

ASHLAND INC.  
Form 10-K  
November 20, 2015

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

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FORM 10-K

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

For the fiscal year ended September 30, 2015

OR

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

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

Commission file number 1-32532

ASHLAND INC.

Kentucky

(State or other jurisdiction of incorporation or organization)

20-0865835

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

50 E. RiverCenter Boulevard

P.O. Box 391

Covington, Kentucky 41012-0391

Telephone Number (859) 815-3333

Securities Registered Pursuant to Section 12(b) of the Act:

Title of each class

Name of each exchange on which registered

Common Stock, par value \$.01 per share

New York Stock Exchange

Securities Registered Pursuant to Section 12(g) of the Act: None

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

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes  No

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

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

Indicate by check mark 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.

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

Large Accelerated Filer

Accelerated Filer

Non-Accelerated Filer

Smaller Reporting Company

(Do not check if a smaller reporting company)

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Act).

Yes  No

At March 31, 2015, the aggregate market value of voting stock held by non-affiliates of the Registrant was approximately \$8,563,870,000. In determining this amount, the Registrant has assumed that its directors and executive officers are affiliates. Such assumption shall not be deemed conclusive for any other purpose.

At October 31, 2015, there were 66,805,186 shares of Registrant’s common stock outstanding.

Documents Incorporated by Reference

Portions of Registrant’s Proxy Statement (Proxy Statement) for its January 28, 2016 Annual Meeting of Shareholders are incorporated by reference into Part III of this annual report on Form 10-K to the extent described herein.

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## PART I

### ITEM 1. BUSINESS

#### GENERAL

Ashland Inc. is a Kentucky corporation, with its principal executive offices located at 50 E. RiverCenter Boulevard, Covington, Kentucky 41011 (Mailing Address: 50 E. RiverCenter Boulevard, P.O. Box 391, Covington, Kentucky 41012-0391) (Telephone: (859) 815-3333). Ashland was organized in 2004 as the successor to a Kentucky corporation of the same name organized on October 22, 1936. The terms “Ashland” and the “Company” as used herein include Ashland Inc., its predecessors and its consolidated subsidiaries, except where the context indicates otherwise.

Ashland is a global leader in specialty chemicals and, through Valvoline, a premium consumer-branded lubricant supplier. Ashland provides products, services and solutions that meet customers’ needs throughout a variety of industries in more than 100 countries. Its chemistry is used in a wide variety of markets and applications, including architectural coatings, adhesives, automotive, construction, energy, food and beverage, personal care, and pharmaceutical.

Ashland has three reportable segments: Specialty Ingredients, Performance Materials and Valvoline. Financial information about Ashland’s three reportable segments for each of the fiscal years in the three-year period ended September 30, 2015 is set forth in Note Q of Notes to Consolidated Financial Statements in this annual report on Form 10-K, including sales, equity income, other income, operating income and assets. International data, such as sales to external customers, net assets and property, plant and equipment, are set forth in Note Q as well.

Specialty Ingredients is a global leader in cellulose ethers, vinyl pyrrolidones and biofunctionals. It offers industry-leading products, technologies and resources for solving formulation and product-performance challenges. Specialty Ingredients uses natural, synthetic and semisynthetic polymers derived from plant and seed extract, cellulose ethers, vinyl pyrrolidones, acrylic polymers as well as polyester and polyurethane-based adhesives. Specialty Ingredients includes two divisions - Consumer Specialties and Industrial Specialties - that offer comprehensive and innovative solutions for today’s demanding consumer and industrial applications. Key customers include: pharmaceutical companies; makers of personal care products, food and beverages; manufacturers of paint, coatings and construction materials; packaging and converting; and oilfield service companies. During 2015, Ashland sold the industrial biocides assets within Specialty Ingredients. See Note B of Notes to Consolidated Financial Statements in this annual report on Form 10-K for information on the divestiture of these assets.

Performance Materials is composed of two divisions: Composites and Intermediates/Solvents. Performance Materials is a global leader in unsaturated polyester resins and vinyl ester resins. The business unit has leading positions in gelcoats, maleic anhydride, butanediol, tetrahydrofuran, N-Methylpyrrolidone and other intermediates and solvents. Key customers include: manufacturers of residential and commercial building products; industrial product specifiers and manufacturers; wind blade and pipe manufacturers; automotive and truck OEM suppliers; boatbuilders; engineered plastics and electronic producers; and specialty chemical manufacturers. Results from the former Elastomers division were included in Performance Materials’ results of operations within the Statements of Consolidated Comprehensive Income until its December 1, 2014 sale. See Note B for information on the divestiture of the Elastomers division.

Valvoline is a leading, worldwide producer and distributor of premium-branded automotive, commercial and industrial lubricants and automotive chemicals. It ranks as the #2 quick-lube chain and #3 passenger car motor oil brand in the United States. The brand operates and franchises approximately 940 Valvoline Instant Oil Change<sup>SM</sup> centers in the United States. It also markets Valvoline<sup>TM</sup> lubricants and automotive chemicals; MaxLife<sup>TM</sup> lubricants created for higher-mileage engines; SynPower<sup>TM</sup> synthetic motor oil; and Zerex<sup>TM</sup> antifreeze. Key customers include: retail auto parts stores and mass merchandisers who sell to consumers; installers, such as car dealers, repair shops and quick lubes; commercial fleets; and distributors. During 2015, Ashland sold its Valvoline car care product assets, including Car Brite<sup>TM</sup> and Eagle One<sup>TM</sup> automotive appearance products, and sold its joint venture equity investment in Venezuela. See Note B for information on the divestitures of this investment and the car care product assets.

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At September 30, 2015, Ashland and its consolidated subsidiaries had approximately 10,500 employees (excluding contract employees).

Available Information – Ashland’s Internet address is <http://www.ashland.com>. On this website, Ashland makes available, free of charge, its annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and any amendments to those reports, as well as any beneficial ownership reports of officers and directors filed on Forms 3, 4 and 5. All such reports are available as soon as reasonably practicable after they are electronically filed with, or electronically furnished to, the Securities and Exchange Commission (SEC). Ashland also makes available, free of charge on its website, its Corporate Governance Guidelines, Board Committee Charters, Director Independence Standards and code of business conduct that applies to Ashland’s directors, officers and employees. These documents are also available in print to any shareholder who requests them. Information contained on Ashland’s website is not part of this annual report on Form 10-K and is not incorporated by reference in this document. The public may read and copy any materials Ashland files with the SEC at the SEC’s Public Reference Room at 100

F Street, NE, Washington, DC 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC maintains an Internet site (<http://www.sec.gov>) that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC.

#### CORPORATE DEVELOPMENTS

On September 22, 2015, Ashland announced that the Board of Directors approved proceeding with a plan to separate Ashland into two independent, publicly traded companies comprising of the new Ashland and Valvoline. Ashland has begun the process to separate its Valvoline business from its Specialty Ingredients and Performance Materials businesses while it finalizes the transaction structure and obtains customary regulatory and other approvals. Ashland intends for the separation, which is subject to final board approval prior to completion, to be tax free for Ashland shareholders. Immediately following the separation, Ashland shareholders will own shares of both the new Ashland and Valvoline. The separation is expected to be completed as soon as practicable, but not before the end of fiscal 2016.

The new Ashland will be a global leader in providing specialty chemical solutions to customers in a wide range of consumer and industrial markets. These markets are currently served by Specialty Ingredients and Performance Materials. Key markets and applications include pharmaceutical, personal care, food and beverage, architectural coatings, adhesives, automotive, construction and energy. Together these businesses generated approximately \$3.4 billion in sales for the fiscal year ended September 30, 2015.

Valvoline will focus on building the world's leading engine and automotive maintenance business by providing hands-on expertise to customers in each of its primary market channels: Do-It-Yourself (DIY); Installers; Valvoline Instant Oil Change<sup>SM</sup>; and International. Valvoline generated sales of \$2.0 billion for Ashland during the fiscal year ended September 30, 2015.

#### ASHLAND SPECIALTY INGREDIENTS

Ashland Specialty Ingredients (Specialty Ingredients) offers industry-leading products, technologies and resources for solving formulation and product-performance challenges. Using natural, synthetic and semisynthetic polymers derived from plant and seed extract, cellulose ethers, vinyl pyrrolidones, acrylic polymers as well as polyester and polyurethane-based adhesives, Specialty Ingredients offers comprehensive and innovative solutions for consumer and industrial applications.

Key customers include pharmaceutical companies; makers of personal care products, food and beverages; manufacturers of paint, coatings and construction materials; packaging and converting; and oilfield service companies. Certain customer relationships are significant, and the loss of any one of those customers could have a material adverse effect on the Specialty Ingredients reportable segment.

Specialty Ingredients' areas of expertise include: organic and synthetic chemistry, polymer chemistry, surface and colloid science, rheology, structural analysis and microbiology.

Specialty Ingredients' solutions provide an array of properties, including: thickening and rheology control, water retention, adhesive strength, binding power, film formation, conditioning and deposition, colloid stabilization and suspension.

Specialty Ingredients is composed of two divisions: Consumer Specialties and Industrial Specialties. These divisions are defined based on end use markets of customers, but significant overlap of underlying product lines between the two divisions exists and many of the products are produced in shared manufacturing facilities, in order to better manage capacity and achieve desired returns.

Consumer Specialties – The Consumer Specialties division includes the Oral Care, Hair Care, Skin Care, Home Care and Pharmaceutical & Nutrition portfolios.

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Oral Care – Specialty Ingredients’ portfolio of oral care products delivers active ingredients in toothpaste and mouthwashes; provides bioadhesive functionality for dentures; delivers flavor, texture and other functional properties; and provides product binding to ensure form and function throughout product lifecycle.

Hair Care – Specialty Ingredients’ portfolio of hair care products includes advanced styling polymers, fixatives, conditioning polymers, emulsifiers, preservatives and rheology modifiers.

- Skin Care – Specialty Ingredients’ portfolio of skin care products helps to firm, nourish, revitalize and smooth skin. The Skin Care line also provides sun care products, including UV filters, water-resistant agents and thickeners. Emulsifiers, emollients, preservatives and rheology modifiers complete the Skin Care product line.

Home Care – Specialty Ingredients’ portfolio of products and technologies is used in many types of cleaning applications, including fabric care, home care and dishwashing. Specialty Ingredients’ products are used in a variety of applications for viscosity enhancement, particle suspension, rheology modification and stabilization.

Pharmaceutical – Specialty Ingredients is a leading supplier of excipients and tablet coating systems to the pharmaceutical and nutraceutical industries. The excipients division offers a comprehensive range of polymers for use as tablet binders, superdisintegrants, sustained-release agents and drug solubilizers, as well as a portfolio of fully formulated, one-step tablet coating systems for immediate-, sustained- and delayed-release applications.

Nutrition – Specialty Ingredients' nutrition portfolio provides functional benefits in areas such as thickening, texture control, thermal gelation, structure enhancement, water binding, clarification and stabilization. Its core products include cellulose gums and vinyl pyrrolidone polymers which are used in a wide range of offerings for bakery, beverage, dairy, desserts, meat products, pet food, prepared foods, sauces and savory products.

Industrial Specialties – The Industrial Specialties division includes Coatings, Construction, Energy, Adhesives and Performance Specialties.

Coatings – Coatings Specialties is a recognized leader in rheology solutions for waterborne architectural paint and coatings. Products include hydroxyethylcellulose (HEC), which provides thickening and application properties for interior and exterior paints, and nonionic synthetic associative thickeners (NSATs), which are APEO-free liquid synthetics for high-performance paint and industrial coatings. The Coatings Specialties market complements its rheology offering with a broad portfolio of performance foam-control agents, surfactants and wetting agents, dispersants and pH neutralizers.

Construction – Construction Specialties is a major producer and supplier of cellulose ethers and companion products for the construction industry. These products control properties such as water retention, open time, workability, adhesion, stabilization, pumping, sag resistance, rheology, strength, appearance and performance in dry-mortar formulations.

Energy – Energy Specialties is a leading global manufacturer of guar-, synthetic- and cellulosic-based products for drilling fluids, oil-well cement slurries, completion and workover fluids, fracturing fluids and production chemicals. Specialty Ingredients offers the oil and gas industry solutions for drilling, stimulation, completion, cementing and production applications.

Adhesives – Adhesives Specialties manufactures and sells adhesive solutions to the packaging and converting, building and construction, and transportation markets and manufactures and markets specialty coatings and adhesive solutions for use across multiple industries. Key technologies and markets include: acrylic polymers for pressure-sensitive adhesives; urethane adhesive for flexible packaging applications; aqueous and radiation-curable adhesives and specialty coatings for printing and converting applications; emulsion polymer isocyanate adhesives for structural wood bonding; elastomeric polymer adhesives for commercial roofing applications; acrylic, polyurethane and epoxy structural adhesives for bonding fiberglass reinforced plastics, composites, thermoplastics and metals in automotive, marine, recreational and industrial applications; specialty phenolic resins for paper impregnation and friction material bonding. Adhesive Specialties' adhesive products provide an array of functional properties including high-strength bonding, ease and speed of product assembly, heat and moisture resistance and design flexibility.

