions are incorrect, or other unforeseen events occur, our business, ability to supply customers, financial condition, results of operations and cash flows could be adversely impacted. Failure to develop and market new products and manage product life cycles could impact our competitive position and have an adverse effect on our business, financial condition and results of operations.

Our operating results are largely dependent on our assessment and management of our portfolio of current, new and developing products and our ability to bring those products to market. We plan to grow earnings by focusing on developing markets and solutions to meet increasing demand for products. Our ability to execute this strategy and our other growth plans successfully could be adversely affected by difficulties or delays in product development such as the inability to identify viable new products, successfully complete research and development, obtain relevant regulatory approvals, effectively manage our manufacturing process or costs, obtain intellectual property protection, or gain market acceptance of new products and services. Because of the lengthy and costly development process, technological challenges and intense competition, we cannot assure you that any of the products we are currently developing, or could begin to develop in the future, will achieve commercial success. Further, sales of our new products could replace sales of some of our current products, offsetting the benefit of even a successful product introduction. We must also successfully anticipate and adapt our products to the changing requirements of our customers. If we do not keep our products current with our customers' needs, they may seek alternative suppliers. A failure to develop commercially successful products, to develop additional uses for existing products or to keep existing products at the cutting edge of product performance, could materially adversely affect our business, financial condition and results of operations.

The cyclical nature of the chemicals industry causes significant fluctuations in our results of operations and cash flows.

Our historical operating results reflect the cyclical and volatile nature of the supply and demand balance of the chemicals industry. The chemicals industry has experienced alternating periods of inadequate capacity and supply, allowing prices and profit margins to increase, followed by periods when substantial capacity is added, resulting in oversupply, overcapacity, corresponding declining utilization rates and, ultimately, declining prices and profit margins. Some of the markets in which our customers participate, such as the automotive, aviation, electronics, energy and building and construction industries, are cyclical in nature, thus posing a risk to us. These markets are highly competitive, are driven to a large extent by end-use markets and may experience overcapacity, all of which may affect demand for and pricing of our products and result in volatile operating results and cash flows over our business cycle. Future growth in product demand may not be sufficient to utilize current or future capacity. Excess

industry capacity may continue to depress our volumes and margins on some products. Our operating results, accordingly, may be volatile as a result of these changes in industry capacity.

Failure to accurately forecast market and customer trends for our products could adversely affect our business and financial results or operating efficiencies.

Our ability to meet the product demands of our customers require that we accurately forecast market and customer trends for our products. If we are unable to accurately forecast market and customer trends for our products, our revenues and operating results could be adversely affected.

We may experience excess capacity with respect to the products we have agreed to supply to the purchaser of our Chemtura AgroSolutions business under the post-closing supply agreements. If such supply agreements are terminated at the end of their minimum contract terms and we are unable to find additional production to fill the vacated capacity, we may experience declining utilization rates which could have an adverse impact on our operating results. Decline in general economic conditions and other external factors may adversely impact our operations. External factors, including domestic and global economic conditions, international events and circumstances, competitor actions and government regulation, are beyond our control and can cause fluctuations in demand and volatility in the prices of raw materials and other costs that can intensify the impact of economic cycles on our operations. We produce a broad range of products that are used as additives and components in other products in a wide variety of end-use markets. As a result, our products may be negatively impacted by supply and demand instability in other industries and the effects of that instability on supply chain participants. Economic and political conditions in countries in which we operate may also adversely impact our operations. For example, some countries in Europe have been particularly adversely affected by rising government deficits and debt levels, which require certain countries to adopt deflationary fiscal and monetary policies that could negatively affect our businesses. Although our diversified product portfolio and international presence lessens our dependence on a single market and exposure to economic conditions or political instability in any one country or region, our businesses are nonetheless sensitive to changes in economic conditions. For example, in 2015, 21% of our net sales were from the Asia/Pacific region. To further our growth strategies in the Asia/Pacific region, we completed the construction of a manufacturing facility in Nantong, People's Republic of China. An economic downturn in China could negatively impact our growth strategies in the Asia/Pacific region. Financial crises and economic downturns anywhere in the world could adversely affect our results of operations, cash flows and financial condition.

Competition may adversely impact our results of operations.

We face significant competition in many of the markets in which we operate due to the trend toward global expansion and consolidation by competitors. Some of our existing competitors are larger than we are and may have more resources and better access to capital markets to facilitate continued expansion or new product development. Additionally, some of our competitors have a greater product range and distributional capability than we do for certain products and in specific regions. We also expect that we will continue to face new competitive challenges as well as additional risks inherent in international operations in developing regions. We are susceptible to price competition in certain markets in which customers are sensitive to changes in price. At the same time, we also face downward pressure on prices from industry overcapacity, lower cost structures in certain businesses and lower energy and raw material prices. The further use and introduction of generic and alternative products by our competitors may result in increased competition and could require us to reduce our prices and take other steps to compete effectively. These measures could negatively affect our financial condition, results of operations and cash flows. Alternatively, if we were to increase prices in response to this competition, the reactions of our competitors and customers to such price increases could cause us to reevaluate and possibly reverse such price increases or risk a loss in sales volumes. The loss of or a significant reduction in purchases by our largest customers could adversely affect our operations. While some of our largest customers have entered into supply contracts with us, these customers may not continue to purchase the same levels of our products in the future due to a variety of reasons. Some of our major customers could decide to purchase the products we provide to them from other third-party providers. If any of our major customers substantially reduces or altogether ceases purchasing our products, depending on market conditions, we could suffer a material adverse effect on our business, financial condition and results of operations.

Our products are subject to extensive government scrutiny and regulation.

We are subject to regulation by federal, state, local and foreign government authorities. In some cases, we need government approval of our products, manufacturing processes and facilities before we may sell certain products. Many products are required to be registered with the U.S. Environmental Protection Agency and with comparable

European Union and elsewhere. We are also subject to ongoing reviews of our products, manufacturing processes and facilities by government authorities, and must also produce product data and comply with detailed regulatory requirements.

The REACh legislation requires chemical manufacturers and importers in the European Union to demonstrate the safety of the chemical substances contained in their products via a substance registration process. The registration process requires capital and resource commitments to compile and file comprehensive chemical dossiers regarding the use and attributes of each chemical substance manufactured or imported by Chemtura and requires us to perform chemical safety assessments. Successful registration under REACh is a functional prerequisite to the continued sale of our products in the European Union market. Thus, REACh and other similar regulations present a risk to the continued sale of our products in the European Union should we be unable or unwilling to complete the registration process or if the European Union seeks to ban or materially restrict the production or importation of the chemical substances used in our products.

New or stricter laws and regulations may be introduced that could result in additional compliance costs and prevent or inhibit the development, manufacture, distribution and sale of our products. Such outcomes could adversely impact our results of operations, financial position and cash flows.

Environmental, health and safety regulation matters could have a negative impact on our results of operations and cash flows.

We are subject to extensive federal, state, local and foreign environmental, health and safety laws and regulations concerning, among other things, emissions in the air, discharges to land, surface, subsurface strata and water and the generation, handling, storage, transportation, treatment and disposal of hazardous waste and other materials. Our operations bear the risk of violations of those laws and sanctions for violations such as clean-up and removal costs, long-term monitoring and maintenance costs, costs of waste disposal, natural resource damages and payments for property damage and personal injury. Although it is our policy to comply with such laws and regulations, it is possible that we have not been or may not be at all times in compliance with all of these requirements. Additionally, these requirements, and enforcement of these requirements, may become more stringent in the future. The ultimate additional cost of compliance with any such requirements could be material. Non-compliance could subject us to material liabilities such as government fines or orders, criminal sanctions, third-party lawsuits, remediations and settlements, the suspension, modification or revocation of necessary permits and licenses, or the suspension of non-compliant operations. We may also be required to make significant site or operational modifications at substantial cost or pay remediation costs at current or former facilities. In addition, various federal and state statutes impose strict liability upon various classes of persons with respect to costs associated with the investigation and remediation of waste disposal sites. Future regulatory or other developments could also restrict or eliminate the use of, or require us to make modifications to, our products, packaging, manufacturing processes and technology, which could have a significant adverse impact on our financial condition, results of operations and cash flows.

At any given time, we may be involved in claims, litigation, administrative proceedings, settlements and investigations of various types in a number of jurisdictions involving potential environmental liabilities, including clean-up costs associated with hazardous waste disposal sites, natural resource damages, property damage, personal injury and regulatory compliance or non-compliance. The resolution of these environmental matters could have a material adverse effect on our results of operations and cash flows.

Current and future litigation, governmental investigations, prosecutions and administrative claims, including antitrust-related governmental investigations and lawsuits, could harm our financial condition, results of operations and cash flows.

We have been involved in several significant lawsuits and claims relating to environmental and chemical exposure matters, and may in the future be involved in similar litigation. Additionally, we are routinely subject to other civil claims, litigation and arbitration and regulatory investigations arising in the ordinary course of our business as well as with respect to our divested businesses. We could become subject to additional claims. An adverse outcome of these claims could have a materially adverse effect on our business, financial conditions, results of operations and cash flows.

We have also been involved in a number of governmental investigations, prosecutions and administrative claims in the past, including antitrust-related governmental investigations and civil lawsuits, and may in the future be subject to similar claims. Additionally, we have incurred and could again incur expenses in connection with antitrust-related matters, including expenses related to our cooperation with governmental authorities and defense-related civil lawsuits.

Conflicts, military actions, terrorist attacks and general instability along with increased security regulations related to our industry, could adversely affect our business.

Conflicts, military actions and terrorist attacks have precipitated economic instability and turmoil in financial markets. The uncertainty and economic disruption resulting from hostilities, military action or acts of terrorism may impact any or all of our facilities and operations or those of our suppliers or customers. Accordingly, any conflict, military action or terrorist attack that impacts us or any of our suppliers or customers, could have a material adverse effect on our business, results of operations, financial condition and liquidity.

Federal regulations aimed at increasing security at certain chemical production plants and similar legislation that may be proposed in the future could require us to enhance plant security and to alter or discontinue our production of certain chemical products, thereby increasing our operating costs and causing an adverse effect on our results of operations.

Regulations have been implemented by the U.S. Department of Homeland Security ("DHS") aimed at decreasing the risk, and effects, of potential terrorist attacks on chemical plants located within the United States. Pursuant to these regulations, these goals would be accomplished in part through the requirement that certain high-priority facilities develop a prevention, preparedness, and response plan after conducting a vulnerability assessment. In addition, companies may be required to evaluate the possibility of using less dangerous chemicals and technologies as part of their vulnerability assessments and prevention plans and implementing feasible safer technologies in order to minimize potential damage to their facilities from a terrorist attack. We have registered certain of our sites with DHS in accordance with these regulations, have conducted vulnerability assessments at applicable sites and have received DHS review and approval of our security plans. These regulations may be revised further and additional legislation may be proposed in the future on this topic. It is possible that such future legislation could contain terms that are more restrictive than what has recently been passed and which would be more costly to us. We cannot predict the final form of currently pending legislation or other related legislation that may be passed and we can provide no assurance that such legislation will not have an adverse effect on our results of operations in a future reporting period. In addition, we may incur liabilities for subsequent damages in the event that we fail to comply with these regulations. Our businesses depend upon many proprietary technologies, including patents, licenses and trademarks. Our competitive position could be adversely affected if we fail to protect our patents or other intellectual property rights or if we become subject to claims that we are infringing upon the rights of others. Our patents may not provide full protection against competing manufacturers outside of the United States, the European Union countries and certain other developed countries. Weaker protection may adversely impact our sales and results of operations. Our intellectual property is of particular importance for a number of the specialty chemicals that we manufacture and sell. The trademarks and patents that we own may be challenged, and because of such challenges, we could eventually lose our exclusive rights to use and enforce such patented technologies and trademarks, which could adversely affect our competitive position and results of operations. We are licensed to use certain patents and technology owned by other companies, including foreign companies, to manufacture products complementary to our own products. We pay royalties for these licenses in amounts not considered material, in the aggregate, to our consolidated results. In some of the countries in which we operate, such as China, the laws protecting patent holders are significantly weaker than in the United States, countries in the European Union and certain other developed countries. Weaker protection may assist competing manufacturers in becoming more competitive in markets in which they might not have otherwise been able to introduce competing products for a number of years. As a result, we tend to rely more heavily upon trade secret and know-how protection in these regions, as applicable, rather than patents. We also rely on unpatented proprietary know-how and continuing technological innovation and other trade secrets in all regions to develop and maintain our competitive position. Although it is our policy to enter into confidentiality agreements with our employees and third parties to restrict the use and disclosure of trade secrets and proprietary know-how, those confidentiality agreements may be breached. Additionally, adequate remedies may not be available in the event of an unauthorized use or disclosure of such trade secrets and know-how, and others could obtain knowledge of such trade secrets through independent development or other access by legal means. The failure of our patents, trademarks or confidentiality agreements to protect our processes, apparatuses, technology, trade secrets or proprietary know-how and the brands under which we market and sell our products could have a material adverse effect on our business, financial condition, results of operations and cash flows.

We cannot be assured that our products or methods do not infringe on the patents, trademarks or other intellectual property rights of others. Infringement and other intellectual claims or proceedings brought against us, whether successful or not, could

result in substantial costs and harm our reputation. Such claims and proceedings can also distract and divert management and key personnel from other tasks important to the success of our business. In addition, intellectual property litigation or claims could force us to do one or more of the following:

cease selling products that contain asserted intellectual property;

pay substantial damages for past use of the asserted intellectual property;

obtain a license from the holder of the asserted intellectual property, which may not be available on reasonable terms; and

redesign or rename, in the case of trademark claims, our products to avoid infringing the rights of third parties. Such requirements could adversely affect our revenue, increase costs, and harm our financial condition. Cybersecurity attack, acts of cyber-terrorism, failure of technology systems and other disruptions to our information technology systems could compromise our information, disrupt our operations, and expose us to liability, which may adversely impact our operations.

In the ordinary course of our business, we store sensitive data, including intellectual property, our proprietary business information and that of our customers, suppliers and business partners, and personally identifiable information of our employees in our information technology systems, including in our data centers and on our networks. The secure processing, maintenance and transmission of this data is critical to our operations. Despite our security measures, our information technology systems may be vulnerable to attacks by hackers or breached or disrupted due to employee error, malfeasance or other disruptions. Any such attack, breach or disruption could compromise our information technology systems and the information stored in them could be accessed, publicly disclosed, lost or stolen and our business operations could be disrupted. Any such access, disclosure or other loss of information or business disruption could result in legal claims or proceedings, liability under laws that protect the privacy of personal information, and damage to our reputation, which could adversely impact our operations.

Legislative and regulatory initiatives related to global warming and climate change could have an adverse effect on our operations and the demand for specialty chemicals.

Due to concerns about the risks of global warming and climate change, a number of various international, national and regional legislative and regulatory initiatives to limit greenhouse gas emissions are currently in various stages of discussion or implementation. Legislative and regulatory programs to reduce emissions of greenhouse gases could require us to incur substantially increased capital, operating, maintenance, and compliance costs, such as costs to purchase and operate emissions control systems, costs to acquire emissions allowances, and costs to comply with new regulatory or reporting requirements. In addition, increasing regulation of fuel emissions could substantially increase the distribution and supply chain costs associated with our products. Consequently, legislative and regulatory programs to reduce emissions of greenhouse gases could have an adverse effect on our business, financial condition, results of operations, and cash flows.

In addition, there has been public discussion that climate change may be associated with more extreme weather conditions, such as increased frequency and severity of storms, droughts, and floods. Extreme weather conditions can interfere with our development and production activities, increase our costs of operations or reduce the efficiency of our operations, and potentially increase costs for insurance coverage in the aftermath of such conditions. Significant physical effects of climate change could also have an indirect effect on our financing and operations by disrupting the transportation or process- related services provided by companies or suppliers with whom we have a business relationship.

We may not be able to successfully execute strategic acquisitions, partnerships or other strategic opportunities which could hinder our strategy or result in unanticipated expenses and losses.

Part of our strategy is to pursue strategic acquisitions, partnerships or other strategic opportunities which involve risks. We may not realize the expected benefits of strategic acquisitions, partnerships or other strategic opportunities, including the synergies, cost savings or sales or growth opportunities that we expect. These benefits may not be achieved within the anticipated time frame, or at all. The integration of an acquired business may result in material unanticipated problems, expenses, liabilities or competitive responses. Other risks associated with future acquisitions, partnerships or other strategic opportunities include: the business culture of the acquired business may not match well with culture of the acquirer; technological and product synergies, economies of scale and cost reductions may not occur as expected; unforeseen expenses, delays or conditions may be imposed upon the acquisition, partnership or

other strategic opportunity, including due to required regulatory approvals or consents; we may acquire or assume unexpected liabilities or be subject to unexpected penalties or other enforcement actions; faulty assumptions may be made regarding the integration process; unforeseen difficulties may arise

in integrating operations, processes and systems; higher than expected investments may be required to implement necessary compliance processes and related systems, including information technology systems, accounting systems and internal controls over financial reporting; we may fail to retain, motivate and integrate key management and other employees of the acquired business; higher than expected finance costs may arise due to unforeseen changes in tax, trade, environmental, labor, safety, payroll or pension policies in any jurisdiction in which the acquired business conducts its operations; and we may experience problems in retaining customers and integrating customer bases. Many of these factors will be outside of our control and any one of them could result in increased costs, decreases in the amount of expected revenues and diversion of management's time and attention. Failure to implement our acquisition strategy, including successfully integrating acquired businesses, could have an adverse effect on our business, financial condition and results of operations.