Performance – Performance Specialties provides products and services to over 30 industries. Ashland offers a broad spectrum of organo- and water-soluble polymers that are derived from both natural and synthetic resources. Product lines include derivatized cellulose polymers, synthetics, guar and guar derivatives that impart effective functionalities to serve a variety of industrial markets and specialized applications. Many of the products within Performance Specialties function as performance additives that deliver high levels of end-user value in formulated products. In other areas, such as plastics and textiles, Performance Specialties' products function as a processing aid, improving the quality of end products and reducing manufacturing costs.

Specialty Ingredients' cellulosics products were approximately 37% and 16% of Specialty Ingredients' sales and Ashland's consolidated sales, respectively, for fiscal 2015.

Specialty Ingredients operates throughout the Americas, Europe and Asia Pacific. It has 26 manufacturing facilities in eight countries which serve both the Consumer Specialties and Industrial Specialties divisions and participates in two joint ventures. Specialty Ingredients has manufacturing facilities in Huntsville, Alabama; Wilmington, Delaware;



Dalton, Georgia; Calumet City, Illinois; Calvert City, Kentucky; Freetown, Massachusetts; Chatham and Parlin, New Jersey; Columbus, Hilliard and Ashland, Ohio; White City, Oregon; Piedmont, South Carolina; Kenedy and Texas City, Texas and Hopewell, Virginia within the United States and Doel-Beveren, Belgium; Cabreuva, Brazil; Jiangmen and Nanjing, China; Alizay and Sophia Antipolis, France; Memmingen, Germany; Zwijndrecht, the Netherlands and Kidderminster, Newton Aycliffe and Poole, United Kingdom. Specialty Ingredients also operates two production facilities through a joint venture in Luzhou and Suzhou, China.

Specialty Ingredients markets and distributes its products and services directly and through third-party distributors in the Americas, Europe, the Middle East, Africa and Asia Pacific.

## ASHLAND PERFORMANCE MATERIALS

Ashland Performance Materials (Performance Materials) is a global leader in unsaturated polyester resins and vinyl ester resins. The business unit has leading positions in gelcoats, maleic anhydride, butanediol, tetrahydrofuran, N-Methylpyrrolidone and other intermediates and solvents. Performance Materials' Composites division is a global leader helping customers create stronger, lighter, more resistant substitutes for traditional materials through higher performing, cost-efficient resin technologies that improve the manufacturing, fabrication and design process. Applied industries include construction, transportation, infrastructure, and boatbuilding. The Intermediates and Solvents division provides butanediol and its derivatives to the chemical process industry, plastics manufacturers, and electronics markets, among others. Prior to the December 1, 2014 sale, the Elastomers division provided high-quality styrene butadiene rubber primarily to the replacement tire market.

Key customers include manufacturers of residential and commercial building products, industrial product specifiers and manufacturers, wind blade manufacturers, pipe manufacturers, automotive and truck OEM suppliers, boatbuilders, chemical producers and electronics makers.

Performance Materials is composed of the following divisions:

**Composites** – The Composites division manufactures and sells a broad range of general-purpose and high-performance grades of unsaturated polyester and vinyl ester resins, gelcoats and low-profile additives for the reinforced plastics industry. Key markets include the transportation, construction, marine and infrastructure end markets. Performance Materials' composite products provide an array of functional properties including corrosion resistance, fire retardance, ultraviolet resistance, water and chemical resistance, high mechanical strength, impact and scratch resistance and high strength-to-weight ratios. In addition, the division also manufactures and sells molten maleic anhydride for the manufacture of a variety of products such as unsaturated polyester resins, copolymers, lubricating oil additives, alkenyl succinic anhydrides, malic acid, fumaric acid and numerous derivative chemicals. Molten maleic anhydride is supplied both to Ashland businesses who consume it as a raw material, primarily in North America, and to the merchant market.

**Intermediates and Solvents** – The Intermediates and Solvents (I&S) division is a leading producer of 1,4 butanediol and its derivatives, including tetrahydrofuran and n-methylpyrrolidone. These products are used as chemical intermediates in the production of engineering polymers and polyurethanes, and as specialty process solvents in a wide array of applications including electronics, construction, and active pharmaceutical ingredient manufacture.

Butanediol is also supplied to Specialty Ingredients for use as a raw material.

Performance Materials' composites products were approximately 68% and 15% of Performance Materials' sales and Ashland's total consolidated sales, respectively, for fiscal 2015.

Performance Materials operates throughout the Americas, Europe and Asia Pacific. It has 15 manufacturing facilities in seven countries. Composites has manufacturing plants in Fort Smith and Jacksonville, Arkansas; Commerce, California; Bartow, Florida; Neville Island and Philadelphia, Pennsylvania; and Neal, West Virginia within the United States and Aracariguama, Brazil; Changzhou, China; Porvoo, Finland; Miszewo, Poland; and Benicarló, Spain. I&S has manufacturing facilities in Lima, Ohio and Marl, Germany. Performance Materials also provides toll manufacturing services to ASK Chemicals GmbH through manufacturing facilities located in Changzhou, China. ASK Chemical GmbH was a joint venture in which Ashland held a 50% interest until its interest was sold on June 30, 2014. Performance Materials markets and distributes its products directly and through third-party distributors in the Americas, Europe, the Middle East, Africa and Asia Pacific.

## VALVOLINE

Valvoline delivers premium-branded automotive, commercial and industrial lubricants and automotive chemicals. It operates and franchises approximately 940 Valvoline Instant Oil Change<sup>SM</sup> centers in the United States. It markets Valvoline<sup>TM</sup> lubricants and automotive chemicals; MaxLife<sup>TM</sup> lubricants for cars with higher mileage engines; SynPower<sup>TM</sup> synthetic motor oil; and Zerex<sup>TM</sup> antifreeze.

Key customers include retail auto parts stores and mass merchandisers who sell to consumers; installers, such as car dealers, repair shops and quick lubes; commercial fleets; and distributors. Certain customer relationships are significant, and the loss of any one of those customers could have a material adverse effect on the Valvoline business unit.

The Valvoline reportable segment is composed of the following markets:

Do It Yourself (DIY) – The DIY unit sells Valvoline™ and other branded and private label products to consumers who perform their own auto maintenance. These products are sold through retail auto parts stores such as AutoZone, O'Reilly Auto Parts,

Advance Auto Parts, mass merchandisers such as Wal-Mart Stores, Inc., and warehouse distributors and their affiliated jobber stores such as NAPA and CARQUEST.

Installer Channels – The Installer Channels unit sells branded products and services to installers (such as car dealers, general repair shops and quick lubes) through a network of independent distributors and company-owned and operated “direct market” operations as well as national accounts such as Goodyear, Monro and Sears. The division also sells branded products and services to on-highway fleets and construction companies through company-owned and operated “direct market” operations, national accounts and a network of distributors. The Installer Channels has a relationship with Cummins Inc. (Cummins) for co-branding in the North America Heavy Duty business. During fiscal 2015, Ashland sold its Valvoline car care product assets.

Valvoline Instant Oil Change (VIOC) – The Valvoline Instant Oil Change<sup>SM</sup> chain is the second largest competitor in the U.S. “fast oil change” service business, providing Valvoline with a significant presence in the installer channels segment of the passenger car and light truck motor oil market. As of September 30, 2015, 279 company-owned and 663 independently-owned and operated franchise VIOC centers were operating in 43 states. VIOC centers offer customers an innovative computer-based preventive maintenance tracking system that allows service technicians to make service recommendations based primarily on manufacturers’ recommendations. In addition, this division includes distribution to quick lubes branded “Valvoline Express Care<sup>TM</sup>,” which consists of 328 independently-owned and operated stores.

Valvoline International – Outside of North America, Valvoline International markets Valvoline<sup>TM</sup>, Zerex<sup>TM</sup> and other branded products through wholly-owned affiliates, joint ventures, licensees and independent distributors in over 138 countries. Valvoline International operates joint ventures with Cummins in Argentina, China and India. In addition, Valvoline International operates joint ventures with local entities in Colombia, Ecuador and Thailand. Valvoline International markets products for both consumer and commercial vehicles and equipment and is served by company-owned plants in the United States, Australia and the Netherlands and by numerous third-party warehouses and toll manufacturers throughout the world.

Valvoline International sells branded products and services to original equipment manufacturers (OEMs) through company-owned and operated “direct market” operations, national accounts and a network of distributors. Valvoline International also maintains a strategic alliance with Cummins to distribute heavy duty lubricants to the commercial market, as well as smaller alliances with other global OEMs.

Valvoline’s lubricants products were approximately 86% and 31% of Valvoline’s and Ashland’s total consolidated sales, respectively, for fiscal 2015.

Valvoline operates lubricant blending and packaging plants in Santa Fe Springs, California; Cincinnati, Ohio; East Rochester, Pennsylvania and Deer Park, Texas within the United States and Wetherill Park, Australia and Dordrecht, the Netherlands. Bulk blending and distribution facilities are located in College Park, Georgia; Willow Springs, Illinois and St. Louis, Missouri within the United States and Mississauga, Canada. Distribution operations are conducted from centers located in College Park, Georgia; Willow Springs, Illinois; Noblesville, Indiana; St. Louis, Missouri; Cincinnati, Ohio and East Rochester, Pennsylvania within the United States and through owned facilities in Birkenhead, United Kingdom and leased facilities in Sydney, Australia and Dordrecht, the Netherlands. Valvoline also uses property owned and operated by third-parties in Pasadena and Highlands, Texas in the United States; Rotterdam, the Netherlands, and other smaller locations, and is a part of a joint venture that operates a plant in Ambarnath, India.

In addition to raw materials, Valvoline sources a significant portion of packaging and third party products and services.

## MISCELLANEOUS

Environmental Matters

Ashland maintains a companywide environmental policy overseen by the Environmental, Health, Safety and Product Compliance Committee of Ashland's Board of Directors. Ashland's Environmental, Health, Safety and Product Regulatory (EHS&PR) department has the responsibility to ensure that Ashland's businesses worldwide maintain environmental compliance in accordance with applicable laws and regulations. This responsibility is carried out via training; widespread communication of EHS&PR policies; information and regulatory updates; formulation of relevant policies, procedures and work practices; design and implementation of EHS&PR management systems; internal auditing by a separate auditing group; monitoring of legislative and regulatory developments that may affect Ashland's operations; assistance to the businesses in identifying compliance issues and opportunities for voluntary actions that go beyond compliance; and incident response planning and implementation.

Federal, state and local laws and regulations relating to the protection of the environment have a significant impact on how Ashland conducts its businesses. In addition, Ashland's operations outside the United States are subject to the environmental laws of the countries in which they are located. These laws include regulation of air emissions and water discharges, waste handling, remediation and product inventory, registration and regulation. New laws and regulations may be enacted or adopted by various

regulatory agencies globally. The costs of compliance with any new laws or regulations cannot be estimated until the manner in which they will be implemented has been more precisely defined.

At September 30, 2015, Ashland's reserves for environmental remediation and related environmental litigation amounted to \$186 million, reflecting Ashland's estimates of the most likely costs that will be incurred over an extended period to remediate identified conditions for which the costs are reasonably estimable, without regard to any third-party recoveries. Engineering studies, historical experience and other factors are used to identify and evaluate remediation alternatives and their related costs in determining the estimated reserves for environmental remediation. Environmental remediation reserves are subject to numerous inherent uncertainties that affect Ashland's ability to estimate its share of the costs. Such uncertainties involve the nature and extent of contamination at each site, the extent of required cleanup efforts under existing environmental regulations, widely varying costs of alternate cleanup methods, changes in environmental regulations, the potential effect of continuing improvements in remediation technology and the number and financial strength of other potentially responsible parties at multiparty sites. Although it is not possible to predict with certainty the ultimate costs of environmental remediation, Ashland currently estimates that the upper end of the reasonably possible range of future costs for identified sites could be as high as approximately \$370 million. No individual remediation location is significant, as the largest reserve for any site is approximately 14% or less of the remediation reserve. Ashland continues to discount certain environmental sites and regularly adjusts its reserves as environmental remediation continues. Environmental remediation expense, net of insurance receivables, amounted to \$40 million in 2015, compared to \$33 million in 2014 and \$29 million in 2013.