Furthermore, we have made strategic divestitures from time to time. A successful divestiture depends on various factors, which could impact our financial condition, results of operations or cash flows, including our ability to: effectively transfer liabilities, contracts, facilities and employees to the purchaser; identify and separate the intellectual property to be divested from the intellectual property that we wish to keep; and reduce fixed and other costs previously associated with the divested assets or business. In addition, if customers of the divested business do not receive the same level of service from the new owners, this may adversely affect our other businesses to the extent that these customers also purchase our other products. These divestitures may on occasions also result in continued financial involvement in the divested businesses, including through guarantees, supply and transition service agreements, deferred purchase consideration and other financial arrangements, any of which could impact our financial condition, results of operations or cash flows.

We are dependent upon a trained, dedicated sales force, the loss of which could materially affect our operations. Many of our products are sold and supported through dedicated staff and specifically trained personnel. The loss of this sales force due to market or other conditions could affect our ability to sell and support our products effectively, which could have an adverse effect on our results of operations.

Our results of operations are subject to exchange rate and other currency risks. A significant movement in exchange rates could adversely impact our results of operations.

Significant portions of our businesses are conducted in currencies other than the U.S. dollar. Accordingly, foreign currency exchange rates affect our operating results. Effects of exchange rate fluctuations upon our future operating results cannot be predicted because of the number of currencies involved, the variability of currency exposure and the potential volatility of currency exchange rates. We face risks arising from the imposition of exchange controls and currency devaluations. Exchange controls may limit our ability to convert foreign currencies into U.S. dollars or to remit dividends and other payments by our foreign subsidiaries or businesses located in or conducted within a country imposing controls. In certain foreign countries, some components of our cost structure are denominated in U.S. dollars while our revenues are denominated in the local currency. In those cases, currency devaluation could adversely impact our operating margins.

Our unfunded and underfunded defined benefit pension plans and post-retirement health care plans could adversely impact our financial condition, results of operations and cash flows.

The cost of our defined benefit pension and post-retirement health care plans is recognized through operations over extended periods of time and involves many uncertainties during those periods of time. Our funding policy for defined benefit pension plans is to accumulate plan assets through our cash contributions and prudent investment returns, such that, over the long run, they will approximate the present value of projected benefit obligations. Our pension cost is materially affected by certain factors and assumptions, including the discount rate used to measure pension obligations, changes in the life expectancy of plan beneficiaries, the level of plan assets available to fund those obligations at the measurement date and the expected long-term rate of return on plan assets. Significant changes in investment performance or a change in the portfolio mix of invested assets can result in corresponding increases and decreases in the valuation of plan assets or in a change of the expected rate of return on plan assets. Similarly, our post-retirement health care cost is materially affected by certain factors and assumptions, including the discount rate used to measure these obligations, as well as by changes in the actual cost of providing these medical benefits. We have underfunded obligations under our U.S. tax-qualified defined benefit pension plans totaling approximately \$67 million on a projected benefit obligation basis as of December 31, 2015. Declines in the value of the plan

investments, the discount rate used to measure liabilities, increases in life expectancy of beneficiaries or unfavorable changes in law or regulations that govern pension plan funding could materially change the timing and amount of required funding. Additionally, we sponsor other foreign and non-qualified U.S. pension plans under which there are substantial unfunded liabilities totaling approximately \$79 million on a projected benefit obligation basis as of December 31, 2015. Foreign regulatory authorities may seek to have

Chemtura and/or certain of our non-sponsoring subsidiaries take responsibility for some portion of these obligations. Mandatory funding contributions with respect to these obligations and potential unfunded benefit liability claims could have a material adverse effect on our financial condition, results of operations or future cash flows. In addition, we have unfunded post-retirement health care plan liabilities totaling approximately \$94 million on a projected benefit obligation basis at December 31, 2015. Our actual costs with respect to our post-retirement health care plans could exceed our current actuarial projections.

Joint venture investments that we enter into could be adversely affected by our lack of sole decision-making authority, our reliance on joint venture partners' financial condition and disputes between us and our joint venture partners. A portion of our operations is conducted through certain ventures in which we share control with third parties. We may in the future enter into joint ventures in which we share control with third parties. In these situations, we are not in a position to exercise sole decision-making authority regarding the facility, partnership, joint venture or other entity. Investments through partnerships, joint ventures, or other entities may, under certain circumstances, involve risks not present were a third party not involved, including the possibility that joint venture partners might become bankrupt, fail to fund their share of required capital contributions, make poor business decisions or block or delay necessary decisions. Joint venture partners may have economic or other business interests or goals that are inconsistent with our business interests or goals, and may be in a position to take actions contrary to our policies or objectives. Such investments may also have the potential risk of impasses on decisions, such as a sale, because neither we nor our joint venture partners would have full control over the partnership or joint venture. Disputes between us and our joint venture partners may result in litigation or arbitration that would increase our expenses and prevent the members of our management team from focusing their time and effort on our business. Consequently, actions by, or disputes with, our joint venture partners might result in subjecting the facilities owned by the partnership or joint venture to additional risk. In addition, we may in certain circumstances be liable for the actions of our joint venture partners. Restrictive covenants in our credit facilities may limit our ability to engage in certain transactions.

Our credit facilities contain various covenants that limit our ability to engage in specified types of transactions. The covenants limit our ability to, among other things, incur additional indebtedness or repay certain indebtedness, create liens, pay dividends on or make other distributions on or repurchase capital stock or make other restricted payments, make investments, and enter into acquisitions, dispositions and joint ventures. Such restrictions in our credit facilities could result in us having to obtain the consent of our lenders in order to take certain actions. We may be unable to obtain such consents from our lenders, or obtaining such consents may be difficult or costly for us. Our ability to expand our business or to address declines in our business may be limited if we are unable to obtain (or hindered from obtaining) such consents.

A breach of any of these covenants could result in a default under our credit facilities and other debt obligations. Upon the occurrence of an event of default, the lenders could elect to declare all amounts outstanding under our credit facilities immediately due and payable and terminate all commitments to extend further credit. If we were unable to repay those amounts, the lenders could proceed against the collateral granted to them to secure our indebtedness. Our subsidiaries have pledged a significant portion of their assets as collateral under our credit facilities. If the lenders under credit facilities accelerate the repayment of borrowings, we may not have sufficient assets to repay amounts borrowed under the credit facilities which could have a material adverse effect on our cash flow and on the value of our stock.

Future events may impact our deferred tax asset position related to our utilization of net operating losses ("NOLs") and U.S deferred federal income taxes on undistributed earnings of international affiliates that are considered to be reinvested indefinitely.

We evaluate our ability to utilize deferred tax assets and our need for valuation allowances based on available evidence. This process involves significant management judgment about assumptions that are subject to change from period to period based on changes in tax laws or variances between future projected operating performance and actual results. We are required to establish a valuation allowance for deferred tax assets if we determine, based on available evidence at the time the determination is made, that it is more likely than not that some portion or all of the deferred tax assets will not be utilized. In making this determination, we evaluate all positive and negative evidence as of the end of each reporting period. Future adjustments (either increases or decreases), to a deferred tax asset valuation allowance are determined based upon changes in the expected realization of the net deferred tax assets. The utilization

of our deferred tax assets ultimately depends on the existence of sufficient taxable income in either the carry-back or carry-forward periods under the applicable tax law. Due to significant estimates used to establish a valuation allowance and the potential for changes in facts and circumstances, it is reasonably possible that we will be required to record adjustments to a valuation allowance in future reporting periods. Changes to a valuation allowance or the amount of deferred tax liabilities could have a materially adverse effect on our business, financial condition and results of operations. Further, while we have no current intention to do so in the foreseeable

future, should we change our assertion regarding the permanent reinvestment of the undistributed earnings in foreign operations, a deferred tax liability may need to be established.

If our goodwill, intangible assets or long-lived assets become impaired, we may be required to record a significant charge to earnings.

Under U.S. generally accepted accounting principles ("GAAP"), we review our intangible assets and long-lived assets for impairment when events or changes in circumstances indicate the carrying value may not be recoverable. Goodwill is tested for impairment on July 31 of each year, or more frequently if required. Factors that may be considered a change in circumstances, indicating that the carrying value of our goodwill, intangible assets or long-lived assets may not be recoverable, include, but are not limited to, a decline in stock price and market capitalization, reduced future cash flow estimates, and slower growth rates in our industry. We may be required to record a significant charge in our financial statements during the period in which any impairment of our goodwill, intangible assets or long-lived assets is determined, negatively impacting our results of operations.

If our estimates or judgments relating to our accounting policies prove to be incorrect, our operating results could be adversely affected.

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, as provided in Management's Discussion and Analysis of Financial Condition and Results of Operations. The results of these estimates form the basis for making judgments about the carrying values of assets, liabilities and equity, and the amount of revenue and expenses that are not readily apparent from other sources. Significant assumptions and estimates used in preparing our consolidated financial statements include, among others, those related to allowance for uncollectible accounts receivable, inventories, environmental matters, pension and other post-retirement benefits expense, income taxes and the carrying value of goodwill and long-lived assets. Our operating results may be adversely affected if our assumptions change or if actual circumstances differ from those in our assumptions, which could cause our operating results to fall below the expectations of securities analysts and investors, resulting in a decline in the price of our common stock.

If we fail to establish and maintain adequate internal controls over financial reporting, we may not be able to report our financial results in a timely and reliable manner, which could harm our business and impact the value of our securities.

We depend on our ability to produce accurate and timely financial statements in order to run our business. If we fail to do so, our business could be negatively affected and our independent registered public accounting firm may be unable to attest to the fair presentation of our Consolidated Financial Statements in accordance with U.S. GAAP and the effectiveness of our internal control over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act. Effective internal controls are necessary for us to provide reliable financial reports and to effectively prevent fraud. If we cannot provide reliable financial reports and effectively prevent fraud, our reputation and operating results could be harmed. Even effective internal controls have inherent limitations including the possibility of human error, the circumvention or overriding of controls, or fraud. Therefore, even effective internal controls can provide only reasonable assurance with respect to the preparation and fair presentation of financial statements. In addition, projections of any evaluation of effectiveness of internal control over financial reporting in future periods are subject to the risk that the control may become inadequate because of changes in conditions or a deterioration in the degree of compliance with the policies or procedures.

If we fail to maintain adequate internal controls, including any failure to implement new or improved controls, or if we experience difficulties in their implementation, we could fail to meet our reporting obligations, and there could be a material adverse effect on our business and financial results. In the event that our current control practices deteriorate, we may be unable to accurately report our financial results or prevent fraud, and investor confidence and the market price of our securities may be adversely affected.

Actions of activist stockholders could cause us to incur substantial costs, divert management's attention and resources, and have an adverse effect on our business.

From time to time, we may be subject to proposals by stockholders urging us to take certain corporate actions. If activist stockholder activities ensue, our business could be adversely affected because responding to proxy contests

and reacting to other actions by activist stockholders can be costly and time-consuming, disrupt our operations and divert the attention of management and our employees. For example, we may be required to retain the services of various professionals to advise us on activist stockholder matters, including legal, financial and communications advisors which could be costly. In addition,

perceived uncertainties as to our future direction, strategy or leadership created as a consequence of activist stockholder initiatives may result in the loss of potential business opportunities, harm our ability to attract new investors, customers and employees, and cause our stock price to experience periods of volatility or stagnation. If we issue additional shares of common stock in the future, it will result in the dilution of our existing stockholders. Our certificate of incorporation authorizes the issuance of 500 million shares of common stock, of which 100.6 million shares were issued and 67.2 million shares outstanding as of December 31, 2015. Our board of directors (the "Board") has the authority to issue additional shares of common stock up to the authorized capital stated in the certificate of incorporation. Our Board may choose to issue some or all of such shares of common stock to acquire one or more businesses or to provide additional financing in the future. The issuance of any such shares of common stock may result in a reduction of the book value or market price of the outstanding shares of our common stock. Additionally, we have an incentive plan that allows for the issuance of up to 11 million shares (currently 4.3 million shares remain available for future grants).

Item 1B: Unresolved Staff Comments None.

### Item 2: Properties

The following table sets forth information regarding our principal operating properties and other significant properties as of December 31, 2015. All of the following properties are owned except where otherwise indicated and reflect our properties from continuing operations, which exclude properties associated with the sale of our Chemtura AgroSolutions, Antioxidant and Consumer Products businesses. In general, our operating properties are well maintained, suitably equipped and in good operating condition.

Location Facility Reporting Segment

NORTH AMERICA

United States Arkansas

El Dorado Plant Industrial Engineered Products

Connecticut

Middlebury\* Executive Offices Shared Service Center, Business and Corporate Office Industrial Engineered Products, Industrial Performance

Naugatuck Research Center Industrial Engineered Products, Industrial Performance

Products Products

Illinois

Mapleton Plant Industrial Engineered Products

New Jersey

East Hanover Plant Industrial Performance Products
Fords Plant Industrial Performance Products
Perth Amboy Plant Industrial Performance Products

North Carolina

Gastonia Plant Industrial Performance Products, Agrochemical

Manufacturing

Pennsylvania

Philadelphia\* Executive Offices Corporate Offices

Canada

Elmira Plant Industrial Performance Products, Agrochemical

Manufacturing

West Hill Plant Industrial Performance Products

EUROPE/AFRICA

Germany

Bergkamen\* Plant, Research Center Industrial Engineered Products

Italy

Latina \* Plant Industrial Performance Products, Agrochemical

Manufacturing

Milan<sup>1</sup> Office Industrial Performance Products

The Netherlands

Amsterdam \* Plant Agrochemical Manufacturing, Industrial Performance

Products

Location Facility Reporting Segment

EUROPE/AFRICA (continued)

Switzerland

Frauenfeld\* Office Business and Corporate Office

United Kingdom

Accrington Plant Industrial Performance Products

Trafford Park Plant, Office Industrial Engineered Products, Industrial Performance Products,

Shared Service Center, Corporate

**ASIA** 

Japan

Tokyo\* Office Industrial Engineered Products, Industrial Performance Products

People's Republic of

China

Nantong Plant Industrial Performance Products
Nanjing Plant, Research Center Industrial Performance Products

Shanghai\* Office Shared Service Center, Business and Corporate Office

South Korea

Hyeongok Plant Industrial Engineered Products

Taiwan

Kaohsiung Plant Industrial Engineered Products, Industrial Performance Products

LATIN AMERICA

**Brazil** 

Rio Claro \* Plant Industrial Engineered Products, Industrial Performance Products,

Agrochemical Manufacturing, Corporate

Mexico

Altamira Plant Industrial Engineered Products, Industrial Performance Products
Mexico City\* Office Industrial Engineered Products, Industrial Performance Products

Reynosa Plant Industrial Engineered Products

### Item 3: Legal Proceedings

Information regarding our legal proceedings can be found in Note 15 – Legal Proceedings and Contingencies in our Notes to Consolidated Financial Statements and is incorporated by reference herein.

Item 4: Mine Safety Disclosure

Not applicable.

<sup>\*</sup> Leased property.

<sup>1.</sup> Facility leased by Anderol Italia S.r.l, of which we own 51%.

#### **PART II**

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

Our common stock is listed on the New York Stock Exchange (the "NYSE") under the ticker symbol "CHMT". As of December 31, 2015, 100.6 million shares were issued and 67.2 million shares were outstanding.

We have no current plans to pay any cash dividends on our common stock and instead may retain earnings, if any, for future operations, expansions, debt repayments, acquisitions or we may purchase shares of our common stock under our share repurchase program. Any decision to declare and pay dividends in the future will be made at the discretion of our Board and will depend on, among other things, our results of operations, cash requirements, financial condition, contractual restrictions and other factors that our Board may deem relevant. In addition, our debt agreements contain covenants restricting the payment of dividends by us and by each of our subsidiaries that are party to such facilities, which is subject to a number of specific exceptions.

The following table summarizes the range of market prices for our common stock as reported by the NYSE by quarter during the past two years:

	2015			
	First	Second	Third	Fourth
Market price per common share:				
High	\$27.35	\$31.10	\$28.99	\$32.34
Low	\$21.23	\$26.64	\$24.89	\$26.32
	2014			
	First	Second	Third	Fourth
High	\$27.94	\$26.26	\$26.81	\$25.11
Low	\$23.42	\$21.96	\$22.88	\$21.02

The number of holders of record of our common stock on December 31, 2015 was approximately 4,200. See Item 1A – Risk Factors for a discussion of risks related to our common stock.

Issuer Purchases of Equity Securities During the Fourth Quarter of 2015

In October 2014, the Board approved a share repurchase authorization of up to \$500 million conditioned upon the sale of the Chemtura AgroSolutions business. In August 2015, the Board authorized an increase to the October 2014 authorization by \$150 million, up to \$650 million in the aggregate when combined with the October 2014 authorization, and extended the program to December 1, 2016.

During the quarter ended December 31, 2015, we repurchased 0.4 million shares of our common stock at a cost of \$10 million. As of December 31, 2015, \$171 million remained outstanding under our share repurchase program. The following table provides information about our repurchases of equity securities during the quarter ended December 31, 2015.

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs
	(in millions)		(in millions)	(in millions)
October 1, 2015 - October 31, 2015	0.1	\$27.61	0.1	\$ 178
November 1, 2015 -November 30, 2015	_	\$—	_	\$ 178
December 1, 2015 - December 31, 2015	0.3	\$27.30	0.3	\$ 171
Total	0.4		0.4	

Annrovimate

#### PERFORMANCE GRAPH

The following graph compares the cumulative total return on our common stock for the last five fiscal years with the returns of the Standard & Poor's 500 Stock Index and the Dow Jones US Chemicals Index, assuming an investment of \$100 on December 31, 2010 and the reinvestment of all dividends.

COMPARISON OF CUMULATIVE TOTAL RETURN AMONG CHEMTURA CORPORATION,

S&P	500	AND	DOW	JONES	CHEMICAL INDEX

	12/31/2010	12/31/2011	12/31/2012	12/31/2013	12/31/2014	12/31/2015
CHEMTURA CORPORATION	\$100.0	\$71.0	\$133.0	\$174.7	\$154.7	\$170.6
S&P500	\$100.0	\$102.1	\$117.9	\$154.9	\$175.4	\$177.7
DOW JONES US CHEMICAL	\$100.0	\$98.4	\$120.0	\$155.8	\$169.0	\$160.8
INDEX	\$100.0	<b>Φ90.4</b>	\$120.0	\$133.8	\$109.0	\$100.8

Item 6: Selected Financial Data

The following reflects selected financial data for each of our last five fiscal years and has been reclassified to reflect the effects of the Antioxidant and Consumer Products businesses as discontinued operations. The divestiture of our Chemtura AgroSolutions business did not meet the criteria to be accounted for as a discontinued operation and, therefore, we have included the results of that business as part of our continuing operations. The information below should be read in conjunction with Item 7 - Management's Discussion and Analysis of Financial Condition and Results of Operations and Item 8 - Financial Statements and Supplementary Data of this Annual Report. The financial information presented may not be indicative of future performance.

(In millions of dollars, except per share data)	2015		2014		2013		2012		2011	
Summary of Operations										
Net sales (a)	\$1,745		\$2,190		\$2,231		\$2,196		\$2,184	
Gross profit	433		508		510		581		558	
Selling, general and administrative	151		255		229		246		269	
Depreciation and amortization	93		102		101		100		103	
Research and development	20		36		40		41		36	
Facility closures, severance and related costs	3		25		42		11		3	
Loss (gain) on sale of business (b)	4		(529	)	_				(27	)
Impairment charges (c)	1				_				4	
Changes in estimates related to expected allowable claims (d)			_		_				3	
Equity (income) loss	(1	)			_		4		1	
Operating income	162		619		98		179		166	
Interest expense	(30	)	(45	)	(60	)	(64	)	(63	)
Loss on early extinguishment of debt			(7	)	(50	)	(1	)		
Other income, net	20		12		8		15		1	
Reorganization items, net (e)					_				(19	)
Earnings (loss) from continuing operations before income taxes	152		579		(4	)	129		85	
Income tax (expense) benefit	(16	)	192		(18	)	(26	)	(17	)
Earnings (loss) from continuing operations	\$136		\$771		\$(22	)	\$103		\$68	
Per Share information - attributable to Chemtura										
Earnings (loss) from continuing operations - Basic	\$2.01		\$8.55		\$(0.23	)	\$1.04		\$0.68	
Earnings (loss) from continuing operations - Diluted	\$1.98		\$8.43						\$0.68	
Latinings (1055) from continuing operations - Direct	Ψ1.70		φυ3		Ψ(0.23	,	Ψ1.04		Ψ0.00	
Other Per Share Data										
Common stock trading range - High	\$32.34		\$27.94		\$28.17		\$21.69		\$19.37	
Common stock trading range - Low	\$21.23		\$21.02		\$19.05		\$11.36		\$8.49	
Average shares outstanding - Basic	67.8		90.2		97.7		98.2		100.1	
Average shares outstanding - Diluted	68.8		91.5		97.7		98.8		100.3	

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(In millions)	2015	2014	2013	2012	2011
Financial Position					
Working capital (f)	\$617	\$811	\$1,041	\$1,101	\$931
Current ratio (f)	2.7	3.0	3.2	3.2	3.4
Total assets (f)	\$2,366	\$2,667	\$2,704	\$3,030	\$2,855
Total debt, including short-term borrowings	\$517	\$574	\$898	\$876	\$752
Total equity	\$1,002	\$1,054	\$999	\$1,068	\$1,046
Total capital employed	\$1,519	\$1,628	\$1,897	\$1,944	\$1,798
Debt to total capital %	34.0 %	35.3	% 47.3	% 45.1	% 41.8 %
(In millions of dollars, except for number of					
employees)					
Other Statistics					
Net cash provided by (used in) operations	\$159	\$(78	) \$79	\$218	\$182
Capital spending from continuing operations	\$80	\$113	\$159	\$136	\$142
Depreciation from continuing operations	\$81	\$87	\$82	\$80	\$81
Amortization from continuing operations	\$12	\$15	\$19	\$20	\$22
Approximate number of employees at end of year	2,500	2,700	3,300	4,600	4,500

Net sales includes \$38 million and \$6 million in 2015 and 2014, respectively, related to the non-cash portion of the (a)recognition of our fulfillment, net of accretion, of our below-market contract obligations associated with the sale of our Chemtura AgroSolutions business in 2014.

- (b) Gain on sale of business primarily included a \$529 million gain on the sale of our Chemtura AgroSolutions business in 2014 and \$27 million gain on the sale of our 50% interest in Tetrabrom Technologies Ltd. in 2011.
- (c) The 2011 charge primarily included the impairment of intangible assets of \$3 million within the Agrochemical Manufacturing segment.
  - In March 2009, Chemtura and 26 of our affiliates filed for relief under Chapter 11 of Title 11 of the United States Code ("Chapter 11") the United States Bankruptcy Court for the Southern District of New York (the "Bankruptcy
- (d) "Plan"). In November 2010, the Bankruptcy Court entered an order confirming our plan of reorganization (the "Plan"). Changes in estimates related to expected allowable claims relate to adjustments to liabilities subject to compromise (primarily legal and environmental reserves) as a result of our Chapter 11 proof of claims evaluation process.
- (e) Reorganization items, net, represents professional fees, impacts from the settlement of claims and charges for reorganization initiatives.
  - In the fourth quarter of 2015, we elected to early adopt on a prospective basis the provisions of Accounting Standards Update No. 2015-17 Balance Sheet Classification of Deferred Taxes ("ASU 2015-17"), which requires that deferred tax liabilities and assets and related valuation allowances be classified as non-current on the balance
- (f) sheet. Previous to this adoption deferred tax assets or liabilities and related valuation allowances could be classified as either current or non-current depending on the nature of the assets or liability that gave rise to the deferred tax position. Given that we elected prospective adoption, we did not reclassify prior year information to conform with ASU 2015-17.

Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations
The following discussion and analysis should be read in conjunction with our Consolidated Financial Statements

included in Item 8 of this Form 10-K.

Forward-Looking Statements

In addition to historical information, this Report contains "forward-looking statements" within the meaning of Section 27(a) of the Securities Act of 1933, as amended and Section 21(e) of the Exchange Act of 1934 as amended.

We use words such as "anticipate," "believe," "intend," "estimate," "expect," "continue," "should," "could," "may," "plan," "p

"will" and similar expressions to identify forward-looking statements. Such statements include, among others, those concerning our expected financial performance and strategic and operational plans, as well as all assumptions, expectations, predictions, intentions or beliefs about future events. You are cautioned that any such forward-looking statements are not guarantees of future performance and that a number of risks and uncertainties could cause actual results to differ materially from those anticipated in the forward-looking statements.

Such risks and uncertainties include, but are not limited to:

Risks associated with significant international operations and interests;

Increases in the price of raw materials or energy and our ability to recover cost increases through increased sales prices for our products;

Disruptions in the availability of raw materials or energy;

Operating risks at our production facilities;

Risks associated with maintenance of existing facilities and construction of new facilities;

Failure to develop new products and our ability to remain technologically innovative and offer improved products in a cost-effective manner;

The cyclical nature of the global chemicals industry;

Failure to accurately forecast market and customer trends for our products;

Declines in general economic conditions;

Significant competition in many of the markets in which we operate;

Loss of or significant reduction in purchases by our largest customers;

Our products are subject to extensive government scrutiny and regulation;

Environmental, health and safety regulations;

Current and future litigation, governmental investigations, prosecutions and administrative proceedings;

Military conflicts and terrorism;

Federal regulations aimed at increasing security at certain chemical production plants;

Our ability to protect our patents or other intellectual property rights;

Our ability to reduce the risks of cyber incidents and protect our information technology;

Risks associated with possible climate change legislation, regulation and international accords;

Risks associated with strategic acquisitions, partnerships and other strategic opportunities;

Our dependence upon a trained, dedicated sales force;

Exchange rate and other currency risks;

Our unfunded and underfunded defined benefit pension plans and post-retirement welfare benefit plans;

Risks associated with Joint Ventures;

Restrictive covenants in our credit facilities;

Deferred tax assets and utilization of our net operating losses;

The ability to support the carrying value of the goodwill and long-lived assets related to our businesses;

Estimates and judgments relating to our accounting policies;

Our ability to maintain adequate internal controls over financial reporting;

Actions of activist shareholders;

Assuance of additional shares of stock and resulting dilution; and

Other risks and uncertainties detailed in Item 1A - Risk Factors in our filings with the Securities and Exchange Commission.

These statements are based on our estimates and assumptions and on currently available information. The forward-looking statements include information concerning our possible or assumed future results of operations, and

our actual results may differ significantly from the results discussed. Forward-looking information is intended to reflect opinions as of the date this Form 10-K was filed. We undertake no duty to update any forward-looking statements to conform the statements to actual results or changes in our operations.

#### **OUR BUSINESS**

We are a global, United States publicly traded specialty chemical company dedicated to delivering innovative, performance-driven engineered specialty chemical solutions which are used as additives, ingredients or intermediates that add value to our customers' end products. We are committed to global sustainability through "greener technology" and developing engineered chemical solutions that meet our customers' evolving needs. We operate in a wide variety of end-use industries, including automotive, building and construction, electronics, lubricants, packaging and transportation. We are a leader in many of our key product lines and transact business in approximately 90 countries. Our principal executive offices are located in Philadelphia, Pennsylvania and Middlebury, Connecticut. During 2013 and 2014, through a series of divestitures, we transformed ourselves from a diversified specialty chemical company into a company primarily serving the global industrial specialty chemical market. Prior to 2015 as part of our transformational initiatives, we divested several businesses that did not fit with our strategic objectives. In November 2014, we sold our Chemtura AgroSolutions business to Platform Specialty Products Corporation ("Platform"). The sale included the stock of certain subsidiaries, the dedicated manufacturing plants located at Gairaula, India and Pekin, Illinois, working capital and certain other assets as well as the assumption of certain liabilities. In December 2013, we completed the sale of our subsidiaries dedicated to the Consumer Products business to KIK Custom Products Inc. ("KIK"). The assets of those subsidiaries included dedicated manufacturing plants in the U.S. and South Africa. In April 2013, we completed an asset sale of our antioxidant and UV Stabilizer (the "Antioxidant") business to SK Blue Holdings, Ltd. ("SK") and Addivant USA Holdings Corp. ("Addivant"). The sale included dedicated manufacturing plants in the U.S., France, and Germany, and joint venture interests in the Kingdom of Saudi Arabia and Korea. A further description of these transactions are provided in Note 2 - Divestitures in our Notes to Consolidated Financial Statements.

Under the terms of the sale agreement with Platform, we retained most of the property, plant and equipment used to manufacture products for the Chemtura AgroSolutions business and have continued to manufacture products for Platform under several supply agreements and a tolling agreement (collectively, the "supply agreements"). The supply agreements have minimum terms of between two and four years. To reflect the change in the nature of operations, we changed the name of our Chemtura AgroSolutions segment to Agrochemical Manufacturing after the sale in 2014. Our commitment to this strategic change required us to reevaluate our remaining operations and management structure as well as our ability to increase operating efficiencies, reduce costs and increase value to our shareholders. In addition to the divestiture of our non-strategic businesses, in the fourth quarter of 2014, our Board of Directors (the "Board") approved a restructuring plan (the "2014 Restructuring Plan") to eliminate the stranded costs associated with our Chemtura AgroSolutions business, streamline the costs of our manufacturing operations and align our remaining operations and management structure for operating efficiencies designed to increase our business operating income and cash flows and build a platform for future organic growth. A further description of this restructuring initiative is provided in Note 3 - Restructuring and Asset Impairment Activities.

We entered 2015 a transformed company. We are comprised of two strategic business reporting segments, Industrial Performance Products and Industrial Engineered Products which, coupled with our Corporate reporting segment, are collectively referred to as our "Core Segments". In addition to our Core Segments, our Agrochemical Manufacturing reporting segment represents the ongoing activity with Platform under the supply agreements.

The primary economic factors that influence the operations and net sales of our Industrial Performance Products ("Industrial Performance") and Industrial Engineered Products ("Industrial Engineered") segments (collectively referred to as "Industrials") are demand conditions in industrial, electronics, energy, residential and commercial construction, and transportation markets. Other factors affecting our financial performance include industry capacity, customer demand, raw material and energy costs, and sales prices. Sales prices are influenced by the global demand and supply for the products we produce, our ability to innovate and differentiate our products and competitor behavior. We seek to pursue sales prices that reflect the value our products deliver to our customers, while aiming to pass on higher raw material and energy costs to our customers to preserve our profit margins. The risks that may impact our performance are included in Item 1A - Risk Factors.

#### OVERVIEW OF OUR PERFORMANCE

In 2015, we substantially delivered on our commitments we had established for our transformed company despite being a smaller company and encountering some headwinds in the supply of certain raw materials and sluggish market

demand conditions. Among the many accomplishments in 2015 were:

#### Improvement Initiatives

We announced in late 2014 a cost reduction program to deliver \$62 million annualized incurred cost savings indicating we would realize \$50 million of savings in 2015. We delivered on that commitment and achieved our "run-rate" savings in incurred costs in the third quarter of 2015 although part of the benefit was offset by the absorption effect of lower sales volume.

We promptly eliminated the stranded costs associated with our former Chemtura AgroSolutions business. We also completed the closure of our West Lafayette, Indiana and Adrian, Michigan facilities. These actions together with the manufacturing and SG&A cost reduction program substantially completed the 2014 Restructuring Plan.

We increased the percentage of operating income to net sales in our Industrial Performance and Industrial Engineered segments by 520 basis points and 600 basis points, respectively, for the year ended December 31, 2015 as compared with prior year end despite a reduction in net sales for the same periods. The improvement came from the benefits of our cost reduction actions and from "price-over-raw material costs", among other factors.

We demonstrated substantial improvements in cash flow. Net cash flow provided by operating activities was \$159 million, an improvement of \$237 million from 2014 when we used cash. Capital expenditures declined as planned from \$113 million in 2014 to \$80 million in 2015.

We continued to drive our commercial and operational excellence initiatives, improving our customers' experience and our operating effectiveness.

We continued to reduce the number of our legal entities, primarily through liquidation, eliminating the costs of regulatory and other compliance. As a result, in the fourth quarter of 2015, we recorded an \$8 million gain due to the release of accumulated foreign currency translation adjustments on these liquidations.

### Share Repurchases

During 2015, we repurchased 6.2 million shares of our common stock under our share repurchase program at a cost of \$150 million. As of December 31, 2015, \$171 million remained outstanding under our Board authorized share repurchase program to fund further repurchases in 2016.

#### **Debt Repayments**

During 2015, we reduced our outstanding debt by \$57 million primarily the result of payments made with proceeds from the sale of our Chemtura AgroSolutions business and cash on hand, lowering our total debt to \$517 million as of December 31, 2015.

We reduced interest expense by \$15 million for the year ended December 31, 2015 as compared with the prior year end due to debt repayments made in 2015 and late 2014.

With the combination of improved operating profitability and cash flows and the reductions in debt outstanding, we ended 2015 with our total debt close to our long term financial goal of 2 times Adjusted EBITDA (Adjusted EBITDA is defined in this section under the heading ADJUSTED EBITDA).

#### Other

During the second quarter of 2015, we sold 2 million shares of Platform common stock that we had received as part of the purchase price consideration when we sold our Chemtura AgroSolutions business to Platform in 2014 for net cash proceeds of \$54 million. As a result of holding the shares, which were accounted for as available for sale securities, we reported a net gain of \$3 million in the second quarter of 2015.

#### **RESULTS OF OPERATIONS**

Our management discussion and analysis of our results of operations relates to our business from continuing operations.

The sale of our Chemtura AgroSolutions business in November 2014 did not meet the criteria to be reported as a discontinued operation and, therefore, our results from continuing operations includes the historical financial information of that business through the date of sale. Given the sale of our Chemtura AgroSolutions business to Platform in 2014, a discussion of the results of operations for the consolidated company for the years ended December 31, 2015, 2014 and 2013 is less meaningful to investors due to the sale and the change in the nature of the operations associated with our Agrochemical Manufacturing business from a market participant to a supplier of products to Platform under the supply agreements.

We determined that the most effective way to present to investors the change in results of continuing operations for the year ended December 31, 2015 compared with the year ended December 31, 2014, as well as the comparison for the year ended December 31, 2014 compared with the year ended December 31, 2013, is to provide separate discussions of the changes in our consolidated results for the Core Segments and then separately for the Agrochemical Manufacturing segment.

Under the headings "2015 Compared to 2014" and "2014 Compared to 2013," we are providing a table which presents the results of operations of the consolidated Company including the Agrochemical Manufacturing segment through operating income. The table then segregates the results of operations for our Core Segments and our Agrochemical Manufacturing segment. The discussion of the components of operating income included in the section titled Overview only reflect changes related to the Core Segments. A separate discussion regarding the changes in results of operations of the Agrochemical Manufacturing segment is presented in each section under the heading "Agrochemical Manufacturing".

Components of net income which are not included in operating income are affected by other factors in addition to the inconsistency in the results of operations after the sale of our Chemtura AgroSolutions business. We therefore have not included net income in the tables. As a result, the comparison discussions for the changes in those components which are not part of operating income are presented for the Company as a whole.

For a further discussion on the sale of our Chemtura AgroSolutions business and the ongoing supply agreements with Platform, as well as the sale of our Antioxidant and Consumer Products businesses, see Note 2 - Divestitures in our Notes to Consolidated Financial Statements.