**Product Control, Registration and Inventory** – Many of Ashland's products and operations are subject to chemical control laws of the countries in which they are located. These laws include regulation of chemical substances and inventories under the Toxic Substances Control Act (TSCA) in the United States and the Registration, Evaluation and Authorization of Chemicals (REACH) regulation in Europe. Under REACH, additional testing requirements, documentation, risk assessments and registrations are occurring and will continue to occur and may adversely affect Ashland's costs of products produced in or imported into the European Union. Examples of other product control regulations include right to know laws under the Global Harmonized System (GHS) for hazard communication, regulation of chemicals used in the manufacture of pharmaceuticals and personal care products and that contact food under the Food, Drug and Cosmetics Act in the United States, the Framework Regulation in Europe and other product control requirements for chemical weapons, drug precursors and import/export. New laws and regulations may be enacted or adopted by various regulatory agencies globally. The costs of compliance with any new laws or regulations cannot be estimated until the manner in which they will be implemented has been more precisely defined.

**Remediation** – Ashland currently operates, and in the past has operated, various facilities at which, during the normal course of business, releases of hazardous substances have occurred. Additionally, Ashland has known or alleged potential environmental liabilities at a number of third-party sites. Federal and state laws, including but not limited to the Resource Conservation and Recovery Act (RCRA), the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) and various other remediation laws, require that contamination caused by hazardous substance releases be assessed and, if necessary, remediated to meet applicable standards. Some of these laws also provide for liability for related damage to natural resources, and claims for alleged property and personal injury damage can also arise related to contaminated sites. Laws in other jurisdictions in which Ashland operates require that contamination caused by such releases at these sites be assessed and, if necessary, remediated to meet applicable standards.

**Air** – In the United States, the Clean Air Act (CAA) imposes stringent limits on facility air emissions, establishes a federally mandated operating permit program, allows for civil and criminal enforcement actions and sets limits on the volatile or toxic content of many types of industrial materials and consumer products. The CAA establishes national ambient air quality standards (NAAQS) with attainment deadlines and control requirements based on the severity of air pollution in a given geographical area. Various state clean air acts implement, complement and, in many instances,

add to the requirements of the federal CAA. The requirements of the CAA and its state counterparts have a significant impact on the daily operation of Ashland's businesses and, in many cases, on product formulation and other long-term business decisions. Other countries where Ashland operates also have laws and regulations relating to air quality. Ashland's businesses maintain numerous permits and emission control devices pursuant to these clean air laws.

The United States Environmental Protection Agency (USEPA) has increased its frequency in reviewing the NAAQS. The USEPA has stringent standards for particulate matter, ozone and sulfur dioxide. Throughout 2015, state and local agencies continued to implement options for meeting the newest standards. Particulate matter strategies include dust control measures for construction sites and reductions in emission rates allowed for industrial operations. Options for ozone include emission controls for certain types of sources, reduced limits on the volatile organic compound content of industrial materials and consumer products, and requirements on the transportation sector. Most options for sulfur dioxide focus on coal and diesel fuel combustion sources. It is not possible at this time to estimate the potential financial impact that these newest standards may have on Ashland's operations or products. Ashland will continue to monitor and evaluate these standards to meet these and all air quality requirements.

**Solid Waste** – Ashland’s businesses are subject to various laws relating to and establishing standards for the management of hazardous and solid waste. In the United States, Ashland’s facilities are subject to RCRA and its regulations governing generators of hazardous waste. Ashland has implemented systems to oversee compliance with the RCRA regulations. In addition to regulating current waste disposal practices, RCRA also addresses the environmental effects of certain past waste disposal operations, the recycling of wastes and the storage of regulated substances in underground tanks. Ashland has the remediation liability for certain facilities subject to these regulations. Other countries where Ashland operates also have laws and regulations relating to hazardous and solid waste, and Ashland has systems in place to oversee compliance.

**Water** – Ashland’s businesses maintain numerous discharge permits. In the United States, such permits may be required by the National Pollutant Discharge Elimination System of the Clean Water Act and similar state programs. Other countries have similar laws and regulations requiring permits and controls relating to water discharge.

**Climate Change and Related Regulatory Developments** – Ashland has been collecting energy use data and calculating greenhouse gas (GHG) emissions for many years. Ashland evaluates the potential impacts from both climate change and the anticipated GHG regulations to facilities, products and other business interests, as well as the strategies commonly considered by the industrial sector to reduce the potential impact of these risks. These risks are generally grouped as impacts from legislative, regulatory and international developments, impacts from business and investment trends and impacts to company assets from the physical effects of climate change. Current North American, European and other regional regulatory developments are not expected to have a material effect on Ashland’s operations, although some facilities are subject to promulgated rules. Business and investment trends are expected to drive an increase in the demand for products that improve energy efficiency, reduce energy use and increase the use of renewable resources. At this time, Ashland cannot estimate the impact of this expected demand increase to its businesses. Physical effects from climate change have the potential to affect Ashland’s assets in areas prone to sea level rise or extreme weather events much as they do the general public and other businesses. Due to the uncertainty of these matters, Ashland cannot estimate the impact at this time of GHG-related developments on its operations or financial condition.

#### Competition

Specialty Ingredients and Performance Materials compete in the highly fragmented specialty chemicals industry. The participants in the industry offer a varied and broad array of product lines designed to meet specific customer requirements. Participants compete with individual and service product offerings on a global, regional and/or local level subject to the nature of the businesses and products, as well as the end-markets and customers served. Competition is based on several key criteria, including product performance and quality, product price, product availability and security of supply, responsiveness of product development in cooperation with customers, customer service, industry knowledge and technical capability. Certain key competitors are significantly larger than Ashland and have greater financial resources, leading to greater operating and financial flexibility. The industry has become increasingly global as participants have focused on establishing and maintaining leadership positions outside of their home markets. Many of these segments’ product lines face domestic and international competition, as a result of industry consolidation, pricing pressures and competing technologies.

Valvoline competes in the highly competitive automotive lubricants business, principally through its offerings of premium products and services primarily under the Valvoline™ family of trademarks, coupled with strong brand marketing, customer support and distribution capabilities. Some of the major brands of motor oils and lubricants with which Valvoline competes globally are Castrol, Mobil and Pennzoil. In the “fast oil change” market, Valvoline competes with other leading independent fast lube chains on a national, regional or local basis, as well as automobile dealers and service stations. Important competitive factors for Valvoline in the “fast oil change” market include the Valvoline brand recognition; maintaining market presence through Valvoline Instant Oil Change<sup>SM</sup> and Valvoline Express Care<sup>TM</sup> outlets; and quality and speed of service, location, convenience, sales promotions and other value-add elements.



#### Intellectual Property

Ashland has a broad intellectual property portfolio which is an important component of all of Ashland's reportable segments. In particular, Ashland's Specialty Ingredients and Performance Materials reportable segments rely on patents, trade secrets, formulae and know-how to protect and differentiate their products and technologies. In addition, these reportable segments own valuable trademarks which identify and differentiate Ashland's products from its competitors. The Valvoline™ trademark and other trademarks related to Valvoline brand products and franchises are of particular importance to the Valvoline brand segment and the overall Ashland business. Ashland also licenses intellectual property rights from third-parties.

#### Raw Materials

Ashland purchases its raw materials from multiple sources of supply in the United States and other countries, and believes that raw material supplies will be available in quantities sufficient to meet demand in fiscal 2016. All of Ashland's reportable segments were impacted to varying degrees in fiscal 2015 by the volatility of raw materials costs, and these conditions may continue in fiscal 2016.

### Research and Development

Ashland's program of research and development is focused on defining the needs of the marketplace and framing those needs into technology platforms. Ashland has the capability to deliver and develop the intellectual property required to grow and protect those platforms. Ashland is focused on developing new chemistries, market-changing technologies and customer driven solutions at numerous technology centers located in the Americas, Europe and the Asia Pacific region. Research and development costs are expensed as they are incurred and totaled \$110 million in fiscal 2015, \$114 million in 2014 and \$142 million in 2013. These amounts include impairment charges of \$11 million, \$13 million and \$41 million during fiscal 2015, 2014 and 2013, respectively, related to certain in-process research and development assets associated with the acquisition of ISP. For additional information regarding these impairment charges, see Note H of Notes to Consolidated Financial Statements in this annual report on Form 10-K.

### Seasonality

Ashland's business may vary due to seasonality. Ashland's business units typically experience stronger demand during warmer weather months, which generally occur during Ashland's third and fourth quarters.

### Forward-Looking Statements

This annual report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). These forward-looking statements are not historical facts and generally are identified by words such as "anticipates," "believes," "estimates," "expects," "is likely," "predicts," "projects," "forecasts," "may," "will," "should," and the negative of these words or other comparable terminology. Although Ashland believes that its expectations are based on reasonable assumptions, such expectations are subject to risks and uncertainties that are difficult to predict and may be beyond Ashland's control. As a result, Ashland cannot assure that the expectations contained in such statements will be achieved. Important factors that could cause actual results to differ materially from those contained in such statements are discussed under "Use of estimates, risks and uncertainties" in Note A of Notes to Consolidated Financial Statements in this annual report on Form 10-K. For a discussion of other factors and risks that could affect Ashland's expectations and operations, see "Item 1A. Risk Factors" in this annual report on Form 10-K.

## ITEM 1A. RISK FACTORS

The following discussion of "risk factors" identifies the most significant factors that may adversely affect Ashland's business, operations, financial position or future financial performance. This information should be read in conjunction with Management's Discussion and Analysis and the consolidated financial statements and related notes incorporated by reference into this annual report on Form 10-K. The following discussion of risks is designed to highlight what Ashland believes are important factors to consider when evaluating its expectations. These factors could cause future results to differ from those in forward-looking statements and from historical trends.

Ashland has set aggressive growth goals for its businesses, including increasing sales, cash flow and margins, in order to achieve its long term strategic objectives. Ashland's successful execution of its growth strategies and business plans to facilitate that growth involves a number of risks.

Ashland has set aggressive growth goals for its chemicals and Valvoline businesses in order to meet long term strategic objectives and improve shareholder value. Ashland's failure to meet one or more of these goals or objectives would negatively impact Ashland's potential value and the businesses. One of the most important risks is that Ashland might fail to adequately execute its business and growth plans. Aspects of that risk include changes to global economic environment, changes to the competitive landscape, attraction and retention of skilled employees, the potential failure of product innovation plans, failure to comply with existing or new regulatory schemes, failure to maintain a competitive cost structure and other risks outlined in greater detail in this Item 1A.

Ashland's plan to separate into two independent, publicly traded companies is subject to various risks and uncertainties and may not be completed in accordance with the expected plans or anticipated timeline, or at all, and will involve significant time and expense, any of which could negatively impact our businesses.

On September 22, 2015, Ashland announced plans to separate its Valvoline business from its Specialty Ingredients and Performance Materials businesses in a structure that is expected to be tax free for Ashland shareholders. The separation is intended to be completed as soon as practicable, but will take no less than a year from the date of the announcement of the planned separation. The process of finalizing the transaction structure is underway. Once the separation structure is determined, the separation is subject to final approval from Ashland's board of directors. In addition, other unanticipated developments, including changes to the competitive environment for Valvoline's or new Ashland's respective markets, possible delays in obtaining or failure to obtain

tax opinions, regulatory or other approvals or clearances to approve or facilitate the separation, uncertainty in financial markets and other challenges in executing the separation as planned, could delay or prevent the separation, or cause it to occur on terms or conditions that are different or less favorable than expected.

Ashland expects that the process of completing the proposed separation will be time-consuming and involve significant costs and expenses, which may be significantly higher than those currently anticipated and may not yield a discernible benefit if the separation is not completed. Also, the time and energy required from Ashland's senior management and other employees to plan and execute the separation may lead to increased costs, increased expenses, negative effects on relationships with business partners, suppliers, and customers, disruptions in operations and ultimately harm its businesses. Ashland may also experience difficulty attracting, retaining and motivating employees during the pendency of the separation, which could also harm its businesses.

If the separation is completed, there is a further risk that the sum of the value of the two independent, publicly traded companies will be less than the value of Ashland before the separation. There is also a risk that the completed separation will not meet all of the intended financial, strategic, and operational benefits that were the impetus for the decision to separate the company.

Ashland's success depends upon its ability to attract and retain key employees and the identification and development of talent to succeed senior management.

Ashland's success depends on its ability to attract and retain key personnel, and Ashland relies heavily on its management team. The inability to recruit and retain key personnel or the unexpected loss of key personnel may adversely affect Ashland's operations. Also, a substantial portion of Ashland's U.S.-based employees will be retirement-eligible within the next five years. That, combined with the relatively small number of middle tier managers with substantial experience in place to replace this group of retirement eligible employees, increases the potential negative impact of the risk that key employees could leave the Company. This risk of unwanted employee turnover also is substantial in positions that require certain technical expertise and geographically in developing markets which Ashland has targeted for growth, especially in Asia, South America and Eastern Europe. This risk is further enhanced by the planned separation of Ashland into two publicly traded companies announced on September 22, 2015. In addition, because of its reliance on its management team, Ashland's future success depends, in part, on its ability to identify and develop talent to succeed its senior management and other key positions throughout the organization. If Ashland fails to identify and develop successors, the company is at risk of being harmed by the departures of these key employees.

Ashland faces competition from other companies, which places downward pressure on prices and margins and may adversely affect Ashland's businesses and results of operations.

Ashland operates in highly competitive markets, competing against a number of domestic and foreign companies. Competition is based on several key criteria, including product performance and quality, product price, product availability and security of supply, responsiveness of product development in cooperation with customers and customer service, as well as the ability to bring innovative products or services to the marketplace. Certain key competitors are significantly larger than Ashland and have greater financial resources, leading to greater operating and financial flexibility. As a result, these competitors may be better able to withstand changes in conditions within the relevant industry, changes in the prices of raw materials and energy and changes in general economic conditions. In addition, competitors' pricing decisions could compel Ashland to decrease its prices, which could negatively affect its margins and profitability. Additional competition in markets served by Ashland could adversely affect margins and profitability and could lead to a reduction in market share. Also, Ashland competes in certain markets that are declining and has targeted other markets for growth opportunities. If Ashland's strategies for dealing with declining markets and leveraging opportunity markets are not successful, its results of operations could be negatively affected. Ashland's business exposes it to potential product liability claims and recalls, which could adversely affect its financial condition and performance.

The development, manufacture and sale of specialty chemical and other products by Ashland, including products produced for the food, beverage, personal care, pharmaceutical and nutritional supplement industries, involve an inherent risk of exposure to product liability claims, product recalls, product seizures and related adverse publicity. A product liability claim or judgment against Ashland could also result in substantial and unexpected expenditures, affect consumer or customer confidence in its products, and divert management's attention from other responsibilities. Although Ashland maintains product liability insurance, there can be no assurance that this type or the level of coverage is adequate or that Ashland will be able to continue to maintain its existing insurance or obtain comparable insurance at a reasonable cost, if at all. A product recall or a partially or completely uninsured product liability judgment against Ashland could have a material adverse effect on its reputation, results of operations and financial condition.

Failure to develop and market new products and production technologies could impact Ashland's competitive position and have an adverse effect on its businesses and results of operations.

The specialty chemical industry is subject to periodic technological change and ongoing product improvements. In order to maintain margins and remain competitive, Ashland must successfully develop and introduce new products or improvements that

appeal to its customers and ultimately to global consumers. Ashland plans to grow earnings, in part, by focusing on developing markets and solutions to meet increasing demand in those markets, including demand for personal care and pharmaceutical products which are subject to lengthy regulatory approval processes. Ashland's efforts to respond to changes in consumer demand in a timely and cost-efficient manner to drive growth could be adversely affected by difficulties or delays in product development, including the inability to identify viable new products, successfully complete research and development, obtain regulatory approvals, obtain intellectual property protection or gain market acceptance of new products. Due to the lengthy development process, technological challenges and intense competition, there can be no assurance that any of the products Ashland is currently developing, or could develop in the future, will achieve substantial commercial success.

The impact of changing laws or regulations or the manner of interpretation or enforcement of existing rules could adversely impact Ashland's financial performance and restrict its ability to operate its business or execute its strategies. New laws or regulations, or changes in existing laws or regulations or the manner of their interpretation or enforcement, could increase Ashland's cost of doing business and restrict its ability to operate its business or execute its strategies. This includes, among other things, the possible taxation under U.S. law of certain income from foreign operations, the possible taxation under foreign laws of certain income Ashland reports in other jurisdictions, regulations related to the protection of private information of Ashland's employees and customers, regulations issued by the U.S. Food and Drug Administration (and analogous non-U.S. agencies) affecting Ashland and its customers, compliance with The U.S. Foreign Corrupt Practices Act (and analogous non-U.S. laws) and the European Union's Registration, Authorisation and Restriction of Chemicals (REACH) regulation (and analogous non-EU initiatives), and costs associated with complying with the Patient Protection and Affordable Care Act of 2010 and the regulations promulgated thereunder. In addition, compliance with laws and regulations is complicated by Ashland's substantial and growing global footprint, which will require significant and additional resources to comprehend and ensure compliance with applicable laws in the more than one hundred countries where Ashland conducts business.

Ashland's substantial global operations subject it to risks of doing business in foreign countries, which could adversely affect its business, financial condition and results of operations.

Approximately one half of Ashland's net sales for fiscal 2016 are expected to be to customers outside of North America. Ashland expects sales from international markets to continue to represent an even larger portion of the Company's sales in the future. Also, a significant portion of Ashland's manufacturing capacity is located outside of the United States. Accordingly, Ashland's business is subject to risks related to the differing legal, political, cultural, social and regulatory requirements and economic conditions of many jurisdictions.

The global nature of Ashland's business presents difficulties in hiring and maintaining a workforce in certain countries. Fluctuations in exchange rates may affect product demand and may adversely affect the profitability in U.S. dollars of products and services provided in foreign countries. In addition, foreign countries may impose additional withholding taxes or otherwise tax Ashland's foreign income, or adopt other restrictions on foreign trade or investment, including currency exchange controls. The imposition of tariffs is also a risk that could impair Ashland's financial performance. Certain legal and political risks are also inherent in the operation of a company with Ashland's global scope. For example, it may be more difficult for Ashland to enforce its agreements or collect receivables through foreign legal systems. There is a risk that foreign governments may nationalize private enterprises in certain countries where Ashland operates. In certain countries or regions, terrorist activities and the response to such activities may threaten Ashland's operations more than in those in the United States. In Europe, the effect of economic sanctions imposed on Russia and/or Russia's reaction to the sanctions could adversely impact Ashland's performance and results of operations. Social and cultural norms in certain countries may not support compliance with Ashland's corporate policies including those that require compliance with substantive laws and regulations. Also, changes in general economic and political conditions in countries where Ashland operates, particularly in Europe, the Middle East and emerging markets, are a risk to Ashland's financial performance.

As Ashland continues to operate its business globally, its success will depend, in part, on its ability to anticipate and effectively manage these and other related risks. There can be no assurance that the consequences of these and other factors relating to its multinational operations will not have an adverse effect on Ashland's business, financial condition or results of operations.

The competitive nature of Ashland's markets may delay or prevent the Company from passing increases in raw materials or energy costs on to its customers. In addition, certain of Ashland's suppliers may be unable to deliver products or raw materials or may withdraw from contractual arrangements. The occurrence of either event could adversely affect Ashland's results of operations.

Rising and volatile raw material prices, especially those of hydrocarbon derivatives, cotton linters or wood pulp, may negatively impact Ashland's costs, results of operations and the valuation of its inventory. Similarly, energy costs are a significant component of certain of Ashland's product costs. Ashland is not always able to raise prices in response to such increased costs, and its ability

to pass on the costs of such price increases is dependent upon market conditions. Likewise, reductions in the valuation of Ashland's inventory due to market volatility may not be recovered and could result in losses.

Ashland purchases certain products and raw materials from suppliers, often pursuant to written supply contracts. If those suppliers are unable to meet Ashland's orders in a timely manner or choose to terminate or otherwise avoid contractual arrangements, Ashland may not be able to make alternative supply arrangements. Also, domestic and global government regulations related to the manufacture or transport of certain raw materials may impede Ashland's ability to obtain those raw materials on commercially reasonable terms. If Ashland is unable to obtain and retain qualified suppliers under commercially acceptable terms, its ability to manufacture and deliver products in a timely, competitive and profitable manner or grow its business successfully could be adversely affected.

Adverse developments in the global economy and potential disruptions of financial markets could negatively impact Ashland's customers and suppliers, and therefore have a negative impact on Ashland's results of operations.

A global or regional economic downturn may reduce customer demand or inhibit Ashland's ability to produce and sell products. Ashland's business and operating results are sensitive to global and regional economic downturns, credit market tightness, declining consumer and business confidence, fluctuating commodity prices, volatile exchange rates, changes in interest rates, sovereign debt defaults and other challenges, including those related to international sanctions and acts of aggression or threatened aggression that can affect the global economy. In the event of adverse developments or stagnation in the economy or financial markets, Ashland's customers may experience deterioration of their businesses, reduced demand for their products, cash flow shortages and difficulty obtaining financing. As a result, existing or potential customers might delay or cancel plans to purchase products and may not be able to fulfill their obligations to Ashland in a timely fashion. Further, suppliers may experience similar conditions, which could impact their ability to fulfill their obligations to Ashland. A weakening or reversal of the current economic recovery in the global economy or a substantial part of it could negatively impact Ashland's business, results of operations, financial condition and ability to grow.

Ashland uses information technology (IT) systems to conduct business and these IT systems are at risk from cyber security threats.

The nature of our businesses, the markets we serve, and geographic profile of our operations make Ashland a target of cyber security threats. Despite steps Ashland takes to mitigate or eliminate them, cyber security threats to our systems are increasing and becoming more advanced and could occur as a result of the activity of hackers, employee error or employee misconduct. A breach of our IT systems could lead to the loss and destruction of trade secrets, confidential information, proprietary data, intellectual property, customer and supplier data, and employee personal information, and could disrupt business operations which could adversely affect Ashland's relationships with business partners and harm our brands, reputation, and financial results.

Ashland may not be able to effectively protect or enforce its intellectual property rights.

Ashland relies on the patent, trademark, trade secret and copyright laws of the United States and other countries to protect its intellectual property rights. The laws of some countries may not protect Ashland's intellectual property rights to the same extent as the laws of the United States. Failure of foreign countries to have laws to protect Ashland's intellectual property rights or an inability to effectively enforce such rights in foreign countries could result in the loss of valuable proprietary information, which could have an adverse effect on Ashland's business and results of operations.

Even in circumstances where Ashland has a patent on certain technologies, such patents may not provide meaningful protection against competitors or against competing technologies. In addition, any patent applications submitted by Ashland may not result in an issued patent. There can be no assurance that Ashland's intellectual property rights will not be challenged, invalidated, circumvented or rendered unenforceable. Ashland could also face claims from third parties alleging that Ashland's products or processes infringe on their proprietary rights. If Ashland is found liable for infringement, it could be responsible for significant damages, prohibited from using certain products or processes or required to modify certain products and processes. Any such infringement liability could adversely affect Ashland's



product and service offerings, profitability and results of operations.

Ashland also has substantial intellectual property associated with its know-how and trade secrets that are not protected by patent or copyright laws. Ashland protects these rights by entering into confidentiality and non-disclosure agreements with most of its employees and with third parties. There can be no assurance that such agreements will not be breached or that Ashland will be able to effectively enforce them. In addition Ashland's trade secrets and know how may be improperly obtained by other means, such as a breach of Ashland's information technologies security systems or direct theft. Any unauthorized disclosure of any of Ashland's material know-how or trade secrets could adversely affect Ashland's business and results of operations.

Business disruptions from natural, operational and other catastrophic risks could seriously harm Ashland's operations and financial performance. In addition, a catastrophic event at one of Ashland's facilities or involving its products or employees could lead to liabilities that could further impair its operations and financial performance.

Business disruptions, including those related to operating hazards inherent with the production of chemicals, natural disasters, severe weather conditions, supply or logistics disruptions, increasing costs for energy, temporary plant and/or power outages, information technology systems and network disruptions, cyber-security breach, terrorist attacks, armed conflict, war, pandemic diseases, fires, floods or other catastrophic events, could seriously harm Ashland's operations, as well as the operations of its customers and suppliers, and may adversely impact Ashland's financial performance. Although it is impossible to predict the occurrence or consequences of any such events, they could result in reduced demand for Ashland's products, make it difficult or impossible for Ashland to manufacture its products or deliver products and services to its customers or to receive raw materials from suppliers, or create delays and inefficiencies in the supply chain. In addition to leading to a serious disruption of Ashland's businesses, a catastrophic event at one of our facilities or involving our products or employees could lead to substantial legal liability to or claims by parties allegedly harmed by the event.

While Ashland maintains business continuity plans that are intended to allow it to continue operations or mitigate the effects of events that could disrupt its business, Ashland cannot provide assurances that its plans would fully protect it from all such events. In addition, insurance maintained by Ashland to protect against property damage, loss of business and other related consequences resulting from catastrophic events is subject to coverage limitations, depending on the nature of the risk insured. This insurance may not be sufficient to cover all of Ashland's damages or damages to others in the event of a catastrophe. In addition, insurance related to these types of risks may not be available now or, if available, may not be available in the future at commercially reasonable rates.

Ashland has incurred, and will continue to incur, substantial costs as a result of environmental, health and safety, and hazardous substances liabilities and related compliance requirements. These costs could adversely impact Ashland's cash flow, and, to the extent they exceed Ashland's established reserves for these liabilities, its results of operations. Ashland is subject to extensive federal, state, local and foreign laws, regulations, rules and ordinances relating to pollution, protection of the environment and human health and safety, and the generation, storage, handling, treatment, disposal and remediation of hazardous substances and waste materials. Ashland has incurred, and will continue to incur, significant costs and capital expenditures to comply with these laws and regulations.