#### 2015 COMPARED TO 2014

	2015			2014				
		Agrochemica	l Core		Agrochemical Core			
(in millions)	Consolidate	dManufacturin	gSegments	ConsolidatedManufacturingSegmen				
Net Sales	\$1,745	\$137	\$1,608	\$2,190	\$403	\$1,787		
Cost of goods sold (1)	1,312	97	1,215	1,682	239	1,443		
Gross Profit (1)	433	40	393	508	164	344		
Selling, general and administrative	151	1	150	255	60	195		
Depreciation and amortization	93	4	89	102	8	94		
Research and development	20	_	20	36	10	26		
Facility closures, severance and related costs	3	_	3	25	_	25		
Loss (gain) on sale of business	4	_	4	(529	)—	(529	)	
Impairment charges	1	_	1	_	_	_		
Equity income	(1	)—	(1)					
Operating Income	\$162	\$35	\$127	\$619	\$86	\$533		

(1) - Excludes depreciation and amortization expense which are shown separately.

#### Overview

Consolidated net sales of our Core Segments were \$1.6 billion in 2015 or \$179 million lower than in 2014 due to lower sales volume of \$129 million, unfavorable foreign currency translation of \$38 million and lower sales prices of \$12 million.

The larger portion of the decline in sales volume was attributable to our Industrial Engineered segment. Our Industrial Performance segment also reflected some sales volume declines as well as the effects of unfavorable product mix as compared with 2014. Our Industrial Engineered segment reported a decline in overall volume, despite volume improvement in the sales of our Emerald Innovation 3000<sup>TM</sup> product used in the manufacture of insulation foam for building and construction applications and in clear brine fluids used in oilfield applications. However, due to the impact of a strike at a supplier of elemental bromine in the first half of 2015 and the disruptions in the import and export of hazardous materials in China as a result of the fire at the Tianjin, China port, we experienced a decline in sales volumes for our elemental bromine-based products and products used in energy and electronic applications.

Additionally, decreased demand for flame retardant products used in furniture foam applications and the discontinuance of certain products late in 2014 and in 2015 led to further sales volume declines. Our Industrial Performance segment also experienced a decline in overall sales volume; however, unfavorable product mix particularly in the automotive, power generation, mining, oil and gas application products was a primary driver of lower net sales. Increased overall sales prices in our Industrial Engineered segment products were offset by sales price declines

in our Industrial Performance segment due to our obligation to pass along the reductions in raw material costs resulting from lower oil prices to certain customers under formula based pricing contracts. Throughout 2015, we experienced the unfavorable effects of the stronger U.S. Dollar compared to other major currencies which reduced the U.S. Dollar value of our net sales denominated in foreign currencies.

Gross profit for our Core Segments in 2015 was \$393 million, an increase of \$49 million compared to \$344 million in 2014. Gross profit as a percentage of sales increased to 24% in 2015 compared with 19% in 2014. The increase in gross profit was primarily due to lower raw material costs resulting from lower oil prices, lower manufacturing costs as a result of our cost reduction initiatives, lower distribution costs and favorable foreign currency translation, partly offset by lower sales volume, unfavorable product mix and lower sales prices and a charge of \$8 million related to an increase in our inventory reserves for a discontinued product.

Selling, general and administrative ("SG&A") expense of \$150 million was \$45 million lower than 2014. Our SG&A for 2014 included a \$21 million one-time charge related to the settlement of pension obligations and \$18 million of expenses we incurred in connection with the sale of our Chemtura AgroSolutions business. The remaining reduction in SG&A expense from 2014 is the result of our various cost savings initiatives that we announced at the end of 2014, including the elimination of stranded costs associated with our Chemtura AgroSolutions business, offset in part by higher cost accruals under our employee benefit and management incentive plans in 2015 compared to last year due to our improved performance.

Facility closures, severance and related costs in 2015 were \$3 million compared with \$25 million for 2014. The expense related to the cost reduction initiatives we announced in 2014 and 2013. The restructuring plans in 2014 and 2015 related to both the elimination of stranded costs associated with the sale of our Chemtura AgroSolutions, Consumer Products and Antioxidant businesses as well as initiatives to reduce manufacturing and SG&A costs within our Industrials businesses. Our restructuring plans are described in more detail in Note 3 - Restructuring and Assets Impairment Activities of our Notes to Consolidated Financial Statements.

The loss on sale of business of \$4 million in 2015 and the gain on sale of business of \$529 million in 2014 are related to the sale of our Chemtura AgroSolutions business to Platform in 2014 and the settlement of working capital adjustments and finalization of other post-closing terms of the sale and purchase agreement in 2015.

Other Non-Operating Income and Expense

The following discussion about income and expense components that are not included in the computation of operating income are presented on a total company basis, which is the sum of the Core Segments and the Agrochemical Manufacturing Segment.

Interest expense of \$30 million during 2015 was \$15 million lower than 2014, primarily the result of our repayments of debt utilizing net after-tax cash proceeds from the sale of Chemtura AgroSolutions.

Loss on the early extinguishment of debt of \$7 million for 2014 included a call premium and the write-off of unamortized capitalized financing costs and original issuance discount.

Other income, net was \$20 million for 2015 compared with \$12 million for 2014. Other income, net in 2015 included a gain of \$8 million related to the release of cumulative translation adjustments associated with the rationalization of certain European subsidiaries that were no longer required and a gain of \$3 million related to the sale of the Platform shares. The remaining activity primarily reflected realized and unrealized foreign exchange gains or losses, most significantly related to the strengthening of the U.S. Dollar against foreign currencies which began in the fourth quarter of 2014.

The income tax expense in 2015 was \$16 million compared with a benefit of \$192 million in 2014. The tax benefit reported in 2014 included a release of U.S. valuation allowance in the amount of \$406 million and the tax expense related to the sale of our Chemtura AgroSolutions business. In 2014, we concluded that the positive evidence that we can utilize our U.S. deferred tax assets before they expire outweighed the negative evidence and as a result we released a majority of our U.S. valuation allowance.

Earnings from continuing operations for 2015 was \$136 million, or \$1.98 per diluted share, as compared with \$771 million, or \$8.43 per diluted share in 2014. The after tax gain on the sale of Chemtura AgroSolutions and the tax benefit from the release of the majority of the valuation allowance against our U.S. deferred tax assets were the largest contributors to diluted earnings per share in 2014.

Earnings from discontinued operations, net of tax for 2014, was \$1 million, or \$0.01 per diluted share, which related to the Consumer Products business.

Loss on sale of discontinued operations, net of tax for 2014, was \$9 million, or \$0.10 per diluted share, which primarily represented post-closing adjustments and obligations, settlement of working capital claims and fees associated with those adjustments and claims related to the sale of our Consumer Products business.

Industrial

The following table describes the major factors impacting net sales and operating income for each of our segments:

Industrial

Subtotal

		Indus		Industria		ubtotal	A grack	nemical		
Net Sales (in millions)		Perfor	mance	Engineere	ed Co	ore	Manufa	nemical cturing Tota	ıl	
		Produ	cts	Products	Se	egments	Iviaiiuia	cturing		
2014		\$987		\$800	\$1	1,787	\$403	\$2,1	90	
Changes in sales prices		(24	,	) 12	(1	2	)—	(12	)	
Unit volume and mix		(55	,	(74	)(1	29	)(2	)(131	)	
Foreign currency		(22	,	)(16	)(3	8	)—	(38	)	
Below market contract obli	gation	_		_		-	32	32		
Divestiture						_	(296	)(296	)	
2015		\$886		\$722	\$ 1	1,608	\$137	\$1,7	45	
				Facility	Gain					
Closures										
Operating Income (in	Industria			CAVATAL	nce (loss)	Impair	ment Core	Agroche	mical Total	
millions)		nc&Enginee	_	ana	on sal	charges	S Come	Manufact	turing	
	Products	Product	s expen	related			Segme	ents		
				costs	busin	ess				
2014	\$ 106	\$ 16	\$ (93	) \$ (25	) \$529	\$ <i>-</i>	\$ 533	\$ 86	\$619	
Sale of business					(533	) —	(533	) —	(533)	
Costs associated with the										
sale of Chemtura			18				18		18	
AgroSolutions										
Divestitures								(86	) (86 )	
Subtotal	106	16	(75	) (25	) (4	) —	18		18	
Price over raw materials	32	20					60		60	
(a)	32	28	_	_	_	_	60	_	60	
Unit volume and mix	(27	) (17	) —				(44	) (1	) (45 )	
Foreign currency	6	1	_				7		7	
Manufacturing cost and	11	17					28		28	
absorption	11	1 /	_	_	_	_	20	<del></del>	20	
Distribution cost	(3	) 9	_	_	_		6		6	
Below market contract								32	32	
obligation	<del></del>			_				32	32	
Depreciation and	6	(3	) 2				5	4	9	
amortization expense	U	(3	) 2	_			3	4	9	
Pension settlement			21			_	21		21	
Facility closures,				22			22		22	
severance and related costs	_	_	_	22	_	_	22	<del></del>	22	
Impairment charges	_	_	_	_		(1	)(1	) —	(1)	
SGA&R	11	8	(9	) —		_	10	_	10	
Other	(1	) (1	) (3	) —		_	(5	) —	(5)	
2015	\$ 141	\$ 58	\$ (64	) \$ (3	) \$ (4	) \$ (1	) \$ 127	\$ 35	\$162	

<sup>(</sup>a) Price over raw materials is the sum of the net changes in sales prices and the net changes in raw material costs between the two periods. As the reduction in the costs of certain raw materials result in certain circumstances in reductions in sales prices under certain contractual and negotiated agreements, the change in sales prices net of changes in raw material costs provides a better measure of the impact of sales price changes on our profitability

(referred to as "price over raw materials").

The following is a discussion of the results of our segments for 2015 compared with 2014.

**Industrial Performance Products** 

Our Industrial Performance segment reported higher operating income on lower net sales for 2015 as compared with 2014.

The decline in net sales resulted from changes in product mix predominantly in our petroleum additive products coupled with overall lower sales volume in both petroleum additive and urethane product lines. Net sales further declined due to overall lower average sales prices, the result of lower raw material costs and the unfavorable effects of foreign currency translation. As

2015 progressed, we felt the effects of lower demand as our customer's began to manage inventory as demand in mining and oil and gas application products weakened. This weakening effected our product mix as we retained a higher volume of some of our lower margin products. Net sales were further impacted by the strengthening of the U.S. Dollar against major foreign currencies resulting in the value of net sales in foreign currency translating to lower U.S. Dollar sales in 2015 as compared with 2014. Overall lower sales prices particularly for our petroleum additive products were principally the result of our contractual and negotiated agreements that in certain circumstances result in reductions in sales prices when certain raw material costs decline.

Despite the reduction in net sales, operating income compared with 2014 was \$35 million higher due to the benefit of our ability to hold sales prices for our more specialty products, lower raw material and manufacturing costs and lower SG&A and research and development ("R&D", collectively, "SGA&R") expense primarily the result of implementing many of the cost reduction initiatives we announced in 2014. The changes in foreign exchange rates provided a net benefit due to the location of our manufacturing footprint such that the reduction in foreign currency denominated production and administrative costs in U.S. dollar terms more than offset the unfavorable translation of foreign currency denominated net sales. These benefits more than offset the impacts of unfavorable volume and product mix described above.

#### **Industrial Engineered Products**

Our Industrial Engineered segment reported lower net sales but higher operating income for 2015 compared with 2014.

The decline in net sales was primarily related to a decline in overall volume and product mix offset in part by increases in average sales prices. We experienced lower sales volume in our flame retardant products used in energy and electronic applications and in flexible urethane foams used in furniture applications coupled with a reduction in bromine products used in fine chemical applications offset in part by increases in demand for our Emerald Innovation  $3000^{\text{TM}}$  product used in insulation foam applications in building and construction and clear brine fluids used in oilfield applications. The growth in net sales of clear brine fluids occurred despite the overall decline in oil and gas exploration in 2015. This is likely due to the timing of the completion of the deep water drilling projects in which our products are used and may not be indicative of future net sales for these products in these applications.

During the first half of 2015, we experienced an interruption in the supply of elemental bromine due to a strike at a third-party supplier. While the strike ended early in the third quarter, it took until the end of the year for supply to fully recover. The fire and explosion at the Tianjin, China port in August caused disruptions to the import and export of hazardous materials in China which led to unfavorable volume impacts on certain of our products. Additionally, the discontinuance of sales of certain phosphorus-based flame products toward the end of 2014 and the discontinuation of sales of certain bromine based biocides when we closed our Adrian, MI manufacturing facility in June 2015 resulted in further sales volume declines year-over-year. Sales prices for our bromine and bromine derivative products started to recover as 2015 progressed, particularly for electronic flame retardant applications. This benefit was offset in part by unfavorable currency translation due to the strengthening of the U.S. Dollar against foreign currencies in 2015.

The benefit of our cost savings initiatives and the increase in sales prices offset the reduction in net sales. In 2015, we generated \$58 million in operating profit, a \$42 million increase over 2014. The effect of sales volume declines on operating income were offset by the benefit of "price over raw material" costs, lower manufacturing and distribution costs and lower SGA&R. Operating profit in 2015 was impacted by an \$8 million charge to increase our inventory reserves for a discontinued product. By the third quarter of 2015, we had realized the full benefit of our cost reduction initiatives announced in the fourth quarter of 2014, although part of that benefit was offset by the absorption effects of lower sales volume and the increase in our inventory reserves.

#### Corporate

Included in our general corporate expenses are costs of a general nature or managed on a corporate basis. These costs, net of allocations to the business segments, primarily represent corporate stewardship and administration activities

together with costs associated with legacy activities and intangible asset amortization. Functional costs are allocated between the business segments and general corporate expense.

Corporate expense was \$64 million and \$93 million in 2015 and 2014, respectively, which included amortization expense related to intangible assets and depreciation expense of \$14 million and \$16 million in 2015 and 2014 respectively. Our 2014 corporate expense included a one-time charge for \$21 million in 2014 related to the settlement of a pension obligation and \$18 million of non-recurring costs related to the sale of our Chemtura AgroSolutions business. The remaining increase in corporate expense in 2015 is the result of higher accruals under our employee benefit and management incentive plans in 2015 compared

to last year due to improved performance coupled with higher accruals for environmental obligations and project costs partly offset by lower costs as a result of our cost savings initiatives.

#### Agrochemical Manufacturing

In the first ten months of 2014, our Chemtura AgroSolutions business manufactured and resold agrochemical products to third party distributors and customers. In November 2014, we sold our Chemtura AgroSolutions business to Platform. Under the terms of the sale agreement with Platform, we retained most of the property, plant and equipment used to manufacture products for the Chemtura AgroSolutions business and are continuing to manufacture products for Platform under the supply agreements. We operated under the supply agreements for the two months ended December 31, 2014 and for the twelve months ended December 31, 2015. Therefore, the results of operations in 2014 are not comparable to the result of operations in 2015. In light of the incomparability, we have only provided discussion on the results of operations for 2015 and the net sales and operating profit of this segment prior to the sale in 2014.

### Supply Agreement Results

The supply agreements with Platform are designed to recover the actual cash costs incurred to manufacture the products under the agreements. Accordingly, the supply agreements are considered below-market contracts for their full term. Contemporaneous with the sale, we accrued in 2014 an obligation of \$230 million, on a discounted basis, which represents the loss of profit on these products over the terms of the supply agreements, including contractual obligations to continue supply for a period of up to 2 years after termination of the supply agreements. The recognition of the obligation, along with the accretion of the obligation to its undiscounted value of \$345 million, will be recorded as net sales on a straight-line basis over the term of each supply agreement.

For the year ended December 31, 2015, the Agrochemical Manufacturing segment net sales were \$137 million, which included \$38 million related to the recognition of our fulfillment of the obligation, net of accretion related to the below-market supply agreements. For the two month period ended December 31, 2014, the Agrochemical Manufacturing segment net sales were \$22 million, which included \$6 million related to the recognition of our fulfillment of the obligation, net of accretion related to the below-market supply agreements.

Operating income for the year ended December 31, 2015 was \$35 million compared with \$6 million for the two months ended December 31, 2014. As the contracts were designed to recover a majority of the costs incurred, operating income reflected the recognition of the obligation, net of accretion, related to the below market contract, less a small amount of depreciation and amortization that is not included as part of the recoverable costs.

Previous Results of the Chemtura AgroSolutions Business (Pre-Divestiture)

Net sales of the Chemtura AgroSolutions business for the ten months ended October 31, 2014 were \$381 million and operating income was \$80 million.

### 2014 COMPARED TO 2013

Overview

	2014			2013				
		Agrochemical	l Core		Agrochemica	l Core		
(in millions)	Consolidate	dManufacturin	gSegments	ConsolidatedManufacturingSegments				
Net Sales	\$2,190	\$403	\$1,787	\$2,231	\$449	\$1,782		
Cost of goods sold (1)	1,682	239	1,443	1,721	275	1,446		
Gross Profit (1)	508	164	344	510	174	336		
Selling, general and administrative	255	60	195	229	61	168		
Depreciation and amortization	102	8	94	101	12	89		
Research and development	36	10	26	40	14	26		
Facility closures, severance and related costs	25	_	25	42	_	42		
Gain on sale of business	(529	)—	(529)					
Equity (income) loss	_	_	_	_	(1	1		
Operating Income	\$619	\$86	\$533	\$98	\$88	\$10		

(1) - Excludes depreciation and amortization expense which are shown separately.

#### Overview

Consolidated net sales of our Core Segments were \$1.8 billion in 2014 or \$5 million higher than in 2013 driven by a \$12 million increase in volume which was offset in part by a \$4 million reduction in average sales prices and \$3 million related to the unfavorable effects of foreign currency translation. Our Industrial Performance segment reported an increase in sales which represented an increase in volume of our polyester polyols and sales price increases of our petroleum additive products offset by volume declines in our intermediate, detergents and inhibitor products. Our Industrial Engineered segment reported a decline in sales due to competition reducing sales prices for a number of our product lines and the decline in demand for our flexible foam application products weakened as the year progressed unfavorably impacting volume. Our Industrial Engineered segment delivered improvement in volume of our brominated performance products which was offset in part by declines in sales volumes for our polymerization co-catalysts products.