Environmental, health and safety regulations change frequently, and such regulations and their enforcement have tended to become more stringent over time. Accordingly, changes in environmental, health and safety laws and regulations and the enforcement of such laws and regulations could interrupt Ashland's operations, require modifications to its facilities or cause Ashland to incur significant liabilities, costs or losses that could adversely affect its profitability. Actual or alleged violations of environmental, health or safety laws and regulations could result in restrictions or prohibitions on plant operations as well as substantial damages, penalties, fines, civil or criminal sanctions and remediation costs. In addition, under some environmental laws, Ashland may be strictly liable and/or jointly and severally liable for environmental damages and penalties.

Ashland is also subject to various federal, state, local and foreign environmental laws and regulations that require environmental assessment or remediation efforts (collectively, environmental remediation) at multiple locations.

Ashland uses engineering studies, historical experience and other factors to identify and evaluate remediation alternatives and their related costs in determining the estimated reserves for environmental remediation.

Environmental remediation reserves are subject to numerous inherent uncertainties that affect Ashland's ability to estimate its share of the applicable costs. Such uncertainties involve the nature and extent of contamination at each site, the extent of required cleanup efforts under existing environmental regulations, widely varying costs of alternate cleanup methods, changes in environmental regulations, the potential effect of continuing improvements in remediation technology and the number and financial strength of other potentially responsible parties at multiparty sites. As a result, Ashland's actual costs for environmental remediation could affect Ashland's cash flow and, to the

extent costs exceed established reserves for those liabilities, its results of operations.

Ashland is responsible for, and has financial exposure to, liabilities from pending and threatened claims, including those alleging personal injury caused by exposure to asbestos, which could adversely impact Ashland's results of operations and cash flow.

There are various claims, lawsuits and administrative proceedings pending or threatened, including those alleging personal injury caused by exposure to asbestos, against Ashland and its current and former subsidiaries. Such actions are with respect to commercial matters, product liability, toxic tort liability and other matters that seek remedies or damages, some of which are for substantial amounts. While these actions are being contested, their outcome is not predictable. Ashland's results could be adversely affected by financial exposure to these liabilities. Insurance maintained by Ashland to protect against claims for damages alleged by third parties is subject to coverage limitations, depending on the nature of the risk insured. This insurance may not be sufficient to cover all of Ashland's liabilities to others. In addition, insurance related to these types of risks may not be available now or, if

available, may not be available in the future at commercially reasonable rates. Ashland's ability to recover from its insurers for asbestos liabilities could also have an adverse impact on its results of operations. Projecting future asbestos costs is subject to numerous variables that are extremely difficult to predict. In addition to the significant uncertainties surrounding the number of claims that might be received, other variables include the type and severity of the disease alleged by each claimant, the long latency period associated with asbestos exposure, dismissal rates, costs of medical treatment, the impact of bankruptcies of other companies that are co-defendants in claims, uncertainties surrounding the litigation process from jurisdiction to jurisdiction and from case to case, and the impact of potential changes in legislative or judicial standards. Furthermore, any predictions with respect to these variables are subject to even greater uncertainty as the projection period lengthens. In light of these inherent uncertainties, Ashland believes that its asbestos reserves represent the best estimate within a range of possible outcomes. As a part of the process to develop these estimates of future asbestos costs, a range of long-term cost models was developed. These models are based on national studies that predict the number of people likely to develop asbestos-related diseases and are heavily influenced by assumptions regarding long-term inflation rates for indemnity payments and legal defense costs, as well as other variables mentioned previously. Because of the inherent uncertainties in projecting future asbestos liabilities and establishing appropriate reserves, Ashland's actual asbestos costs could adversely affect its results of operations and, to the extent they exceed its reserves, could adversely affect its results of operations.

Ashland's pension and postretirement benefit plan obligations are currently underfunded, and Ashland may have to make significant cash payments to some or all of these plans, which would reduce the cash available for Ashland's businesses.

Ashland has underfunded obligations under its domestic and foreign pension and postretirement benefit plans. The funded status of Ashland's pension plans is dependent upon many factors, including returns on invested assets, the level of certain market interest rates and the discount rate used to determine pension obligations. Unfavorable returns on plan assets or unfavorable changes in applicable laws or regulations could materially change the timing and amount of required plan funding, which would reduce the cash available for Ashland's businesses. In addition, a decrease in the discount rate used to determine pension obligations could result in an increase in the valuation of pension obligations, which could affect the reported funding status of Ashland's pension plans and future contributions. Similarly, an increase in discount rates could increase the periodic pension cost in subsequent fiscal years. Under the Employee Retirement Income Security Act of 1974 (ERISA), as amended, the Pension Benefit Guaranty Corporation (PBGC) has the authority to terminate an underfunded tax-qualified pension plan under limited circumstances. In the event Ashland's tax-qualified pension plans are terminated by the PBGC, Ashland could be liable to the PBGC for some portion of the underfunded amount.

Ashland's substantial indebtedness may adversely affect its business, results of operations and financial condition. Ashland maintains a substantial amount of debt. Ashland's substantial indebtedness could adversely affect its business, results of operations and financial condition by, among other things:

- requiring Ashland to dedicate a substantial portion of its cash flow from operations to pay principal and interest on its debt, which would reduce the availability of Ashland's cash flow to fund working capital, capital expenditures, acquisitions, execution of its growth strategy and other general corporate purposes;
- limiting Ashland's ability to borrow additional amounts to fund working capital, capital expenditures, acquisitions, debt service requirements, execution of its growth strategy and other purposes;
- making Ashland more vulnerable to adverse changes in general economic, industry and regulatory conditions and in its business by limiting Ashland's flexibility in planning for, and making it more difficult for Ashland to react quickly to, changing conditions;
- placing Ashland at a competitive disadvantage compared with those of its competitors that have less debt and lower debt service requirements;
- making Ashland more vulnerable to increases in interest rates since some of its indebtedness is subject to variable rates of interest; and

making it more difficult for Ashland to satisfy its financial obligations.

In addition, Ashland may not be able to generate sufficient cash flow from its operations to repay its indebtedness when it becomes due and to meet its other cash needs. If Ashland is not able to pay its debts as they become due, it could be in default under its credit facility or other indebtedness. Ashland might also be required to pursue one or more alternative strategies to repay indebtedness, such as selling assets, refinancing or restructuring its indebtedness or selling additional debt or equity securities. Ashland may not be able to refinance its debt or sell additional debt or equity securities or its assets on favorable terms, if at all, and if Ashland must sell its assets, it may negatively affect its ability to generate revenues.

#### ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

#### ITEM 2. PROPERTIES

Ashland's corporate headquarters is located in Covington, Kentucky. Principal offices of other major operations are located in Wilmington, Delaware (Specialty Ingredients); Bridgewater, New Jersey (Specialty Ingredients); Dublin, Ohio (Specialty Ingredients and Performance Materials); Lexington, Kentucky (Valvoline); and Barendrecht, the Netherlands; Shanghai, China; Hyderabad, India; Warsaw, Poland; and Schaffhausen, Switzerland (each of which are shared service centers of Ashland's business units). All of these office buildings are leased, except for portions of the Dublin, Ohio and the Lexington, Kentucky facilities that are owned. Principal manufacturing, marketing and other materially important physical properties of Ashland and its subsidiaries are described within the applicable business units under "Item 1" in this annual report on Form 10-K. All of Ashland's physical properties are owned or leased. Ashland believes its physical properties are suitable and adequate for the Company's business. Additional information concerning certain leases may be found in Note K of Notes to Consolidated Financial Statements in this annual report on Form 10-K.

#### ITEM 3. LEGAL PROCEEDINGS

The following is a description of Ashland's material legal proceedings.

##### Asbestos-Related Litigation

Ashland is subject to liabilities from claims alleging personal injury caused by exposure to asbestos. Such claims result primarily from indemnification obligations undertaken in 1990 in connection with the sale of Riley Stoker Corporation (Riley), a former subsidiary. Although Riley was neither a producer nor a manufacturer of asbestos, its industrial boilers contained some asbestos-containing components provided by other companies.

Hercules, a wholly-owned subsidiary of Ashland, is also subject to liabilities from asbestos-related personal injury lawsuits involving claims which typically arise from alleged exposure to asbestos fibers from resin encapsulated pipe and tank products which were sold by one of Hercules' former subsidiaries to a limited industrial market.

Ashland and Hercules are also defendants in lawsuits alleging exposure to asbestos at facilities formerly or presently owned or operated by Ashland or Hercules.

In October 2012, Ashland and Hercules initiated various arbitration proceedings against Underwriters at Lloyd's, certain London companies and/or Chartis (AIG) member companies seeking to enforce these insurers' contractual obligations to provide indemnity for asbestos liabilities and defense costs under existing coverage-in-place agreements. In addition, Ashland and Hercules initiated a lawsuit in Kentucky state court against certain Berkshire Hathaway entities (National Indemnity Company and Resolute Management, Inc.) on grounds that these Berkshire Hathaway entities wrongfully interfered with Underwriters' and Chartis' performance of their respective contractual obligations to provide asbestos coverage by directing the insurers to reduce and delay certain claim payments.

On January 13, 2015, Ashland and Hercules entered into a comprehensive settlement agreement related to certain insurance coverage for asbestos bodily injury claims with Underwriters at Lloyd's, certain London companies and Chartis (AIG) member companies, along with National Indemnity Company and Resolute Management, Inc., under which Ashland and Hercules received a total of \$398 million. In exchange, all claims were released against these entities for past, present and future coverage obligations arising out of the asbestos coverage-in-place agreements that were the subject of the pending arbitration proceedings. In addition, as part of this settlement, Ashland and Hercules released all claims against National Indemnity Company and Resolute Management, Inc. in the Kentucky state court action. As a result, the arbitration proceedings and the Kentucky state court action have been terminated.

As a result of this settlement, during 2015, Ashland recorded an after-tax gain of \$120 million within the discontinued operations caption of the Statements of Consolidated Comprehensive Income and a \$249 million reduction in the asbestos insurance receivable balance, consisting of \$227 million and \$22 million for Ashland and Hercules,

respectively, within the Condensed Consolidated Balance Sheets. See Note N of the Notes to Condensed Consolidated Financial Statements in this annual report on Form 10-K for further information.

In addition, Ashland placed \$335 million of the settlement funds received into a renewable annual trust restricted for the purpose of paying for ongoing and future litigation defense and claim settlement costs incurred in conjunction with asbestos claims.

For additional detailed information regarding liabilities arising from asbestos-related litigation, see “Management’s Discussion and Analysis - Critical Accounting Policies - Asbestos Litigation” and Note N of Notes to Consolidated Financial Statements in this annual report on Form 10-K.

#### Environmental Proceedings

(a) CERCLA and Similar State Law Sites - Under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 and similar state laws, Ashland and its subsidiaries may be subject to joint and several liability for cleanup costs in connection with alleged releases of hazardous substances at sites where it has been identified as a “potentially responsible party” (PRP). As of September 30, 2015, Ashland and its subsidiaries have been identified as a PRP by U.S. federal and state authorities, or by private parties seeking contribution, for the cost of environmental investigation and/or cleanup at 85 waste treatment or disposal sites. These sites are currently subject to ongoing investigation and remedial activities, overseen by the United States Environmental Protection Agency (USEPA) or a state agency, in which Ashland or its subsidiaries are typically participating as a member of a PRP group. Generally, the type of relief sought includes remediation of contaminated soil and/or groundwater, reimbursement for past costs of site cleanup and administrative oversight and/or long-term monitoring of environmental conditions at the sites. The ultimate costs are not predictable with assurance.

(b) Hattiesburg, Mississippi Resource Conservation and Recovery Act Matter - In November 2008, the Mississippi Department of Environmental Quality (MDEQ) issued a Notice of Violation to Hercules’ now-closed Hattiesburg, Mississippi manufacturing facility alleging that a process water impoundment basin at the facility had been operated as a hazardous waste storage and treatment facility without a permit in violation of the Resource Conservation and Recovery Act. In May 2011, the USEPA issued an inspection report from a September 2010 inspection with allegations similar to those of the MDEQ and promulgated an information request. Ashland has been working with the MDEQ and USEPA to settle this matter in the context of the shutdown and ongoing remediation of the Hattiesburg facility. The USEPA proposed a settlement penalty in excess of \$100,000. While it is reasonable to believe that this matter will involve a penalty from the MDEQ and/or the USEPA exceeding \$100,000, the potential penalty with respect to this enforcement matter should not be material to Ashland.