Gross profit for our Core Segments in 2014 was \$344 million, an increase of \$8 million compared to \$336 million in 2013. Gross profit as a percentage of sales remained stable at 19% for both years. Gross profit in dollars increased due to the absence of a \$21 million charge we took in 2013 related to costs to remediate a legacy non-operating site in France. Our gross profit was unfavorably impacted by the decrease in sales prices, an increase in raw material, distribution and manufacturing costs, and unfavorable product mix offset by the elimination of stranded costs associated with the Antioxidant and Consumer Products businesses and other cost savings initiatives.

SG&A expense of \$195 million was \$27 million higher than in 2013, primarily the result of a \$21 million charge related to the settlement of pension obligations, \$12 million of additional costs in 2014 associated with the sale of our Chemtura AgroSolutions business (exclusive of the amounts reported as part of the gain on sale) and \$9 million in costs associated with our investment in business excellence initiatives. This was partially offset by \$3 million in other pension matters primarily related to the absence of one-time charges that were recorded in 2013, a \$3 million reduction in selling expense and the remainder in savings associated with the reduction of employee costs and benefits associated with our restructuring programs and the elimination of the stranded costs associated with the Antioxidant and Consumer Products businesses.

Facility closures, severance and related costs in 2014 was \$25 million compared with \$42 million for 2013. The expense related to the cost reduction initiatives we announced in 2014 and 2013. The restructuring plans related to both the elimination of stranded costs associated with the sale of our Chemtura AgroSolutions, Consumer Products and Antioxidant businesses as well as initiatives to reduce manufacturing and SG&A costs within our Industrials businesses. Our restructuring plans are described in more detail in Note 3 - Restructuring and Assets Impairment Activities of our Notes to Consolidated Financial Statements.

The gain on sale of business of \$529 million in 2014 represented the sale of our Chemtura AgroSolutions business to Platform.

Other Non-Operating Income and Expense

The following discussion about income and expense outside of operating income is presented on a total company basis, which is the sum of the Core Segments and the Agrochemical Manufacturing segment.

Interest expense of \$45 million during 2014 was \$15 million lower than 2013 due to our debt refinancing actions taken in the second half of 2013. The full benefit of our fourth quarter 2014 redemption of the outstanding 2018 Senior Notes and the pay down of the Term Loan due 2016 (the "Term Loan") are reflected in our 2015 results. Loss on the early extinguishment of debt of \$7 million for 2014 included a call premium and the write-off of unamortized capitalized financing costs and original issuance discount. Loss on early extinguishment of debt of \$50 million for 2013 included the difference between the principal amount of the 2018 Senior Notes tendered and the sum of the tender offer consideration and consent payments and the write-off of unamortized capitalized financing costs and original issuance discount.

Other income, net was \$12 million for 2014 compared with \$8 million for 2013. Other income, net primarily reflected the net impact of foreign exchange gains and losses. In 2014, we realized foreign exchange gains and losses on the repayment of several foreign denominated intercompany loans between our subsidiaries in addition to significant fluctuations in the Euro and British Pound Sterling. In addition, during 2013, we recognized a gain of \$13 million

related to the release of cumulative translation adjustments associated with the rationalization of certain European subsidiaries that are no longer required.

The income tax benefit in 2014 was \$192 million compared with expense of \$18 million in 2013. The tax benefit reported in 2014 included a release of U.S. valuation allowance in the amount of \$406 million and the tax expense related to the sale of our Chemtura AgroSolutions business. In 2014, we concluded that the positive evidence that we can utilize our U.S. deferred tax

assets before they expire outweighed the negative evidence and as a result we released a majority of our U.S. valuation allowance. In 2013, tax expense was related to taxable income of certain of our international subsidiaries. In 2013, we provided a full valuation allowance against the tax expense associated with our U.S. net operating loss. Earnings from continuing operations for 2014 was \$771 million, or \$8.43 per diluted share, as compared with a loss from continuing operations of \$22 million, or \$0.23 per diluted share, in 2013.

Earnings from discontinued operations, net of tax for 2014, was \$1 million, or \$0.01 per diluted share, as compared with \$25 million, or \$0.26 per diluted share, for 2013. Discontinued operations in 2013 represented the results of operations of our Antioxidants business through its sale in April 2013 and our Consumer Products business through its sale in December 2013. Additionally, in 2013, we recorded an impairment charge of \$7 million which included the impairment of property, plant and equipment related to the Consumer Products business.

Loss on sale of discontinued operations, net of tax for 2014, was \$9 million, or \$0.10, per diluted share. The loss represented customary working capital adjustments of \$1 million and \$8 million associated with the Antioxidant and Consumer Products divestitures, respectively. Loss on sale of discontinued operations, net of tax for 2013, was \$180 million, or \$1.84, per diluted share which represented a net loss of \$155 million and \$25 million associated with the Antioxidant and Consumer Products businesses, respectively.

The following table describes the major factors impacting net sales and operating income for each of our segments:

Industrial

Subtotal

Industrial

Net Sales (in millions)  2013 Changes in sales prices Unit volume and mix Foreign currency Divestiture	Pe	dustrial rformance oducts 79	Enginee Product \$803 (12 11 )(2	ered	Subtotal Core Segments \$1,782 )(4 12 )(3 —	Agro Manu \$449 )10 8 )(8 (56	chemical T facturing T \$ 6 20 (1)	2,231 0 11	)
2014	\$9	87	\$800		\$1,787	\$403	\$	2,190	
Operating Income (in millions)	Industrial Industrial General Performance Engineere & corporate Products Products expense Products Products expense  Facility  closures, severance sale of Core and business Segments  Manufacturing  related costs								
2013	\$ 109	\$ 55	\$ (112	) \$ (4	2)\$—	\$10	\$ 88	\$98	
Sale of business					529	529	_	529	
Costs associated with the sale of Chemtura AgroSolutions	_	_	(12	) —		(12	)—	(12	)
Divestitures					_		(14	) (14	)
Subtotal	109	55	(124	) (42	) 529	527	74	601	
Price over raw materials (a)	(6	) (4	) —	_		(10	)8	(2	)
Unit volume and mix	12	(16	) —	—		(4	)18	14	
Foreign currency	4	(4	) —	_			(7	) (7	)
Manufacturing cost and absorption	(2	) (2	) —	_	_	(4	)(1	) (5	)
Distribution cost	(3	) (2	) —	_	_	(5	)(1	) (6	)
Depreciation and amortization expense	(6	) (1	) 2		_	(5	)4	(1	)
Environmental reserve non-operating site	_	_	21	_		21	_	21	
Pension settlement	_	_	(21	) —	_	(21	)—	(21	)
Facility closures, severance and related costs	_		_	17	_	17		17	

SGA&R	(8	) (8	) 6	_	_	(10	)(9	) (19 )
Other	6	(2	) 23		_	27		27
2014	\$ 106	\$ 16	\$ (93	) \$ (25	) \$ 529	\$533	\$ 86	\$619

Price over raw materials is the sum of the net changes in sales prices and the net changes in raw material costs (a) between the two periods. As the reduction in the costs of certain raw materials result in certain circumstances in reductions in sales prices under certain contractual and negotiated agreements, the change in sales prices net of

changes in raw material costs provides a better measure of the impact of sales price changes on our profitability (referred to as "price over raw materials").

The following is a discussion of the results of our segments for 2014 compared with 2013.

**Industrial Performance Products** 

Our Industrial Performance segment reported higher net sales and lower operating income in 2014 compared with 2013.

We experienced overall volume declines in our intermediate, inhibitor and detergent petroleum additive products which was more than offset by volume improvement in our synthetic basestocks for finished fluid applications, Adiprene®/Vibrathane® products and polyester polyols. Net sales price increases were unable to offset the loss in volume. Overall sales price for our petroleum additive products was favorable to prior year but still fell short of covering increases in our raw material costs. Operating income reflected a favorable product mix of selling higher margin products than in 2013 which was offset in part by higher distribution and SGA&R.

Operating income was \$106 million in 2014, a decrease of \$3 million compared with 2013. The decrease reflected higher raw material costs, an increase in SGA&R costs and additional accelerated depreciation of property, plant and equipment, offset by higher sales volume and favorable product mix, higher sales prices and favorable foreign currency translation.

### **Industrial Engineered Products**

Our Industrial Engineered segment reported lower net sales and operating income in 2014 compared with 2013. During 2014, we felt the effects of excess industry capacity in bromine and in polymerization co-catalysts products ("PCC"). The resulting competition driven by excess supply drove a reduction in our sales prices and resulted in lower volumes. We saw growth in the sales of our Emerald Innovation 3000<sup>TM</sup> products as customers switched to this alternative from traditional HBCD flame retardant styrene based insulation foam applications coupled with increased volume from international markets for our clear brine fluids used in energy markets partly offset the reductions in bromine based products and PCC volumes. Demand for flexible foam flame retardant products declined as the year progressed resulting in lower volumes. Towards the end of the year, sales prices for bromine products stabilized, but sales prices did not recover to 2013 levels. While we experienced a decrease in our raw material costs, the benefit was offset by the decline in sales prices, increase in sales of lower margin products, higher manufacturing and other costs and higher SGA&R expenses.

Operating income of \$16 million in 2014 decreased \$39 million compared with last year. The decrease reflected unfavorable volume and product mix, lower sales prices, higher SGA&R costs, unfavorable foreign currency translation, higher distribution costs and an increase in other costs, offset by a decrease in raw material costs. Corporate

Corporate expense was \$93 million and \$112 million in 2014 and 2013, respectively, which included amortization expense related to intangible assets and depreciation expense of \$16 million and \$18 million in 2014 and 2013 respectively. Included in corporate expense in 2013 was a charge of \$21 million to increase an environmental reserve for the costs to remediate a legacy non-operating site in France. Included in corporate expense in 2014 is a charge for \$21 million related to the settlement of a pension obligation, an additional \$12 million of costs incurred in the exploration and sale of our Chemtura AgroSolutions business over 2013, exclusive of the amount reported as part of the gain on sale, offset by \$24 million related to the elimination of stranded costs associated with our Chemtura AgroSolutions business in 2014 and our Antioxidant and Consumer Products businesses which were sold in 2013. Agrochemical Manufacturing

In 2013 and for the first ten months of 2014, our Chemtura AgroSolutions business manufactured and resold agrochemical products to third party distributors and customers. In November 2014, we sold our Chemtura AgroSolutions business to Platform. Under the terms of the sale agreement with Platform, we have retained most of the property, plant and equipment used to manufacture products for the Chemtura AgroSolutions business and will continue to manufacture products for Platform under the supply agreements. We operated under the supply agreements for the two months ended December 31, 2014. Therefore, the results of operations for the previous Chemtura AgroSolutions business is not comparable to the Agrochemical Manufacturing business. The following represents a discussion of the Agrochemical Manufacturing segment on a go-forward basis and of the Chemtura AgroSolutions business on a pre-sale basis compared with 2013.

#### Supply Agreement Results

For the two month period ended December 31, 2014, the Agrochemical Manufacturing segment's net sales were \$22 million, which included \$6 million related to the recognition of our fulfillment of the obligation, net of accretion related to the below-market supply agreements.

Operating income for the two months ended December 31, 2014 was \$6 million. As the contracts were designed to recover a majority of the costs incurred, operating income reflects only the recognition of the obligation, net of accretion, related to the below market contract, less a small amount of depreciation and amortization that is not included as part of the recoverable costs.

Previous Results of the Chemtura AgroSolutions Business (Pre-Divestiture)

Net sales of the Chemtura AgroSolutions business for the ten months ended October 31, 2014 were \$381 million as compared with net sales of \$449 million for the year ended December 31, 2013 and \$371 million for the ten months ended October 31, 2013. Operating profit for the ten months ended October 31, 2014 was \$80 million compared with \$88 million for the year ended December 31, 2013 and \$74 million for the ten months ended October 31, 2013. The Chemtura AgroSolutions business did not have any third party sales subsequent to the date of sale to Platform. Therefore, to assist investors in understanding the business and its results of operations prior to the date of sale, the discussion that follows compares the first ten months of 2014 with the first ten months of 2013.

Chemtura AgroSolutions generated higher net sales and operating income for the first ten months of 2014 as compared with the same ten months of 2013. Net sales increased \$10 million representing an \$8 million increase in volume and a \$10 million increase in sales price which was offset by \$8 million in unfavorable effects of foreign currency translation. Chemtura AgroSolutions experienced strong demand in Latin America due both to a high level of demand for pest control in the soybean market and the growth in cultivated acreage. Our European region experienced favorable weather conditions in Europe toward the end of the first half of 2014. There was some supply constraints on certain miticides in North America which offset some of the volume growth in the first half of 2014. Overall higher volumes and improved sales prices offset the unfavorable effect of foreign currency translation. Operating income increased \$6 million primarily reflecting the benefit of favorable volume and product mix changes of \$18 million and \$10 million of increased sales prices offset in part by \$9 million in higher SGA&R due primarily to an increase in our bad debt reserves related to certain customers in Brazil and Kazakhstan, \$4 million in higher raw material, manufacturing and distribution costs and \$7 million of unfavorable effects of foreign currency translation.

#### ADJUSTED EBITDA

Adjusted EBITDA is a financial measure that is not calculated or presented in accordance with generally accepted accounting principles ("GAAP"). While we believe that such measures are useful in evaluating our performance, investors should not consider them to be a substitute for financial measures prepared in accordance with GAAP. In addition, the financial measures may differ from similarly titled financial measures used by other companies and do not provide a comparable view of our performance relative to other companies in similar industries. Adjusted EBITDA for 2015, 2014 and 2013 is calculated as follows:

2015	2014	2013	3
\$136	\$763	\$(17	77 )
30	45	60	
_	7	50	
(20	) (12	) (8	)
16	(192	) 18	
	(1	) (25	)
_	9	180	
162	619	98	
93	102	101	
3	25	42	
4	(529	) —	
12	14	13	
(38	) (6	) —	
	18	6	
	_	21	
	21	_	
	(4	) (2	)
1	2	2	
\$237	\$262	\$28	1
	\$136 30 (20 16  162 93 3 4 12 (38  1	\$136  \$763 30  45 - 7 (20 ) (12 16  (192 - (1 - 9 162  619 93  102 3  25 4  (529 12  14 (38 ) (6 - 18 21 - (4 1 2	\$136 \$763 \$(17) 30 45 60 - 7 50 (20 ) (12 ) (8 16 (192 ) 18 - (1 ) (25 - 9 180  162 619 98 93 102 101 3 25 42 4 (529 ) - 12 14 13 (38 ) (6 ) - 18 6 - 18 6 - 21 - 21 - (4 ) (2 1 2 2

#### LIQUIDITY AND CAPITAL RESOURCES

We believe that our cash flow from operations, borrowing capacity under our U.S. and international credit facilities and our current cash and cash equivalents provide sufficient liquidity to maintain our current operations and capital expenditure requirements, repurchase shares of our common stock under our share repurchase program, service our debt and pursue other strategic initiatives.

The following is a discussion on significant factors affecting our liquidity and use of capital resources. Financing Facilities

Our financing facilities are comprised of public debt, several loans and a revolving line of credit. Senior Notes

In July 2013, we issued in a registered public offering \$450 million of 5.75% Senior Notes due 2021 (the "2021 Senior Notes"). As of December 31, 2015, \$450 million remained outstanding. The 2021 Senior Notes are callable at any time prior to July 2016 at 100% of their value plus a make-whole premium. After July 2016 the 2021 Senior Notes are callable at pre-determined fixed rates under the terms described in the 2021 Senior Notes indenture. Loans

In August 2010, we entered into a Term Loan due 2016 with Bank of America, N.A., as administrative agent, and other lenders party thereto, for an aggregate principal amount of \$295 million. On October 31, 2012, we exercised the accordion feature of our Term Loan and borrowed an additional \$125 million. Repayments were made on the Term Loan in 2013 and 2014 with proceeds from the 2021 Senior Notes offering, sale of businesses and cash on hand. In May 2015, we made an additional

repayment of \$42 million. As of December 31, 2015, \$40 million remained outstanding under the Term Loan, which is now classified as short term borrowings in our Consolidated Balance Sheet as it matures in August 2016. We maintain a 5 year secured credit facility of CNY 250 million (approximately \$40 million) available through December 2017 (the "China Bank Facility") with Agricultural Bank of China, Nantong Branch ("ABC Bank"). The China Bank Facility has been used for funding construction of our manufacturing facility in Nantong, China and is secured by land, property and machinery of our subsidiary Chemtura Advanced Materials (Nantong) Co., Ltd.. Repayments of principal are made in semi-annual installments from December 2014 through December 2017. In December 2014 and January 2015, we repaid \$5 million and \$15 million, respectively, of the China Bank Facility with proceeds from the sale of our Chemtura AgroSolutions business. As of December 31, 2015, \$12 million remained outstanding under the China Bank Facility.

### **Revolving Credit Facilities**

In December 2013, we entered into a five-year senior secured revolving credit facility that provides for \$175 million available to our domestic subsidiaries (the "US ABL Facility") and €60 million available to Chemtura Sales Europe B.V., a Netherlands subsidiary (the "Foreign ABL Facility", and together with the US ABL Facility, the "2018 ABL Facility"), subject in each case to availability under a borrowing base. The 2018 ABL Facility provides a \$125 million letter of credit sub-facility.