(c) Lower Passaic River, New Jersey Matters - Ashland, through two formerly owned facilities, and ISP, through a now-closed facility, have been identified as PRPs, along with approximately 70 other companies (the Cooperating Parties Group or the CPG), in a May 2007 Administrative Order of Consent (AOC) with the USEPA. The parties are required to perform a remedial investigation and feasibility study (RI/FS) of the entire 17 miles of the Passaic River. In June 2007, the EPA separately commenced a Focused Feasibility Study (FFS) as an interim measure. In accordance with the 2007 AOC, in June 2012 the CPG voluntarily entered into another AOC for an interim removal action focused solely at mile 10.9 of the Passaic River. The allocations for the 2007 AOC and the 2012 removal action are based on interim allocations, are immaterial and have been accrued. In April 2014, the EPA released the FFS. The CPG submitted the Draft RI/FS Report on April 30, 2015. The EPA is expected to release the FFS Record of Decision for the lower 8 miles by December 31, 2015. Based on current knowledge and proceedings, Ashland does not believe the outcome of these proceedings or the release of the FFS Record of Decision will have a material adverse impact on its business and financial operations; however, there are a number of contingencies in the future that could possibly have a material impact including adverse rulings or verdicts, allocation proceedings and related orders.

(d) Zwijndrecht Plant Matter - Between August 2012 and January 2014, Dutch environmental authorities have found several violations of a waste water discharge permit by Ashland Industries Nederland B.V., as owner of the manufacturing site at Zwijndrecht, The Netherlands. As a result, administrative penalties and sanctions totaling €350,000 were paid during calendar years 2013 and 2014. In addition, Dutch authorities announced prosecution with regards to some permit violations. Ashland initiated a settlement proposal and is awaiting a response to the proposal. While it is reasonable to believe that this matter will involve an additional penalty exceeding \$100,000, the potential liability with respect to this matter should not be material to Ashland.



For additional information regarding environmental matters and reserves, see Note N of Notes to Consolidated Financial Statements in this annual report on Form 10-K.

**Other Pending Legal Proceedings**

In addition to the matters described above, there are other various claims, lawsuits and administrative proceedings pending or threatened against Ashland and its current and former subsidiaries. Such actions are with respect to commercial matters, product liability, toxic tort liability and other environmental matters which seek remedies or damages, some of which are for substantial amounts. While Ashland cannot predict with certainty the outcome of such actions, it believes that adequate reserves have been recorded and losses already recognized with respect to such actions were immaterial as of September 30, 2015. There is a reasonable possibility that a loss exceeding amounts already recognized may be incurred related to these actions; however, Ashland believes that such potential losses were immaterial as of September 30, 2015.

#### ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

#### ITEM X. EXECUTIVE OFFICERS OF ASHLAND

The following is a list of Ashland's current executive officers, their ages and their positions and offices during the last five years (listed alphabetically after the current members of Ashland's Executive Committee).

**WILLIAM A. WULFSOHN** (age 53) is Chairman and Chief Executive Officer of Ashland since January 1, 2015. Prior to joining Ashland, Mr. Wulfsohn served as President and Chief Executive Officer of Carpenter Technology Corp., a manufacturer of stainless steel, titanium, and other specialty metals and engineered products, from July 2010 to November 2014. Mr. Wulfsohn also served as a Director for Carpenter Technology Corp. from April 2009 to November 2014.

**J. KEVIN WILLIS** (age 50) is Senior Vice President and Chief Financial Officer of Ashland and has served in such capacities since May 2013. Mr. Willis served as Vice President of Finance and Controller for the Specialty Ingredients business unit from August 2011 until May 2013 and Vice President of Finance and Treasurer from 2007 to 2011.

**PETER J. GANZ** (age 53) is Senior Vice President, General Counsel, Secretary and Chief Compliance Officer of Ashland and has served as Senior Vice President, General Counsel and Chief Compliance Officer since July 2011 and Secretary since November 2012. Prior to joining Ashland, Mr. Ganz served as a partner with Sedgwick LLP, an international law firm, and as Executive Vice President, General Counsel and Secretary of Foster Wheeler AG, a global engineering and construction contractor and power equipment supplier.

**LUIS FERNANDEZ-MORENO** (age 53) is Senior Vice President of Ashland and President, Chemicals Group since April 2015. He previously served as Senior Vice President of Ashland and President, Ashland Specialty Ingredients from October 2013 until April 2015. Prior to that, Mr. Fernandez-Moreno served as Vice President of Ashland and President of Water Technologies from November 2012 until October 2013. During the past five years, he has served as Executive Vice President of Arch Chemicals, Inc., a global biocides company, where he was responsible for the wood protection and HTH water products businesses.

**SAMUEL J. MITCHELL, JR.** (age 54) is Senior Vice President of Ashland and President, Valvoline and has served in such capacities since 2011 and 2002, respectively. During the past five years, he has also served as Vice President of Ashland.

**GREGORY W. ELLIOTT** (age 54) joined Ashland on November 9, 2015 as its Vice President and Chief Human Resources and Communications Officer. Since 2008, Mr. Elliott served as the Senior Vice President, Human Resources and Administration of Navistar, Inc., a global manufacturer of commercial and military trucks, proprietary diesel engines and buses.

**J. WILLIAM HEITMAN** (age 61) is Vice President and Controller of Ashland and has served in such capacities since 2008.

**KEITH C. SILVERMAN** (age 48) is Vice President, Environmental, Health, Safety and Regulatory Compliance and has served in such capacities since February 2014. He previously served as Vice President, Environmental, Health, Safety and Product Regulatory from June 2012 until January 2014. Prior to joining Ashland, he spent a number of years at Merck & Co., Inc., a pharmaceutical company, where he held various positions of increasing responsibility in research and development as well as in global safety and the environment.

**ANNE T. SCHUMANN** (age 55) is Vice President and Chief Information and Administrative Services Officer of Ashland and has served in such capacities since 2008 and 2009, respectively.

Each executive officer is elected by the Board of Directors of Ashland to a term of one year, or until a successor is duly elected, at the annual meeting of the Board of Directors, except in those instances where the officer is elected other than at an annual meeting of the Board of Directors, in which case his or her tenure will expire at the next annual meeting of the Board of Directors unless the officer is re-elected.



PART II

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

See Quarterly Financial Information on page F-56 for information relating to market price and dividends of Ashland’s Common Stock.

At October 31, 2015, there were approximately 13,000 holders of record of Ashland’s Common Stock. Ashland Common Stock is listed on the New York Stock Exchange (NYSE) (ticker symbol ASH) and has trading privileges on NASDAQ.

There were no sales of unregistered securities required to be reported under Item 5 of Form 10-K.

FIVE-YEAR TOTAL RETURN PERFORMANCE GRAPH

The following graph compares Ashland’s five-year cumulative total shareholder return with the cumulative total return of the S&P MidCap 400†index and one peer group of companies. Ashland is listed in the S&P MidCap 400†index. The cumulative total shareholder return assumes the reinvestment of dividends.

COMPARISON OF FIVE-YEAR CUMULATIVE TOTAL RETURN  
ASHLAND, S&P MIDCAP 400†INDEX AND PEER GROUP

	2010	2011	2012	2013	2014	2015
Ashland	100	92	150	197	225	220
S&P MidCap 400†	100	99	127	162	181	183
Peer Group - Materials	100	93	122	143	170	140

The peer group consists of the following industry indices:

Peer Group – Materials: S&P 500†Materials (large-cap) and S&P MidCap 400†Materials. As of September 30, 2015, this peer group consisted of 59 companies.

## Purchase of Company Common Stock

Share repurchase activity during the three months ended September 30, 2015 was as follows:

Q4 Fiscal Periods	Total Number of Shares Purchased	Average Price Paid per Share, including commission	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) (a)
July 1, 2015 to July 31, 2015:				\$1,000
2014 ASR Agreements	563,905 (b)	\$116.33	563,905	
2015 ASR Agreements	302,315 (b)	125.22	302,315	
Employee tax withholdings	6,447 (c)	119.60	—	
August 1, 2015 to August 31, 2015	448 (c)	108.47	—	1,000
September 1, 2015 to September 30, 2015	2,629 (c)	105.34	—	1,000
Total.....	875,744		866,220	\$1,000

- (a) On April 28, 2015, Ashland's Board of Directors approved a \$1 billion share repurchase authorization that expires December 31, 2017 and allows for shares to be repurchased in privately negotiated and/or open market transactions, including under plans complying with Rule 10b5-1 of the Exchange Act. The \$1 billion represents the remaining amount available for share repurchase as of September 30, 2015. On November 17, 2015, Ashland entered into an uncollared accelerated share repurchase agreement (the November 2015 ASR Agreement) with Goldman Sachs & Co. (Goldman Sachs) to repurchase an aggregate of \$500 million of Ashland's common stock. Under the November 2015 ASR Agreement, Ashland has agreed to repurchase an aggregate of \$500 million of its common stock from Goldman Sachs, with an initial delivery of approximately 3.9 million shares. The November 2015 ASR Agreement is scheduled to terminate no later than May 2016 but may be terminated early in certain circumstances, in whole or in part. Goldman Sachs may be required to deliver additional shares of common stock to Ashland, or under certain circumstances, Ashland may be required to deliver shares of common stock or to make a cash payment, at its election, to Goldman Sachs.
- (b) In August 2014, the Company entered into an accelerated share repurchase program with two financial institutions to purchase \$750 million of the Company's common stock (the 2014 ASR Agreements). In exchange for an up-front payment totaling \$750 million, the financial institutions initially delivered approximately 5.9 million shares of Ashland common stock. The 2014 ASR Agreements had a variable maturity, at the financial institutions' option, with a pricing period termination date of no later than June 30, 2015. In June 2015, the 2014 ASR Agreements terminated pursuant to their terms and the pricing period was closed. The settlement price, which represents the weighted average price of Ashland's common stock over the pricing period less a discount, was \$116.33 per share. Based on this settlement price, the final number of shares repurchased by Ashland that were to be delivered by the financial institutions was 6.4 million shares. Ashland received the additional 563,905 shares from the financial institutions in the September 2015 quarter to settle the difference between the initial share delivery and the total number of shares repurchased.

Additionally, in January 2015, the Company entered into accelerated share repurchase programs to purchase \$269.6 million of the Company's common stock (the 2015 ASR Agreements). In exchange for an up-front

payment totaling \$269.6 million, the financial institutions initially delivered approximately 1.9 million shares of Ashland common stock. The 2015 ASR Agreements had a variable maturity, at the financial institutions' option, with a pricing period termination date of no later than July 31, 2015. In June 2015, the financial institutions exercised their early termination option under the 2015 ASR Agreements and the pricing period was closed. The settlement price, which represents the weighted average price of Ashland's common stock over the pricing period less a discount, was \$125.22 per share. Based on this settlement price, the final number of shares repurchased by Ashland that were to be delivered by the financial institutions under the 2015 ASR Agreements was 2.2 million shares. Ashland received the additional 302,315 shares from the financial institutions in the September 2015 quarter to settle the difference between the initial share delivery and the total number of shares repurchased. The average price paid by the Company for the shares delivered under the 2014 ASR Agreements and the 2015 ASR Agreements was \$119.43.

- (c) Shares withheld from employees to cover their withholding requirements for personal income taxes related to the vesting of restricted stock.

**ITEM 6. SELECTED FINANCIAL DATA**

See Five-Year Selected Financial Information on page F-57.

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

See Management's Discussion and Analysis of Financial Condition and Results of Operations on pages M-1 through M-39.

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

See Quantitative and Qualitative Disclosures about Market Risk on page M-39.

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

The consolidated financial statements of Ashland presented in this annual report on Form 10-K are listed in the index on page F-1.

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

None.

**ITEM 9A. CONTROLS AND PROCEDURES**

Disclosure Controls and Procedures – As of September 30, 2015, Ashland, under the supervision and with the participation of Ashland's management, including Ashland's Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of Ashland's disclosure controls and procedures as defined in Exchange Act Rules 13a-15(e) and 15d-15(e). Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that the disclosure controls and procedures were effective as of September 30, 2015.

Internal Control over Financial Reporting – See Management's Report on Internal Control Over Financial Reporting on page F-2 and the Reports of Independent Registered Public Accounting Firms on page F-3, F-4, and F-5.

Changes in Internal Control over Financial Reporting – There have been no changes in Ashland's internal control over financial reporting that occurred during the quarter ended September 30, 2015 that have materially affected, or are reasonably likely to materially affect, Ashland's internal control over financial reporting.

**ITEM 9B. OTHER INFORMATION**

None.

**PART III**

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

There is hereby incorporated by reference the information to appear under the caption "Proposal One - Election of Directors for a One-Year Term" in Ashland's Proxy Statement, which will be filed with the SEC within 120 days after September 30, 2015. See also the list of Ashland's executive officers and related information under "Executive Officers of Ashland" in Part I - Item X in this annual report on Form 10-K.

There is hereby incorporated by reference the information to appear under the caption "Corporate Governance - Governance Principles" in Ashland's Proxy Statement.

There is hereby incorporated by reference the information to appear under the caption "Corporate Governance - Shareholder Nominations of Directors" in Ashland's Proxy Statement.





There is hereby incorporated by reference the information to appear under the caption “Audit Committee Report” regarding Ashland’s audit committee and audit committee financial experts, as defined under Item 407(d)(4) and (5) of Regulation S-K in Ashland’s Proxy Statement.

There is hereby incorporated by reference the information to appear under the caption "Corporate Governance - Section 16(a) Beneficial Ownership Reporting Compliance" in Ashland's Proxy Statement.

#### ITEM 11. EXECUTIVE COMPENSATION

There is hereby incorporated by reference the information to appear under the captions “Compensation of Directors,” “Corporate Governance - Personnel and Compensation Committee Interlocks and Insider Participation,” “Executive Compensation,” “Compensation Discussion and Analysis,” and “Personnel and Compensation Committee Report on Executive Compensation” in Ashland’s Proxy Statement.

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

There is hereby incorporated by reference the information to appear under the captions “Ashland Common Stock Ownership of Certain Beneficial Owners,” and “Ashland Common Stock Ownership of Directors and Executive Officers of Ashland” in Ashland’s Proxy Statement.

The following table summarizes the equity compensation plans under which Ashland Common Stock may be issued as of September 30, 2015.

Plan Category	Equity Compensation Plan Information				
	Number of securities to be issued upon exercise of outstanding options, warrants and rights		Weighted-average exercise price of outstanding options, warrants and rights		Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
	(a)		(b)		(c)
Equity compensation plans approved by security holders.....	830,851	(1)	\$63.65	(2)	2,823,304 (3)
Equity compensation plans not approved by security holders.....	202,901	(4)	—		685,655 (5)
Total.....	1,033,752		\$63.65	(2)	3,508,959

This figure includes (a) 5,874 stock options outstanding under the Amended and Restated Ashland Inc. Incentive Plan (“Amended Plan”) and (b) 102 stock options outstanding under the Hercules Incorporated Amended and Restated Long Term Incentive Compensation Plan. This figure also includes 2,972 net shares that could be issued under stock-settled SARs under the Amended Plan, 183,657 net shares that could be issued under stock-settled SARs under the 2006 Ashland Inc. Incentive Plan (“2006 Incentive Plan”) and 222,055 net shares that could be issued under stock-settled SARs and 16,000 shares that could be issued under stock-settled restricted stock units under the Amended and Restated 2011 Ashland Inc. Incentive Plan (“2011 Incentive Plan”), based upon the closing (1) price of Ashland Common Stock on the NYSE as of September 30, 2015 of \$100.62. Additionally, this figure includes 151,088 restricted shares granted under the Amended Plan and deferred, 71,298 performance share units for the fiscal 2013-2015 performance period, 58,983 performance share units for the fiscal 2014-2016 performance period, and 68,592 performance share units for the fiscal 2015-2017 performance period, payable in Ashland Common Stock under the 2011 Incentive Plan, estimated assuming target performance is achieved. Also included in the figure are 31,680 shares to be issued under the pre-2005 Deferred Compensation Plan for Employees and 17,258 shares to be issued under the pre-2005 Deferred Compensation Plan for Non-Employee Directors, payable in Ashland Common Stock upon termination of employment or service with Ashland.

The weighted-average exercise price excludes shares in Ashland Common Stock which may be distributed under (2) the deferred compensation plans and the deferred restricted stock and performance share units which may be distributed under the 2011 Incentive Plan, as described in footnotes (1) and (4) in this table.

This figure includes 2,414,128 shares available for issuance under the Amended and Restated 2015 Ashland Inc. Incentive Plan (“2015 Incentive Plan”), 144,789 shares available for issuance under the pre-2005 Deferred (3) Compensation Plan for Employees and 264,387 shares available for issuance under the pre-2005 Deferred Compensation Plan for Non-Employee Directors. Under the 2015 Incentive Plan, full-value awards, which include all awards other than stock options and SARs, reduce the share reserve on a 2.75-to-1 basis.

(4) This figure includes 31,223 shares to be issued under the Deferred Compensation Plan for Employees (2005), which is described in the “Non-Qualified Deferred Compensation-Ashland Inc. Employees’ Deferral Plan” section of Ashland’s proxy statement, and 171,678 shares to be issued under the Deferred Compensation Plan for Non-Employee Directors (2005), which is described in the “Compensation of Directors-Annual Retainer” and “Compensation of Directors-Restricted Shares/Units” sections of Ashland’s proxy statement, payable in Ashland Common Stock upon termination of employment or service with Ashland. Because these plans are not equity

compensation plans as defined by the rules of the NYSE, neither plan required approval by Ashland's shareholders. This figure includes 382,741 shares available for issuance under the Deferred Compensation Plan for Employees (2005) and 302,914 shares available for issuance under the Deferred Compensation Plan for Non-Employee Directors (2005). Because these plans are not equity compensation plans as defined by the rules of the NYSE, neither plan required approval by Ashland's shareholders. Ashland also granted Mr. Wulfsohn, its Chief Executive Officer, an employment inducement award, in compliance with Rule 303A.08 of The New York Stock Exchange Listed Company Manual, consisting of a one-time grant of time-vested restricted stock in the amount of 50,000 shares ("2015 Inducement Award"). All shares under the 2015 Inducement Award have been granted, are no longer available for future issuance and are not included in this figure.

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

There is hereby incorporated by reference the information to appear under the captions “Corporate Governance – Director Independence and Certain Relationships,” “Corporate Governance - Related Person Transaction Policy,” and “Audit Committee Report” in Ashland’s Proxy Statement.

#### ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

There is hereby incorporated by reference the information with respect to principal accounting fees and services to appear under the captions “Audit Committee Report” and “Proposal Two - Ratification of Independent Registered Public Accountants” in Ashland’s Proxy Statement.

#### PART IV

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

(a) Documents filed as part of this Report

(1) Financial Statements; and

(2) See Item 15(b) in this annual report on Form 10-K

The consolidated financial statements of Ashland presented in this annual report on Form 10-K are listed in the index on page F-1.

Schedules other than that listed above have been omitted because of the absence of the conditions under which they are required or because the information required is shown in the consolidated financial statements or the notes thereto. Separate financial statements of unconsolidated affiliates are omitted because each company does not constitute a significant subsidiary using the 20% tests when considered individually. Summarized financial information for all unconsolidated affiliates is disclosed in Note D of Notes to Consolidated Financial Statements.

(b) Documents required by Item 601 of Regulation S-K

- 2.1 – Stock and Asset Purchase Agreement, dated as of February 18, 2014, between Ashland Inc. and CD&R Seahawk Bidco, LLC (filed as Exhibit 2.1 to Ashland’s Form 8-K filed on February 24, 2014 (SEC File No. 001-32532), and incorporated herein by reference).
- 2.2 – Sale and Purchase Agreement related to the ASK Chemicals Group, dated April 8, 2014, among Ashland Inc., Ashland International Holdings, Inc., Clariant Produkte (Deutschland) GmbH, Clariant Corp., mertus 158. GmbH, Ascot US Bidco Inc. and Ascot UK Bidco Limited (filed as Exhibit 2.1 to Ashland’s Form 8-K filed on April 14, 2014 ( SEC File No. 001-32532), and incorporated herein by reference).
- 3.1 – Fourth Restated Articles of Incorporation of Ashland Inc. (filed as Exhibit 3.2 to Ashland’s Form 8-K filed on February 4, 2014 (SEC File No. 001-32532), and incorporated herein by reference).
- 3.2 – By-laws of Ashland Inc., as amended and restated (filed as Exhibit 3.3 to Ashland’s Form 8-K filed on February 4, 2014 (SEC File No. 001-32532), and incorporated herein by reference).
- 4.1 – Ashland agrees to provide the SEC, upon request, copies of instruments defining the rights of holders of long-term debt of Ashland and all of its subsidiaries for which consolidated or unconsolidated financial statements are required to be filed with the SEC.
- 4.2 – Indenture, dated as of August 15, 1989, as amended and restated as of August 15, 1990, between Ashland Inc. and Citibank, N.A., as Trustee (filed as Exhibit 4.2 to Ashland’s Form 10-K for the fiscal year ended September 30, 2008 (SEC File No. 001-32532), and incorporated herein by reference).
- 4.3 –

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Agreement of Resignation, Appointment and Acceptance, dated as of November 30, 2006, by and among Ashland Inc., Wilmington Trust Company (Wilmington) and Citibank, N.A. (Citibank) whereby Wilmington replaced Citibank as Trustee under the Indenture dated as of August 15, 1989, as amended and restated as of August 15, 1990, between Ashland Inc. and Citibank (filed as Exhibit 4 to Ashland's Form 10-Q for the quarter ended December 31, 2006 (SEC File No. 001-32532), and incorporated herein by reference).

- 4.4 – Indenture, dated May 27, 2009, by and among Ashland Inc., the Guarantors and U.S. Bank National Association (filed as Exhibit 4.1 to Ashland’s Form 10-Q for the quarter ended June 30, 2009 (SEC File No. 001-32532), and incorporated herein by reference).
- 4.5 – Warrant Agreement dated July 27, 1999 between Hercules and The Chase Manhattan Bank, as warrant agent (filed as Exhibit 4.4 to Hercules’ Form 8-K filed on July 28, 1999 (SEC File No. 001-00496), and incorporated herein by reference).
- 4.6 – Form of Series A Junior Subordinated Deferrable Interest Debentures (filed as Exhibit 4.5 to Hercules’ Form 8-K filed on July 28, 1999 (SEC File No. 001-00496), and incorporated herein by reference).
- 4.7 – Form of CRESTS<sup>SM</sup> Unit (filed as Exhibit 4.7 to Hercules’ Form 8-K filed on July 28, 1999 (SEC File No. 001-00496), and incorporated herein by reference).
- 4.8 – Form of Warrant (filed as Exhibit 4.8 to Hercules’ Form 8-K filed on July 28, 1999 (SEC File No. 001-00496), and incorporated herein by reference).
- 4.9 – Form of \$100,000,000 6.6% Debenture due August 27, 2027 (filed as Exhibit 4.2 to Hercules’ Form 8-K filed on July 30, 1997 (SEC File No. 001-00496), and incorporated herein by reference).
- 4.10 – Indenture, dated as of August 7, 2012, between Ashland Inc. and U.S. Bank N.A., as Trustee (filed as Exhibit 4.1 to Ashland’s Form 8-K filed on September 21, 2012 (SEC File No. 001-32532), and incorporated herein by reference).
- 4.11 – First Supplemental Indenture, dated as of February 26, 2013, between Ashland Inc. and U.S. Bank National Association, as Trustee, in respect of the senior notes due 2022 (filed as Exhibit 4.11 to Ashland’s Form 10-K for the fiscal year ended September 30, 2013 (SEC File No. 001-32532), and incorporated herein by reference).
- 4.12 – Indenture, dated as of February 26, 2013, between Ashland Inc. and U.S. Bank National Association, as Trustee (filed as Exhibit 4.3 to Ashland’s Form 8-K filed on February 27, 2013 (SEC File No. 001- 32532), and incorporated herein by reference).
- 4.13 – First Supplemental Indenture, dated as of February 26, 2013, between Ashland Inc. and U.S. Bank National Association, as Trustee, in respect of the senior notes due 2016, 2018 and 2043 (filed as Exhibit 4.4 to Ashland’s Form 8-K filed on February 27, 2013 (SEC File No. 001-32532), and incorporated herein by reference).
- 4.14 – Second Supplemental Indenture, dated as of March 14, 2013, between Ashland Inc. and U.S. Bank National Association, as Trustee, in respect of the senior notes due 2043 (filed as Exhibit 4.2 to Ashland’s Form 8-K filed on March 18, 2013 (SEC File No. 001-32532), and incorporated herein by reference).

The following Exhibits 10.1 through 10.43 are contracts or compensatory plans or arrangements or management contracts required to be filed as exhibits pursuant to Items 601(b)(10)(ii)(A) and 601(b)(10)(iii)(A) and (B) of Regulation S-K.

- 10.1 – Ashland Inc. Deferred Compensation Plan for Non-Employee Directors and Amendment No. 1 (filed as Exhibit 10.5 to Ashland’s Form 10-Q for the quarter ended December 31, 2004 (SEC File No. 001-02918), and incorporated herein by reference).
- 10.2 – Ashland Inc. Deferred Compensation Plan and Amendment No. 1 (filed as Exhibit 10.3 to Ashland’s Form 10-Q for the quarter ended December 31, 2004 (SEC File No. 001-02918), and incorporated herein by reference).
- 10.3 – Amended and Restated Ashland Inc. Deferred Compensation Plan for Employees (2005) (filed as Exhibit 10.3 to Ashland’s Form 10-K for the fiscal year ended September 30, 2008 (SEC File

No. 001-32532), and incorporated herein by reference).