At December 31, 2015, we had no borrowings under the 2018 ABL Facility. However, we had \$14 million of outstanding letters of credit (primarily related to insurance obligations, environmental obligations and banking credit facilities) which utilized available capacity under the facility. At December 31, 2015, based upon the available borrowing base, we had approximately \$186 million of undrawn availability under the 2018 ABL Facility. Covenants

These financing facilities, excluding the China Bank Facility, contain covenants that limit, among other things, our ability to enter into certain transactions, such as creating liens, incurring additional indebtedness or repaying certain indebtedness, making investments, paying dividends, and entering into acquisitions, dispositions and joint ventures. As of December 31, 2015, we were in compliance with the maintenance covenant requirements of these financing facilities.

For further discussion of the financing facilities, see Note 7 – Debt in the Notes to our Consolidated Financial Statements.

### Share Repurchase Program

In October 2014, the Board approved a share repurchase authorization of up to \$500 million conditioned upon the sale of our Chemtura AgroSolutions business. In August 2015, the Board authorized an increase to the October 2014 authorization by \$150 million, up to \$650 million in the aggregate when combined with the October 2014 authorization, and extended the program to December 1, 2016.

During 2015, we purchased 6.2 million shares for \$150 million under this share repurchase program. As of December 31, 2015, \$171 million remained outstanding under our share repurchase program.

A further discussion of our share repurchase programs is included in Note 10 - Capital Stock and Earnings (Loss) per Common Share in our Notes to Consolidated Financial Statements.

The shares are expected to be repurchased from time to time through open market purchases. The share repurchase program does not obligate us to repurchase any particular amount of common stock and may be modified or suspended at any time at the Board's discretion. The manner, price, number and timing of such repurchases, if any, will be subject to a variety of factors, including market conditions and the applicable rules and regulations of the Securities and Exchange Commission ("SEC").

### Divestitures and Other Sources of Cash

Chemtura AgroSolutions Business Divestiture and On-going Supply Arrangements

In November 2014, we completed the sale of our Chemtura AgroSolutions business to Platform Specialty Products Corporation ("Platform") for approximately \$1 billion, consisting of \$950 million in cash and 2 million shares of Platform's common stock. The purchase price was subject to customary post-closing adjustments and related expenses which were finalized during 2015 and resulted in additional net proceeds of \$3 million.

The net cash after-tax proceeds from this sale were used in part to pay for repurchases of our common stock under our share repurchase program, retire the remaining balance of our 2018 Senior Notes, pre-pay a portion of our Term Loan in December 2014 and pre-pay a portion of our China Facility in two tranches in December 2014 and January 2015. Under the terms of the Stock and Asset Purchase Agreement ("SAPA") with Platform, we have retained most of the property, plant and equipment used to manufacture products for the Chemtura AgroSolutions business and have continued to manufacture products for Platform under several supply agreements and a tolling agreement (collectively, the "supply agreements"). The supply agreements have minimum terms of between two and four years. The supply agreements with Platform are designed to recover the cash costs incurred to manufacture the products under the agreement. As such, the supply agreements are considered below-market contracts for their full term. In 2014 we recorded an obligation of \$230 million, on a discounted basis, which represents the loss of profit on the sale of these products over the terms of the supply agreements, including contractual obligations to continue supply for a period of up to 2 years after the termination of the contracts. The recognition of the obligation, along with the accretion of the obligation to its undiscounted value of \$345 million, is being recorded as net sales on a straight-line basis over the term of each supply agreement. Although the recognition of the obligation will be recorded as net sales to the Agrochemical Manufacturing segment over this period, this recognition will not generate cash flows during the term of the supply agreements. The change in this obligation that is included in net sales for the year ended December 31, 2015 was \$38 million.

For further discussion of the Chemtura AgroSolutions sale, see Note 2 — Divestitures in our Notes to Consolidated Financial Statements.

### Other Divestitures

In December 2013, we sold our wholly owned subsidiaries that constituted our Consumer Products business. The assets of these subsidiaries included dedicated manufacturing plants in the U.S. and South Africa, to KIK for \$300 million and the assumption by KIK of pension and other liabilities totaling approximately \$8 million. The Consumer Products business developed, manufactured and sold performance chemicals to consumers for in-home and outdoor use.

In April 2013, we sold substantially all the assets of our antioxidant business (the "Antioxidant Sale") to SK Blue Holdings, Ltd. ("SK"), an affiliate of SK Capital Partners III, L.P., and Addivant USA Holding Corp. (Addivant") for \$97 million, \$9 million in preferred stock issued by Addivant and the assumption by SK and Addivant of pension, environmental and other liabilities totaling approximately \$91 million.

For further discussion of our Discontinued Operations, see Note 2 — Divestitures in our Notes to Consolidated Financial Statements.

Other Uses of Cash

**Restructuring Initiatives** 

In November 2014, the Board approved a restructuring plan to reduce manufacturing costs, eliminate stranded costs arising from the sale of our Chemtura AgroSolutions business and reduce SG&A costs. The main component of these actions was headcount reductions. The total cash costs approved by the Board to implement this plan was \$37 million, of which we incurred \$21 million in the fourth quarter of 2014 for severance and related costs and \$2 million in 2015 for professional fees and severance related costs related to the closure of our West Lafayette, IN facility that was initiated in February 2015. We do not anticipate incurring the full \$37 million of approved costs to complete the remaining actions in 2016 under this plan.

In June 2014, our Board approved the closure of the Adrian, MI facility, when an option given to KIK as part of the sale of our Consumer Products businesses expired unexercised. Additionally, during the second quarter of 2014, our management approved further actions to consolidate our business' organizational structure. We expected the total cost of these initiatives to be approximately \$7 million to \$9 million, of which we incurred approximately \$5 million as of December 31, 2015 to substantially complete these actions. We recorded a pre-tax charge of \$4 million in 2014, which included \$3 million for severance and related costs and \$1 million for accelerated asset retirement obligations related to the Adrian, MI facility. We recorded a pre-tax charge of approximately \$1 million in 2015, which included primarily professional fees and demolition costs related to the Adrian, MI closure.

### Cash Flows from Operating Activities

Net cash provided by operating activities was \$159 million in 2015 compared with net cash used in operating activities of \$78 million in 2014 and net cash provided by operating activities of \$79 million in 2013. Changes in key accounts are summarized below:

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		- )	(	/

(In millions)	2015	2014	2013	
Accounts receivable	\$24	\$(89	) \$(20	)
Inventories	(5)	(31	) (13	)
Accounts payable	(18)	4	20	
Pension and post-retirement health care liabilities	(28)	(27	) (59	)

During the year ended December 31, 2015, accounts receivable generated cash flows of \$24 million since December 31, 2014, primarily driven by decreases in the accounts receivable balances of our Industrial Performance and Industrial Engineered segments. The Industrial Performance segment's decline in accounts receivable was the result of lower net sales and lower sales prices as we passed along a reduction in raw material costs to certain customers in accordance with formula based contract pricing agreements. Our Industrial Engineered segment's accounts receivable was lower due primarily to lower net sales, primarily related to volume declines coupled with an improvement in collections as compared to 2014. Accounts receivable in our Agrochemical Manufacturing segment also declined from last year due to improved collections from Platform.

Inventory used cash flows of \$5 million since December 31, 2014 primarily driven by an increase in our Industrial Engineered segment's inventory balance due principally to a build of inventory coupled with unfavorable absorption variances that were capitalized into inventory during the fourth quarter of 2015 offset by an increase in our inventory reserves related to a discontinued product. This increase was offset by a decrease in inventory in our Industrial Performance segment primarily the result of lower raw material costs. Inventory in our Agrochemical Manufacturing segment remained consistent with levels at December 31, 2014.

Accounts payable used cash flows of \$18 million for the year ended December 31, 2015 primarily the result of a decrease in accounts payable in our Industrial Performance segment most notably related to the lower cost of raw materials and the timing of our purchases coupled with lower capital spending for our Nantong, China facility since December 31, 2014. This decrease was offset by an increase in accounts payable in our Industrial Engineered segment principally related to negotiated longer payment terms with our vendors. Our Agrochemical Manufacturing segment accounts payable decreased since December 31, 2015 due to the timing of production for Platform under the supply agreements.

We used \$28 million of cash flow for pension and post-retirement health care liabilities in large part due to cash contributions to fund pension and post-retirement benefit liabilities of \$31 million for the year ended December 31, 2015 which included \$24 million for domestic plans and \$7 million for international plans.

Cash flows from operating activities in 2015 were adjusted by the impact of certain non-cash and other charges, which primarily included depreciation and amortization expense of \$93 million, stock-based compensation expense of \$12 million and a loss on the sale of our Chemtura AgroSolutions business of \$4 million offset by the recognition of the obligation, net of accretion, for the below-market obligations with Platform of \$38 million and a gain of \$8 million recorded for the release of cumulative translation adjustment associated with the liquidation of certain wholly-owned subsidiaries.

The impact of changes in working capital of the Chemtura AgroSolutions business through the date of sale in November 2014 are included in the table above. During the year ended December 31, 2014, accounts receivable represented a use of cash of \$89 million since December 31, 2013, primarily driven by increases in the accounts receivable balances of our Agrochemical Manufacturing and Industrial Engineered segments. The Agrochemical Manufacturing segment's increase was primarily due to the increase in demand particularly in North America and Europe for the 2014 growing season, extended terms for certain products in North America, a reduction in the utilization of financing facilities with banks in Brazil coupled with an increase in amounts due from Platform related to production under the supply agreements. The increase in our Industrial Engineered segment accounts receivable was due primarily to stronger sales and longer payment terms in Asia during the last months of 2014 coupled with

slower payments from customer in Europe.

Inventory represented a use of cash of \$31 million during the year ended December 31, 2014 primarily driven by increases in inventory balances in our Agrochemical Manufacturing and Industrial Performance segments, offset by inventory decreases in our Industrial Engineered segment. Our Agrochemical Manufacturing segment continued to build inventory both prior and

subsequent to the sale of the Chemtura AgroSolutions business in anticipation of the 2015 growing season. Increased inventory balances in our Industrial Performance segment from December 31, 2013 is primarily the result of higher raw material prices, lower sales volume in intermediate, inhibitor and detergent petroleum additive products and a build of inventory at our new Ankerweg, The Netherlands plant as production increased throughout 2014. These increases were offset by a reduction in inventory in our Industrial Engineered segment primarily related to additional sales volumes in Emerald Innovation<sup>TM</sup> 3000 products and clear brine fluids and lower unfavorable manufacturing variances capitalized in 2014 compared with 2013, offset by lower sales volumes for bromine based and PCC products.

Accounts payable represented a source of cash of \$4 million for the year ended December 31, 2014, primarily in our Industrial Performance segment due to higher inventory purchases.

Pension and post-retirement health care liabilities represented a use of cash of \$27 million primarily due to the funding of benefit obligations offset by a charge of \$21 million related to the settlement of a pension obligation. Cash contributions to fund pension and post-retirement benefit liabilities amounted to \$49 million for the year ended December 31, 2014 which included \$27 million for domestic plans and \$22 million for international plans. Cash flows from operating activities in 2014 were adjusted by the impact of certain non-cash and other charges, which primarily included a gain on the sale of our Chemtura AgroSolutions business of \$529 million (the cash flows associated with the gain being reported in investing activities), a deferred tax benefit of \$274 million primarily related to a release of the U.S valuation allowance on certain of our deferred tax assets, depreciation and amortization expense of \$102 million, stock-based compensation expense of \$14 million, loss on sale of discontinued operations of \$9 million, loss on early extinguishment of debt of \$7 million and the recognition of the obligation, net of accretion, for the below-market obligations with Platform of \$6 million for two month period subsequent to the sale. During 2013, accounts receivable represented a use of cash of \$20 million since the end of 2012 primarily driven by Industrial Performance segment. Our Industrial Performance segment showed some increase in accounts receivable driven primarily by the sales increases this segment experienced at the end of 2013. Inventory represented a use of cash of \$13 million since December 31, 2012 primarily driven by our Industrial Performance segment which reported an increase in inventory to support increased demand while our Industrial Engineered segment increased due to the acquisition of the remaining 50% of our DayStar joint venture. Accounts payable provide cash to operations of \$20 million during 2013 primarily relating to our Industrial Performance segment as a result of the inventory increase resulting from higher demand. Pension and post-retirement health care liabilities represented a use of cash of \$59 million primarily due to the funding of benefit obligations. Pension and post-retirement contributions amounted to \$57 million during 2013 which included \$32 million for domestic plans and \$25 million for international plans. Cash flows from operating activities in 2013 were adjusted by the impact of certain non-cash and other charges, which primarily included loss on sale of discontinued operations of \$180 million, depreciation and amortization expense of \$123 million, loss on early extinguishment of debt of \$50 million, stock-based compensation expense of \$14 million and impairment charges for long-lived assets of \$7 million offset by a gain of \$13 million recorded for the release of cumulative translation adjustment associated with the liquidation of certain wholly-owned subsidiaries.

Cash Flows from Investing and Financing Activities

### **Investing Activities**

Net cash used in investing activities was \$23 million for 2015. Investing activities included capital expenditures of \$80 million for U.S. and international facilities, environmental and other compliance requirements offset by proceeds from the sale of the Platform shares of \$54 million. Also included in investing activities were remaining proceeds net of transaction costs of \$3 million from the sale of our Chemtura AgroSolutions, Antioxidant and Consumer Products businesses.

Net cash provided by investing activities was \$871 million for 2014. Investing activities included proceeds net of transaction costs and cash transferred of \$965 million, \$3 million and \$3 million from the sale of our Chemtura AgroSolutions, Antioxidant and Consumer Products businesses, respectively, and \$13 million from the collection of a receivable from the sale of our 50% interest in Tetrabrom Technologies Ltd. in 2011. Investing activities also included capital expenditures of \$113 million for U.S. and international facilities, environmental and other compliance requirements.

Net cash provided by investing activities was \$184 million for 2013. Investing included capital expenditures of \$170 million for U.S. and international facilities, environmental and other compliance requirements along with \$3 million for the acquisition of the remaining interest in our DayStar joint venture. Investing activities also included proceeds, net of transaction costs and

cash transferred of \$78 million and \$249 million from the sale of our Antioxidant and Consumer Products businesses, respectively, \$20 million return of capital from our ISEM joint venture and \$10 million from the collection of a receivable from the sale in 2011 of our 50% interest in Tetrabrom Technologies Ltd.

Financing Activities

Net cash used in financing activities was \$189 million for 2015. Financing activities primarily included the repurchase of \$150 million of our common stock under our share repurchase programs, the repayment of \$42 million in principal of the Term Loan, the repayment of \$15 million of our facility with the Agricultural Bank of China, Nantong Branch and payments on other long-term borrowings of \$3 million, which were funded through our business divestitures and cash on hand. Other financing sources in the period were proceeds from the exercise of stock options of \$20 million. Net cash used in financing activities was \$935 million for 2014. Financing activities primarily included the repurchase of \$618 million of our common stock under our share repurchase programs, the repayment of \$236 million in principal of the Term Loan, the purchase of the remaining 7.875% Senior Notes due 2018 (the "2018 Senior Notes") of \$105 million (including the call premium of \$4 million) and payments on other long-term borrowings of \$9 million, which were funded through our business divestitures and cash on hand. Other financing sources in the period were borrowings for capital improvements related to our facility in Nantong, China of \$16 million and proceeds from the exercise of stock options of \$10 million.

Net cash used in financing activities was \$80 million for 2013. Financing activities primarily included the repurchase of \$354 million of the 2018 Senior Notes, payment of the related tender premium and consent fees of \$42 million and repayment of \$102 million in principal of the Term Loan using the proceeds from the issuance of the \$450 million of 2021 Senior Notes and cash on hand. Cash on hand was also used to repurchase \$54 million of our common stock under our share repurchase program and \$12 million of debt issuance costs related to the 2021 Senior Notes financing and amendments to the Term Loan and ABL Facility. Other financing sources in the period were borrowings for capital improvements related to our new facility in Nantong, China of \$17 million, a promissory note for information technology software licenses of \$7 million and proceeds from the exercise of stock options of \$8 million. Contractual Obligations and Other Cash Requirements

We have obligations to make future cash payments under contracts and commitments, including long-term debt agreements, lease obligations, environmental liabilities, post-retirement health care liabilities and other long-term liabilities.

The following table summarizes our significant contractual obligations and other cash commitments as of December 31, 2015.

(In millions)	Paymer	nts Due b						
Contractual Obligations and Other Cash Commitments*	Total	2016	2017	2018	2019	2020	2021 and Thereafter	
Total debt	\$509	\$46	\$11	\$2	<b>\$</b> —	\$	\$450	(a)
Operating leases	38	8	8	6	5	3	8	(b)
Interest payments	162	29	28	27	26	26	26	(c)
Environmental liabilities	63	15	6	5	5	4	28	(d)
Post-retirement health care liabilities	94	8	8	8	7	7	56	(e)
Total	\$866	\$106	\$61	\$48	\$43	\$40	\$568	

Additional information is provided in various footnotes (including Debt, Leases, Legal Proceedings and \*Contingencies, Pension and Other Post-Retirement Plans, Income Taxes, and Divestitures) in our Notes to Consolidated Financial Statements.

Our debt agreements include various notes and bank loans for which payments will be payable through 2021.

- (a) Obligations by period reflect stated contractual due dates. We are not required to make any cash payments under our capital lease obligations, therefore these amounts are excluded from the table above.
- Represents operating lease obligations primarily related to buildings, land and equipment. Such obligations are net
- (b) of future sublease income and will be expensed over the life of the applicable lease contracts. During 2015, we made payments of \$16 million for operating leases.

(c)

Represents interest payments and fees related to our 2021 Senior Notes, Term Loan, ABL Facility and other debt obligations outstanding at December 31, 2015. Assumed interest rates are based upon rates in effect at December 31, 2015.

We have ongoing environmental liabilities for future remediation and operating and maintenance costs directly (d) related to remediation. We estimate that the ongoing environmental liability could range up to \$76 million. We have recorded a liability for ongoing environmental remediation of \$63 million at December 31, 2015.

We have post-retirement health care plans that provide health and life insurance benefits to certain retired and (e) active employees and their beneficiaries. These plans are generally not pre-funded and expenses are paid by us as incurred, with the exception of certain inactive government related plans that are paid from plan assets. Each year we spend in the range of \$50 million - \$60 million in capital spending to sustain existing operations including maintaining our plants, ensuring that they operate safely and generating efficiency improvements that support our other critical business and functional infrastructure.

We fund our defined benefit pension plans based on the minimum amounts required by law plus additional voluntary contribution amounts we deem appropriate. Estimated future funding requirements are highly dependent on factors that are not readily determinable. These include changes in legislation, returns earned on pension investments, labor negotiations and other factors related to assumptions regarding future liabilities. In 2015, we made contributions of \$23 million to our domestic and international pension plans, which included a \$14 million discretionary contribution to our qualified domestic plan. We also contributed \$7 million to our post-retirement benefit plans (including payments made by us directly to plan participants). See "Critical Accounting Estimates" below for details regarding current pension assumptions. To the extent that current assumptions are not realized, actual funding requirements may be significantly different from those described below. The following table summarizes the estimated future funding requirements for defined benefit pension plans under current assumptions:

	Funding				
(In millions)	2016	2017	2018	2019	2020
Qualified domestic pension plans	<b>\$</b> —	<b>\$</b> —	<b>\$</b> —	<b>\$</b> —	\$—
International and non-qualified pension plans	10	10	11	10	10
Total pension plans	\$10	\$10	\$11	\$10	\$10

(a) Represents minimum amounts required by law or contractual obligations. We may elect to make additional discretionary contributions as deemed appropriate consistent with our past practice.

We have substantial U.S. net operating losses ("NOLs") as described in Note 9 - Income Taxes to our Consolidated Financial Statements. While our utilization of these NOLs is subject to annual federal NOL limitations under Internal Revenue Code ("IRC") Section 382, we expect they will substantially reduce the amount of U.S. cash tax payments we are required to make in the foreseeable future.

Other Sources and Uses of Cash

We expect to finance our continuing operations, capital spending requirements and the remainder of our authorized stock repurchase program in 2015 with cash flows provided by operating activities, available cash and cash equivalents and the 2018 ABL Facility. Our long-term stated total leverage target remains approximately 2 times Adjusted EBITDA. We were close to this target on December 31, 2015.

Cash and cash equivalents as of December 31, 2015 were \$323 million, of which \$171 million was held by Chemtura and our U.S. subsidiaries and \$152 million was held by our direct or indirect foreign subsidiaries and consolidated joint ventures. The cash and cash equivalents of our foreign subsidiaries are used to fund working capital requirements, make cash contributions to various pension plans and fund capital expenditures. In light of these cash requirements, we consider undistributed earnings of certain foreign subsidiaries to be indefinitely invested in their operations.

In addition to the letters of credit of \$14 million and \$15 million outstanding at December 31, 2015 and 2014, respectively, we have guarantees that have been provided to various financial institutions. At December 31, 2015 and 2014, we had \$6 million and \$10 million, respectively, in guarantees. The letters of credit and guarantees were primarily related to liabilities for insurance obligations, environmental obligations, banking and credit facilities, vendor deposits and European value added tax ("VAT") obligations.

As of December 31, 2015, such undistributed earnings of our foreign subsidiaries totaled \$481 million. Proceeds received by non-U.S. subsidiaries related to the divestiture of the Chemtura AgroSolutions business were substantially repatriated during 2014. Repatriation of cash held by our foreign subsidiaries could be subject to adverse tax consequences given the potentially higher U.S. effective tax rates and withholding tax requirements in the source country. Estimating the range of tax liabilities that could arise from the repatriation of undistributed earnings of our

foreign subsidiaries is not practicable at this time.

### Subsequent Event

On February 22, 2016, we announced that, in accordance with the selection made by Evercore Trust Company, N.A. ("Evercore Trust"), the independent fiduciary for the Chemtura Corporation Retirement Plan (the "Plan"), we entered into a purchase agreement with Voya Retirement Insurance and Annuity Company ("Voya"), a member of the Voya Financial, Inc. family of companies, for a group annuity contract that will transfer payment responsibility to Voya for retirement pension benefit benefits owed to approximately 5,000 of our retirees in the U.S. or their designated beneficiaries.

By irrevocably transferring the obligations to Voya, we will partially mitigate our exposure to our defined benefit pension plans and estimate a reduction in our overall projected pension benefit obligation in the range of \$350 million to \$375 million, based on the valuation date of February 17, 2016. The annuity purchase price will be funded by the assets of the Plan.

We expect to make a cash contribution to the Plan in the first quarter of 2016 of between \$30 million and \$40 million in order to maintain the Plan's funded status. We expect to incur a non-cash pension settlement charge in the range of \$150 million to \$170 million before tax during the first quarter of 2016 in connection with this group annuity purchase.

### CRITICAL ACCOUNTING ESTIMATES

Our Consolidated Financial Statements have been prepared in conformity with GAAP, which requires us to make estimates and assumptions that affect the amounts and disclosures reported in our Consolidated Financial Statements and accompanying notes. Accounting estimates and assumptions described in this section are those we consider to be the most critical to an understanding of our financial statements because they inherently involve significant judgments and uncertainties. For all of these estimates, we note that future events rarely develop exactly as forecasted, and the best estimates routinely require adjustment. Actual results could differ from such estimates. The following discussion summarizes our critical accounting estimates. Significant accounting policies used in the preparation of our Consolidated Financial Statements are discussed in our Notes to Consolidated Financial Statements.

Carrying Value of Goodwill and Long-Lived Assets

We have elected to perform our annual goodwill impairment procedures for all of our reporting units in accordance with ASC Subtopic 350-20, Intangibles – Goodwill and Other - Goodwill ("ASC 350-20") as of July 31, or sooner, if events occur or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying value. We estimate the fair value of our reporting units utilizing income and market approaches through the application of discounted cash flow and market comparable methods (Level 3 inputs as described in Note 14 – Financial Instruments and Fair Value Measurements). The assessment is required to be performed in two steps: step one to test for a potential impairment of goodwill and, if potential impairments are identified, step two to measure the impairment loss through a full fair value allocation of the assets and liabilities of the reporting unit utilizing the acquisition method of accounting.

We continually monitor and evaluate business and competitive conditions that affect our operations and reflect the impact of these factors in our financial projections. If permanent or sustained changes in business or competitive conditions occur, they can lead to revised projections that could potentially give rise to impairment charges. For further discussion of impairment charges, see Note - 3 Restructuring and Asset Impairment Activities in our Notes to Consolidated Financial Statements.

#### **Environmental Matters**

We are involved in environmental matters of various types in a number of jurisdictions. A number of such matters involve claims for material amounts of damages and relate to or allege environmental liabilities, including cleanup costs associated with hazardous waste disposal sites and natural resource damages.

Each quarter, we evaluate and review estimates for future remediation, operation and management costs directly related to remediation, to determine appropriate environmental reserve amounts. For each site where the cost of remediation is probable and reasonably estimable, we determine the specific measures that are believed to be required to remediate the site, the estimated total cost to carry out the remediation plan, the portion of the total remediation costs to be borne by us and the anticipated time frame over which payments toward the remediation plan will occur. At sites where we expect to incur ongoing operation and maintenance expenditures, we accrue on an undiscounted basis for a period of generally 10 years those costs which are probable and reasonably estimable.

In addition, it is possible that our estimates for environmental remediation liabilities may change in the future should additional sites be identified, further remediation measures be required or undertaken, current laws and regulations be modified or additional environmental laws and regulations be enacted.

We intend to assert all meritorious legal defenses and will pursue other equitable factors that are available with respect to these matters. The resolution of environmental matters asserted against us could require us to pay remedial costs or damages, which are not currently determinable, that could exceed our present estimates, and as a result could have, either individually or in the aggregate, a material adverse effect on our financial condition, results of operations or cash flows.

### Pension and Other Post-Retirement Benefits Expense

Our calculation of pension and other post-retirement benefits expense is dependent on a number of factors and assumptions. These factors and assumptions include discount rates, health care cost trend rates, expected long-term rates of return on plan assets, mortality rates, expected salary and wage increases, and other relevant factors. Components of pension and other post-retirement benefits expense include interest and service costs on the pension and other post-retirement benefit plans, expected return on plan assets and amortization of certain unrecognized costs and obligations. Actual results that differ from the assumptions utilized are accumulated and amortized over future periods and, therefore, generally affect recognized expense and the recorded obligation in future periods. While we believe that the assumptions used are appropriate, differences in actual experience or significant changes in assumptions would affect our pension and other post-retirement benefits costs and obligations. See Note 13 – Pension and Other Post-Retirement Plans in our Notes to Consolidated Financial Statements.

#### Pension Plans

Pension liabilities are measured on a discounted basis and the assumed discount rate is a significant assumption. At each measurement date, the discount rate is based on interest rates for high-quality, long-term corporate debt securities with maturities comparable to our liabilities. At December 31, 2015, we utilized a discount rate of 4.10% for our domestic qualified pension plan compared to 3.80% at December 31, 2014. For the international and non-qualified plans, a weighted average discount rate of 3.46% was used at December 31, 2015, compared to 3.28% used at December 31, 2014. As a sensitivity measure, a 25 basis point reduction in the discount rate for all plans would result in less than a million dollar decrease in pre-tax earnings for 2015.

Domestic discount rates adopted at December 31, 2015 utilized an interest rate yield curve to determine the discount rate pursuant to guidance codified under ASC Topic 715, Defined Benefit Plans ("ASC 715"). The yield curve is comprised of AA bonds with maturities between zero and thirty years. We discounted the annual cash flows of our domestic pension plans using this yield curve and developed a single-point discount rate matching the respective plan's payout structure.

A similar approach was used to determine the appropriate discount rates for the international plans. The actual method used varies from country to country depending on the amount of available information on bond yields to be able to estimate a single-point discount rate to match the respective plan's benefit disbursements.

Our weighted average estimated rate of compensation increase was 2.88% for applicable domestic and international pension plans combined at December 31, 2015. As a sensitivity measure, an increase of 25 basis points in the estimated rate of compensation increase would decrease pre-tax earnings for 2015 by an immaterial amount. The expected return on pension plan assets is based on our investment strategy, historical experience and expectations for long-term rates of return. We determine the expected rate of return on plan assets for the domestic and international pension plans by applying the expected returns on various asset classes to our target asset allocation. We utilized a weighted average expected long-term rate of return of 7.50% on all domestic plan assets and a weighted average rate of 5.66% for the international plan assets for 2015.

Asset-class return expectations are set using a combination of historical and forward-looking analyses. Historical returns are evaluated based on an arithmetic average of annual returns derived from recognized passive indices, such as the S&P 500, for the major asset classes. We looked at the arithmetic averages of annual investment returns from passive indices, assuming a portfolio of investments that follow the current target asset allocation for the domestic plans over several business cycles, to obtain an indication of the long-term historical market performance. The historical return estimates that result for each asset class are reviewed and combined with a qualitative assessment of long-term relationships between asset classes before a return estimate is finalized. The qualitative analysis is targeted

towards removing the effect of unsustainable short-term valuations or trends, or capturing structural changes that are not yet reflected in the historical data. The resulting capital market assumptions

are meant to reflect return levels and behavior that are likely to prevail over longer time periods. The geometric return over the past 19 years, the maximum available period of time for the applicable indices, was 11.94%, and over the past 10 years it was 9.47%. Both of these values exceeded the 7.50% domestic expected return on assets for 2015. The actual annualized return on plan assets for the domestic plans for the 12 months ended December 31, 2015 was approximately (1.2%) (net of investment expenses), which was below the expected return on asset assumption for the year. The international plans realized a weighted average return of approximately 0.7% in local currency terms and approximately (5.4%) in U.S. dollar terms. Changes in exchange rates resulted in currency losses of approximately \$27 million on plan assets, which were more than offset by currency gains of approximately \$36 million on benefit obligations for the international pension arrangements.

Our target asset allocation for the domestic pension plans is based on investing 32% of plan assets in equity instruments, 58% of plan assets in fixed income investments and 10% in all other types of investments. At December 31, 2015, 28% of the portfolio was invested in equities, 61% in fixed income investments and 11% in real estate and other investments.

We have unrecognized actuarial losses relating to our pension plans which have been included in our Consolidated Balance Sheet, but not in our Consolidated Statements of Operations. The extent to which these unrecognized actuarial losses will impact future pre-tax earnings depends on whether the unrecognized actuarial losses are deferred through the asset-smoothing mechanism (the market related value as defined by ASC Topic 715-30, Defined Benefit Plans – Pensions ("ASC 715-30")), or through amortization in pre-tax earnings to the extent that they exceed a 10% amortization corridor, as defined by ASC 715-30, which provides for amortization over the average remaining participant career or life. The amortization of unrecognized net losses existing as of December 31, 2015 will result in a \$16 million decrease to pre-tax earnings for 2016 (\$11 million for the qualified domestic plans and \$5 million for the international and non-qualified plans). Since future gains and losses beyond 2015 are a result of various factors described herein, it is not possible to predict with certainty to what extent the combination of current and future losses may exceed the 10 percent amortization corridor and thereby be subject to further amortization. At the end of 2015, unrecognized net losses amounted to \$270 million for the qualified domestic plans and \$137 million for the international and non-qualified plans. Of these amounts, \$23 million of unrecognized losses for the domestic plans and \$17 million of unrecognized gains for the international plans are deferred through the asset smoothing mechanism as required by ASC 715.

The pre-tax pension expense for all pension plans was \$1 million in 2015. Pension (income) expense is calculated based upon certain assumptions including discount rate, expected long-term rate of return on plan assets, mortality rates and expected salary and wage increases. Actual results that differ from the current assumptions utilized are accumulated and amortized over future periods and will affect pension expense in future periods.

The following table estimates the future pension expense (income), based upon current assumptions:

	Pension	ır				
(In millions)	2016	2017	2018	2019	2020	
Qualified domestic pension plans	\$(5	) \$(5	) \$(5	) \$(4	) \$(3	)
International and non-qualified pension plans	3	1		(2	) (2	)
Total pension plans	\$(2	) \$(4	) \$(5	) \$(6	) \$(5	)

The impact of a 100 basis point change in the actual return on assets would not have a material impact on the pension (income) expense for the above years.

We participate in a multi-employer pension plan that provides defined benefits to certain employees covered under a collective bargaining agreement. The risks of participating in a multi-employer plan differ from those of a single employer plan. The net pension cost of a multi-employer plan is equal to the annual contribution determined in accordance with the provisions of the collective bargaining agreement. Contributions that we make to the plan are not segregated and may be used to fund benefits to employees of other participating employers. The future cost of the plan is dependent on a number of factors, including the funded status of the plan and the ability of other participating companies to meet ongoing funding obligations. If one employer stops contributing to the plan the unfunded obligation of the plan may have to be assumed by the remaining participating employers.

Our contributions to the multi-employer plan for 2015 and prior years have been insignificant. However, due to the withdrawal of certain employers from the plan, there is uncertainty regarding the impact on our future contributions, although any

incremental future contributions are not expected to have a significant impact on our financial statements. We will continue to assess our obligations and risks associated to the multi-employer plan, and update our disclosures accordingly.

Other Post-Retirement Benefits

We provide post-retirement health and life insurance benefits for current retired and active employees and their beneficiaries and covered dependents for certain domestic and international employee groups.

The discount rates we adopted for the valuation of the post-retirement health care plans were determined using the same methodology as for the pension plans. At December 31, 2015, we utilized a weighted average discount rate of 3.97% for post-retirement health care plans, compared to 3.70% at December 31, 2014. As a sensitivity measure, a 25 basis point reduction in the discount rate would result in an immaterial change in pre-tax earnings for 2015. Assumed health care cost trend rates are based on past and current health care cost trends, considering such factors as health care inflation, changes in health care utilization or delivery patterns, technological advances, and the overall health of plan participants. We use health care trend cost rates starting with a weighted average initial level of 4.55% for the domestic arrangements and grading up to an ultimate level of 5%. For the international arrangements, the weighted average initial rate is 6.50%, grading down to 5%.

The pre-tax post-retirement healthcare expense was \$2 million in 2015 and is expected to approximate \$1 million per year for years 2016 to 2020 based upon the various assumptions discussed above.

**Income Taxes** 

Income taxes payable reflect our current tax provision and management's best estimate of the current tax liability relating to the outcome of uncertain tax positions. If the actual outcome of uncertain tax positions differs from our best estimates, an adjustment to income taxes payable could be required, which may result in additional income tax expense or benefit.

We record deferred tax assets and liabilities based on differences between the book and tax basis of assets and liabilities using the enacted tax rates expected to apply to taxable income in the periods in which the deferred tax liability or asset is expected to be settled or realized. We also record deferred tax assets for the expected future tax benefits of net operating losses and income tax credit carryforwards.

Valuation allowances are established when we determine that it is more likely than not that the results of future operations will not generate sufficient taxable income to realize our deferred tax assets. We consider the scheduled reversal of deferred tax assets and liabilities, projected future taxable income, and tax planning strategies in making this assessment. Thus, changes in future results of operations could result in adjustments to our valuation allowances. We anticipate that we will repatriate the undistributed earnings of certain foreign subsidiaries. For the year ended December 31, 2015, we decreased by \$10 million the amount of the net deferred tax liability we provide for the U.S. tax consequences of these repatriations, primarily due to the repatriations as a result of the sale of our Chemtura AgroSolutions business. For the year ended December 31, 2014, we decreased by \$25 million, the amount of the net deferred tax liability we provide for the U.S. tax consequences of these repatriations. We consider undistributed earnings of all other foreign subsidiaries to be indefinitely invested in their operations. At December 31, 2015, such undistributed earnings deemed to be indefinitely reinvested in foreign operations amounted to \$481 million. Repatriation of undistributed earnings, currently deemed indefinitely reinvested, would require us to accrue and pay taxes in the future. Estimating the tax liability that would arise if these earnings were repatriated is not practicable at this time.

We file income tax returns in the U.S (including federal and state) and foreign jurisdictions. The income tax returns for our entities taxable in the U.S. and significant foreign jurisdictions are open for examination and adjustment. We assess our income tax positions and record a liability for all years open to examination based upon our evaluation of the facts, circumstances and information available at the reporting date. The economic benefit associated with a tax position will only be recognized if it is more likely than not that a tax position ultimately will be sustained. We adjust these liabilities, if necessary, upon the completion of tax audits or changes in tax law.

We have a liability for unrecognized tax benefits of \$27 million and \$28 million at December 31, 2015 and 2014, respectively. This decrease is primarily related to actual cash repatriations made during the current year that offset the liability established in prior years for deemed repatriations and settlements of tax audits in various domestic and foreign jurisdictions.

#### ACCOUNTING DEVELOPMENTS

For information on accounting developments, see Note 1 - Nature of Operations and Summary of Significant Accounting Policies in our Notes to Consolidated Financial Statements.

### **OUTLOOK**

In 2016, we plan to build upon the improvements in our earnings and cash flow we achieved in 2015 to further expand Chemtura's profitability. We expect to deliver that improvement by continuing to focus on "managing what we can control."

In 2015, we laid the foundation for improved performance through our manufacturing and SG&A cost reduction programs and through our commercial and operational excellence programs. In 2016, we anticipate being able to sustain the cost reductions we delivered in 2015 and offset cost inflation by the application of continuous improvement and productivity initiatives. However, to achieve further profitability improvement, we plan to deliver growth in sales volume by executing upon our growth levers.

The foundation for sales volume growth in 2016 has been laid in recent years by our investments in new product introductions, product enhancements and manufacturing capacity expansion. These investments have been focused on leveraging secular growth opportunities. We do not anticipate any general economic improvements to assist us in gaining sales volume and we face the uncertainties that flow from the continuing reduction in the price of oil and the slowing of the Chinese economy.

The resulting gains in sales volume should continue to improve the utilization of most but not all of the manufacturing capacity we have added in recent years and thereby reduce our unit product costs. By the end of 2015, we had completed the commissioning of the third and final phase of our investment in our Nantong, China multi-purpose plant with the completion of the urethanes unit. While this unit will commence the production and sale of urethane products in 2016, the slowing of the Chinese economic growth leads us to conclude that the rate at which we may be able to build sales from all three Nantong manufacturing units will be slower than we had previously anticipated. Industrial Performance Products has now been successful in establishing additional supply of the key raw material that had constrained the volume of high viscosity polyalphaolefin synthetic base-stocks they could produce in 2015. With increased raw material availability, we anticipate being able to serve customers' demand for these products, improving the utilization of both the Elmira, Canada and Amsterdam, The Netherlands manufacturing facilities. The investments this segment has made to increase our capacity to produce our inhibitor lubricant additives will permit them to serve the increasing demand for these products in 2016. This segment has also secured additional customer requirements for its urethane hot cast elastomer products. The anticipated increased sales of these products should lay the foundation for their 2016 volume growth.

Within Industrial Engineered Products, in 2016 we should see customers complete their adoption of our Emerald Innovation<sup>TM</sup> 3000 flame retardant used in styrene-based insulation foams, replacing HBCD of which we discontinued manufacturing in 2015. The improvements in operating efficiency made in late 2015 should enable us to increase Emerald Innovation<sup>TM</sup> 3000 production rates to serve increased customer demand. In addition, in light of the U.S. Court of Appeals for the D.C. Circuit's decision on mercury and air toxics standards, we anticipate that demand for our GeoBrom® product used in mercury control applications should increase during 2016. This segment has also secured additional demand for its traditional and metalocene-based polymerization catalysts and its tin-based products that should continue the recovery in performance of the organometallics product line that commenced in 2015. These volume gains and other growth opportunities should more than offset any weakening of demand for our clear brine fluid products used in deep offshore oil and gas applications that may occur. As a result of the lower oil prices, producers are reducing their investment in exploration and it is likely that we may see some reduction in demand compared to 2015. However, we do not yet have visibility as to when in 2016 such declines may occur. In addition, we anticipate that the segment should reflect the full year benefit of the changes in sales prices of bromine and certain derivatives that occurred in 2015.

In February 2016, we made a decision to discontinue one of our product lines within the Industrial Engineered Products segment. Inventory associated with this product line has been written down to its net realizable value of zero in the fourth quarter of 2015. The value of the property, plant and equipment associated with this product line at December 31, 2015 was approximately \$7 million. We are currently in the process of determining whether this property, plant and equipment has an alternative use and the amount, if any, of asset impairment we will take in the

first quarter of 2016.

Despite the low oil price, due to supply and demand conditions for certain of the raw materials we purchase, in 2016 we anticipate that raw material costs in the aggregate will modestly increase compared to the prior year.

The cash generated from our anticipated improved profitability in 2016 can be used to fund an increase in capital expenditures to approximately \$100 million for the year as well as the growth in working capital required by higher net sales. As a result, we expect generation for the year to be comparable to 2015 before cash used to repurchase our shares under our Board authorized share repurchase program, the repayment of the remainder of our senior secured term loan on or before maturity, and the funding of cash contributions to our pension and other post-retirement benefits plans.

We continue to explore opportunities to accelerate value creation for our shareholders through gaining scale by acquisition or a combination with another company. We believe that through building scale in industrial specialty chemicals, we can diversify our market exposures and give our Company the critical mass to invest in innovative products and applications. Executing on a compelling transaction can accelerate the benefits from our focus on the organic growth of our existing portfolio businesses and permit us to sustain our track record of delivering significant value to our shareholders.

There are a number of risks to achieving our business plans as described in Item 1A - Risk Factors and summarized below in Forward Looking Statements.

#### Item 7A: Quantitative and Qualitative Disclosures About Market Risk

Our activities expose our earnings, cash flows and financial condition to a variety of market risks, including the effects of changes in foreign currency exchange rates, interest rates and energy prices. We have short-term exposure to changes in foreign currency exchange rates resulting from transactions entered into by us and our foreign subsidiaries in currencies other than their local currency (primarily trade payables and receivables). We are also exposed to currency risk on intercompany transactions (including intercompany loans).

The primary currencies to which we have foreign currency exchange rate exposure are the European Union Euro, Canadian Dollar, British Pound Sterling, Taiwanese Dollar, Japanese Yen, Swiss Franc and the U.S. Dollar (in certain of our foreign locations). In response to greater fluctuations in foreign currency exchange rates in recent periods, we have increased the degree of exposure risk management activities to minimize the potential impact on earnings. We manage our foreign currency exposures by balancing certain assets and liabilities denominated in foreign currencies and through the use from time to time of foreign currency forward contracts and other foreign currency options. The principal objective of such contracts is to minimize the risks and/or costs associated with global operating activities. The counterparties to these contractual agreements are major financial institutions with which we generally have other financial relationships. We are exposed to credit loss in the event of non-performance by these counterparties. However, we do not anticipate non-performance by the counterparties. We do not utilize financial instruments for trading or other speculative purposes.

The primary method we use to reduce foreign currency exposure is to identify natural hedges, in which the operating activities denominated in respective currencies across various subsidiaries balance in respect to timing and the underlying exposures. In the event a natural hedge is not available, we may employ a forward contract or other option to reduce exposure, generally expiring within one year. While these contracts are subject to fluctuations in value, such fluctuations are generally offset by the value of the underlying exposures being hedged. Gains and losses on foreign currency forward contracts are recognized currently in income but do not have a significant impact on results of operations.

As of December 31, 2015, we do not have any derivative financial instruments outstanding. Interest Rate Sensitivity

Our earnings are affected by changes in interest rates due to the impact those changes have on interest expense from variable-rate debt instruments. The interest rate is fixed for \$462 million of our debt and capital lease obligations, with the remaining \$55 million having variable interest rates. If interest rates on our variable rate debt were, on average, 100 basis points higher in 2016 than they were during 2015, our interest expense would increase by approximately \$1 million.

Item 8: Financial Statements and Supplementary Data

### CHEMTURA CORPORATION AND SUBSIDIARIES

Consolidated Statements of Operations

Years ended December 31, 2015, 2014 and 2013

(In millions, except per share data)

(in initions, except per share data)				
	2015	2014	2013	
NET SALES	\$1,745	\$2,190	\$2,231	
COSTS AND EXPENSES				
Cost of goods sold	1,312	1,682	1,721	
Selling, general and administrative	151	255	229	
Depreciation and amortization	93	102	101	
Research and development	20	36	40	
Facility closures, severance and related costs	3	25	42	
Loss (gain) on sale of business	4	(529)	· —	
Impairment charges	1	_		
Equity income	(1)	<b>—</b>		
OPERATING INCOME	162	619	98	
Interest expense	(30	(45)	(60	)
Loss on early extinguishment of debt		(7)	(50	)
Other income, net	20	12	8	
Earnings (loss) from continuing operations before income taxes	152	579	(4	)
Income tax (expense) benefit	(16	192	(18	)
Earnings (loss) from continuing operations	136	771	(22	)
Earnings from discontinued operations, net of tax		1	25	
Loss on sale of discontinued operations, net of tax		(9)	(180	)
Net earnings (loss)	\$136	\$763	\$(177	)
BASIC PER SHARE INFORMATION:				
Earnings (loss) from continuing operations, net of tax	\$2.01	\$8.55	\$(0.23	)
Earnings from discontinued operations, net of tax		0.01	0.26	
Loss on sale of discontinued operations, net of tax		(0.10)	(1.84	)
Net earnings (loss)	\$2.01	\$8.46	\$(1.81	)
DILUTED PER SHARE INFORMATION:				
Earnings (loss) from continuing operations, net of tax	\$1.98	\$8.43	\$(0.23	)
Earnings from discontinued operations, net of tax		0.01	0.26	
Loss on sale of discontinued operations, net of tax		(0.10)	(1.84	)
Net earnings (loss)	\$1.98	\$8.34	\$(1.81	)
Basic weighted - average shares outstanding	67.8	90.2	97.7	,
Diluted weighted - average shares outstanding	68.8	91.5	97.7	

See Accompanying Notes to Consolidated Financial Statements.

### CHEMTURA CORPORATION AND SUBSIDIARIES

Consolidated Statements of Comprehensive Income (Loss)

Years ended December 31, 2015, 2014 and 2013

(In millions)

(In millions)	2015	2014		2013	
Net earnings (loss)	\$136	\$763		\$(177	)
Other comprehensive income (loss), net of tax:					
Foreign currency translation adjustments -					
net of income tax benefit (expense) of \$11, \$10 and \$(3)	(55	) (73	)	(60	)
Unrecognized pension and other post-retirement benefit changes					
-					
net of income tax (expense) benefit of \$(8), \$39 and \$(16)	(15	) (39	)	208	
Available for sale securities adjustments	5	(5	)		
Comprehensive income (loss)	\$71	\$646		\$(29	)

See Accompanying Notes to Consolidated Financial Statements.

### CHEMTURA CORPORATION AND SUBSIDIARIES

Consolidated Balance Sheets As of December 31, 2015 and 2014 (In millions, except par value data)

(iii iiiiiioiis, except pai vaiue data)	2017	2011	
ACCETTO	2015	2014	
ASSETS CURRENT ASSETS			
CURRENT ASSETS	ф2 <b>2</b> 2	¢202	
Cash and cash equivalents	\$323	\$392	
Accounts receivable, net	210	251	
Inventories, net	315	329	
Other current assets	130	238	
Assets held for sale		6	
Total current assets	978	1,216	
NON-CURRENT ASSETS			
Property, plant and equipment	663	704	
Goodwill	166	172	
Intangible assets, net	88	99	
Deferred tax asset - non-current	354	313	
Other assets	117	163	
Total Assets	\$2,366	\$2,667	
LIABILITIES AND EQUITY			
CURRENT LIABILITIES			
Short-term borrowings	\$46	\$18	
Accounts payable	120	146	
Accrued expenses	142	170	
Below market obligation - current	38	38	
Income taxes payable	15	24	
Liabilities held for sale		9	
Total current liabilities	361	405	
NON-CURRENT LIABILITIES			
Long-term debt	471	556	
Pension and post-retirement health care liabilities	270	318	
Below market obligation - non-current	145	185	
Deferred tax liability - non-current	7	25	
Other liabilities	110	124	
Total liabilities	1,364	1,613	
EQUITY			
Common stock - \$.01 par value, authorized - 500.0 shares, issued - 100.6 shares in	1	1	
2015 and 100.5 shares in 2014	1	1	
Additional paid-in capital	4,371	4,383	
Accumulated deficit	(2,126)	(2,262	)
Accumulated other comprehensive loss	(462)	(397	)
Treasury stock at cost - 33.4 shares in 2015 and 28.8 shares in 2014	(783	(672	)
Total Chemtura stockholders' equity	1,001	1,053	
Non-controlling interests	1	1	
Total equity	1,002	1,054	
Total Liabilities and Equity	\$2,366	\$2,667	
	•	•	

See Accompanying Notes to Consolidated Financial Statements.

CHEMTURA CORPORATION AND SUBSIDIARIES				
Consolidated Statements of Cash Flows				
Years ended December 31, 2015, 2014 and 2013				
(In millions)	2017	2014	2012	
Increase (decrease) in cash	2015	2014	2013	
CASH FLOWS FROM OPERATING ACTIVITIES	<b>0.10</b> <i>6</i>	Φ.7.62	<b>4.177</b>	,
Net earnings (loss)	\$136	\$763	\$(177	)
Adjustments to reconcile net earnings (loss) to net cash provided				
by (used in) operating activities:				
Loss on sale of discontinued operations		9	180	
Loss (gain) on sale of business	4	(529	) —	
Impairment charges	1	_	7	
Agrochemical Manufacturing supply agreements	(38	) (6	) —	
Release of translation adjustment from liquidation of entities	(8	) —	(13	)
Loss on early extinguishment of debt		7	50	
Depreciation and amortization	93	102	123	
Stock-based compensation expense	12	14	14	
Deferred tax (benefit) expense	(14	) (274	) 1	
Other non-cash transactions		3	(1	)
Changes in assets and liabilities, net:				
Accounts receivable	24	(89	) (20	)
Inventories	(5	) (31	) (13	)
Other current assets	4	(27	) (14	)
Other assets	7	6	(18	)
Accounts payable	(18	) 4	20	,
Accrued expenses	(6	) (37	) (18	)
Income taxes payable	(8	) 19	5	
Pension and post-retirement health care liabilities	(28	) (27	) (59	)
Other liabilities	4	12	15	,
Other	(1	) 3	(3	)
Net cash provided by (used in) operating activities	159	(78	) 79	,
	10)	(70	, , ,	
CASH FLOWS FROM INVESTING ACTIVITIES				
Proceeds from divestments, net	3	984	357	
Payments for acquisitions, net of cash acquired			(3	)
Sale of Platform Specialty Products Corporation shares	54	_	_	
Capital expenditures	(80	) (113	) (170	)
Net cash (used in) provided by investing activities	(23	) 871	184	
CASH FLOWS FROM FINANCING ACTIVITIES				
Proceeds from issuance of long term debt	1	19	481	
Payments on long term debt, includes premium on tendering of	(60	(250	\ (500	`
notes	(60	) (350	) (502	)
Payments on other short term borrowings, net		(1	) (1	)
Payments for debt issuance and refinancing costs	_	_	(12	ĺ
Common shares acquired	(150	) (618	) (54	í
Proceeds from exercise of stock options	20	10	8	,
Other financing activities		5	_	
Net cash used in financing activities	(189	) (935	) (80	)
The cash about in initialising activities	(10)	, (755	, (00	,

# CASH AND CASH EQUIVALENTS

Effect of exchange rates on cash and cash equivalents	(16	) (15	) 1
Change in cash and cash equivalents	(69	) (157	) 184
Cash and cash equivalents at beginning of year	392	549	365
Cash and cash equivalents at end of year	\$323	\$392	\$549
See Accompanying Notes to Consolidated Financial Statements.			

### CHEMTURA CORPORATION AND SUBSIDIARIES

Consolidated Statements of Equity

Years ended December 31, 2015, 2014 and 2013

(In millions)

	Shares Outstan	dir	Comm Stock	Additio Paid-in Capital	1	l Accumul Deficit	ate	AccumuledOther Compreh Loss		Treas	•	Total yChemtur Stockhol Equity	a dei	Non Contro	olli sts	Total ng Equity	1
Balance, January 1, 2013	98.0		\$1	\$ 4,366	6	\$ (2,848	)	\$ (428	)	\$(30	)	\$ 1,061		\$ 7		\$1,06	8
Net loss						(177	)					(177	)	_		(177	)
Other comprehensive income								148				148				148	
Divestiture														(6	)	(6	)
Share-based compensation				14								14				14	
Stock options exercised	0.5			1						7		8				8	
Common shares acquired	(2.4	)								(54	)	(54	)			(54	)
Other issuances	0.4			(6	)					4		(2	)			(2	)
Balance, December 31, 2013	96.5		1	4,375		(3,025	)	(280	)	(73	)	998		1		999	
Net earnings						763						763				763	
Other comprehensive loss								(117	)			(117	)			(117	)
Share-based compensation				14								14				14	
Stock options exercised	0.6			1						13		14				14	
Common shares acquired	(25.8	)								(618	)	(618	)			(618	)
Other issuances	0.4			(7													