- 10.4 – Amended and Restated Ashland Inc. Deferred Compensation Plan for Non-Employee Directors (2005) (filed as Exhibit 10.4 to Ashland’s Form 10-K for the fiscal year ended September 30, 2008 (SEC File No. 001-32532), and incorporated herein by reference).

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- 10.5 – Amended and Restated Ashland Inc. Supplemental Early Retirement Plan for Certain Employees (filed as Exhibit 10.5 to Ashland’s Form 10-K for the fiscal year ended September 30, 2010 (SEC File No. 001-32532), and incorporated herein by reference).
- 10.6 – Amendment to the Ashland Inc. Supplemental Early Retirement Plan for Certain Employees (filed as Exhibit 10.10 to Ashland’s Form 10-Q for the quarter ended June 30, 2015 (SEC File No. 001-32532), and incorporated herein by reference).
- 10.7 – Amendment to the Amended and Restated Ashland Inc. Deferred Compensation Plan for Non-Employee Directors (2005) (filed as Exhibit 10.4 to Ashland’s Form 10-Q for the quarter ended March 31, 2015 (SEC File No. 001-32532), and incorporated herein by reference).
- 10.8 – Ashland Supplemental Defined Contribution Plan for Certain Employees (filed as Exhibit 10.3 to Ashland’s Form 10-Q for the quarter ended March 31, 2011 (SEC File No. 001-32532), and incorporated herein by reference).
- 10.9 – Ashland Inc. Supplemental Defined Contribution Plan for Certain Employees effective January 1, 2015 (filed as Exhibit 10.1 to Ashland’s Form 8-K filed on May 18, 2015 (SEC File No. 001-32532), and incorporated herein by reference).
- 10.10 – Amended and Restated Ashland Inc. Nonqualified Excess Benefit Pension Plan (filed as Exhibit 10.6 to Ashland’s Form 10-K for the fiscal year ended September 30, 2008 (SEC File No. 001-32532), and incorporated herein by reference).
- 10.11 – Hercules Incorporated Employee Pension Restoration Plan (filed as Exhibit 10.9 to Ashland’s Form 10-K for the fiscal year ended September 30, 2010 (SEC File No. 001-32532), and incorporated herein by reference).
- 10.12 – Form of Chief Executive Officer Change in Control Agreement (filed as Exhibit 10.1 to Ashland’s Form 8-K filed on January 7, 2009 (SEC File No. 001-32532), and incorporated herein by reference).
- 10.13 – Form of Executive Officer Change in Control Agreement, effective for agreements entered into after July 2009 (filed as Exhibit 10.11 to Ashland’s Form 10-K for the fiscal year ended September 30, 2009 (SEC File No. 001-32532), and incorporated herein by reference) (Replaced in the first quarter of fiscal 2016).
- 10.14 – Form of Inducement Restricted Stock Award Agreement, between William A. Wulfsohn and Ashland (filed as Exhibit 4.3 to Ashland’s Form S-8 filed on December 18, 2014 (SEC File No. 333-201053), and incorporated herein by reference).
- 10.15 – Form of Chief Executive Officer Change in Control Agreement (filed as Exhibit 10.3 to Ashland’s Form 10-Q for the quarter ended December 31, 2014 (SEC File No. 001-32532), and incorporated herein by reference).
- 10.16 – Form of Chief Executive Officer Change in Control Agreement (filed as Exhibit 10.1 to Ashland’s Form 8-K filed on October 9, 2015 (SEC File No. 001-32532), and incorporated herein by reference) (Replaced in the first quarter of fiscal 2016).
- 10.17 – Form of Executive Officer Change in Control Agreement (filed as Exhibit 10.2 to Ashland’s Form 8-K filed on October 9, 2015 (SEC File No. 001-32532), and incorporated herein by reference).
- 10.18 – Ashland Inc. Severance Pay Plan (filed as Exhibit 10.1 to Ashland’s Form 10-Q for the quarter ended June 30, 2013 (SEC File No. 001-32532), and incorporated herein by reference).
- 10.19 – Form of Indemnification Agreement between Ashland and members of its Board of Directors (filed as Exhibit 10.10 to Ashland’s annual report on Form 10-K for fiscal year ended September 30, 2005 (SEC File No. 001-32532), and incorporated herein by reference).
- 10.20 –



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Amended and Restated Ashland Inc. Incentive Plan (filed as Exhibit 10.17 to Ashland's Form 10-K for the fiscal year ended September 30, 2009 (SEC File No. 001-32532), and incorporated herein by reference).

- 10.21 – 2006 Ashland Inc. Incentive Plan (filed as Exhibit 10 to Ashland’s Form 10-Q for the quarter ended December 31, 2005 (SEC File No. 001-32532), and incorporated herein by reference).  
Amended and Restated 2011 Ashland Inc. Incentive Plan (filed as Exhibit 10.1 to Ashland’s
- 10.22 – Form 8-K filed on February 1, 2013 (SEC File No. 001-32532), and incorporated herein by reference).  
Amended and Restated 2015 Ashland Inc. Incentive Plan (filed as Exhibit 10.1 to Ashland’s
- 10.23 – Form 8-K filed on July 20, 2015 (SEC File No. 001-32532), and incorporated herein by reference).  
Form of Stock Appreciation Rights Award Agreement under the Amended and Restated 2011
- 10.24 – Ashland Inc. Incentive Plan (filed as Exhibit 10.16 to Ashland’s Form 10-K for the fiscal year ended September 30, 2014 (SEC File No. 001-32532), and incorporated herein by reference).  
Form of Performance Unit (LTIP) Award Agreement under the Amended and Restated 2011
- 10.25 – Ashland Inc. Incentive Plan (filed as Exhibit 10.17 to Ashland’s Form 10-K for the fiscal year ended September 30, 2014 (SEC File No. 001-32532), and incorporated herein by reference).  
Form of Restricted Stock Award Agreement under the Amended and Restated 2011 Ashland Inc.
- 10.26 – Incentive Plan (filed as Exhibit 10.18 to Ashland’s Form 10-K for the fiscal year ended September 30, 2014 (SEC File No. 001-32532), and incorporated herein by reference).  
Form of Restricted Stock Unit Agreement under the Amended and Restated 2011 Ashland Inc.
- 10.27 – Incentive Plan (filed as Exhibit 10.19 to Ashland’s Form 10-K for the fiscal year ended September 30, 2014 (SEC File No. 001-32532), and incorporated herein by reference).  
Form of Restricted Stock Award Agreement under the Amended and Restated 2015 Ashland Inc.
- 10.28 – Incentive Plan (filed as Exhibit 10.5 to Ashland’s Form 10-Q for the quarter ended March 31, 2015 (SEC File No. 001-32532), and incorporated herein by reference).  
Form of Restricted Stock Unit Award Agreement under the Amended and Restated 2015
- 10.29 – Ashland Inc. Incentive Plan (filed as Exhibit 10.6 to Ashland’s Form 10-Q for the quarter ended March 31, 2015 (SEC File No. 001-32532), and incorporated herein by reference).  
Form of Stock Appreciation Rights Award Agreement under the Amended and Restated 2015
- 10.30 – Ashland Inc. Incentive Plan (filed as Exhibit 10.7 to Ashland’s Form 10-Q for the quarter ended March 31, 2015 (SEC File No. 001-32532), and incorporated herein by reference).  
Form of Performance Unit (LTIP) Award Agreement under the Amended and Restated 2015
- 10.31 – Ashland Inc. Incentive Plan (filed as Exhibit 10.8 to Ashland’s Form 10-Q for the quarter ended March 31, 2015 (SEC File No. 001-32532), and incorporated herein by reference).  
Form of Restricted Stock Award Agreement under the Amended and Restated 2015 Ashland Inc.
- 10.32 – Incentive Plan (Double-Trigger Form) (filed as Exhibit 10.2 to Ashland’s Form 8-K filed on July 20, 2015 (SEC File No. 001-32532), and incorporated herein by reference).  
Form of Restricted Stock Unit Award Agreement under the Amended and Restated 2015
- 10.33 – Ashland Inc. Incentive Plan (Double-Trigger Form) (filed as Exhibit 10.3 to Ashland’s Form 8-K filed on July 20, 2015 (SEC File No. 001-32532), and incorporated herein by reference).  
Form of Stock Appreciation Rights Award Agreement under the Amended and Restated 2015
- 10.34 – Ashland Inc. Incentive Plan (Double-Trigger Form) (filed as Exhibit 10.4 to Ashland’s Form 8-K filed on July 20, 2015 (SEC File No. 001-32532), and incorporated herein by reference).  
Form of Performance Unit (LTIP) Award Agreement under the Amended and Restated 2015
- 10.35 – Ashland Inc. Incentive Plan (Double-Trigger Form) (filed as Exhibit 10.5 to Ashland’s Form 8-K filed on July 20, 2015 (SEC File No. 001-32532), and incorporated herein by reference).
- 10.36 – Letter Agreement between Ashland and Luis Fernandez-Moreno dated July 29, 2013 (filed as Exhibit

10.22 to Ashland's Form 10-K for the fiscal year ended September 30, 2013 (SEC File No. 001-32532), and incorporated herein by reference).

- 10.37 – Letter Agreement between Ashland and Luis Fernandez-Moreno dated November 4, 2013 (filed as Exhibit 10.23 to Ashland’s Form 10-K for the fiscal year ended September 30, 2013 (SEC File No. 001-32532), and incorporated herein by reference).
- 10.38 – Letter Agreement between Ashland and Susan B. Esler dated October 28, 2014 (filed as Exhibit 10.25 to Ashland’s Form 10-K for the fiscal year ended September 30, 2014 (SEC File No. 001-32532), and incorporated herein by reference).
- 10.39 – Letter Agreement between Ashland and William A. Wulfsohn, dated November 12, 2014 (filed as Exhibit 10.1 to Ashland’s Form 8-K filed on November 17, 2014 (SEC File No. 001-32532), and incorporated herein by reference).
- 10.40\*\* – Separation Agreement and General Release between Ashland and Susan B. Esler dated October 1, 2015.
- 10.41\*\* – Separation Agreement and General Release between Ashland and Walter H. Solomon dated October 1, 2015.
- 10.42 – Form of Performance-Based Restricted Stock Award Agreement (filed as Exhibit 10.3 to Ashland’s Form 8-K filed on October 9, 2015 (SEC File No. 001-32532), and incorporated herein by reference).
- 10.43\*\* – Form of Retention Award Agreement for certain Executive Officers.
- 10.44 – Stock Purchase Agreement dated as of May 30, 2011, entered into by and among The Samuel J. Heyman 1981 Continuing Trust for Lazarus S. Heyman, The Samuel J. Heyman 1981 Continuing Trust for Eleanor S. Heyman, The Samuel J. Heyman 1981 Continuing Trust for Jennifer L. Heyman, The Samuel J. Heyman 1981 Continuing Trust for Elizabeth D. Heyman, The Lazarus S. Heyman Age 50 Trust for Assets Appointed Under Will of Lazarus S. Heyman, The Eleanor S. Heyman Age 50 Trust for Assets Appointed Under Will of Lazarus S. Heyman, The Jennifer L. Heyman Age 50 Trust for Assets Appointed Under Will of Lazarus S. Heyman, The Elizabeth D. Heyman Age 50 Trust for Assets Appointed Under Will of Lazarus S. Heyman, The Horizon Holdings Residual Trust, RFH Investment Holdings LLC, Ashland and Ronnie F. Heyman, as representative of the Seller Parties (filed as Exhibit 2.1 to Ashland’s Form 8-K filed on May 31, 2011 (SEC File No. 001-32532), and incorporated herein by reference).
- 10.45 – Master Formation Agreement dated July 15, 2010, among Ashland, Süd-Chemie Aktiengesellschaft and Ashland-Südchemie-Kernfest GmbH (filed as Exhibit 10.26 to Ashland’s Form 10-K for the fiscal year ended September 30, 2010 (SEC File No. 001-32532), and incorporated herein by reference).
- 10.46 – Master Contribution and Sale Agreement dated July 15, 2010, among Ashland, Ashland International Holdings, Inc., Süd-Chemie Aktiengesellschaft, Tecpro Holding Corporation Inc. and Ashland- Südchemie-Kernfest GmbH (filed as Exhibit 10.27 to Ashland’s Form 10-K for the fiscal year ended September 30, 2010 (SEC File No. 001-32532), and incorporated herein by reference).
- 10.47 – Shareholders’ Agreement effective November 30, 2010 by and between Süd-Chemie Aktiengesellschaft and Süd-Chemie Finance GmbH and Ashland and Ashland International Holdings, Inc. (filed as Exhibit 10 to Ashland’s Form 10-Q for the quarter ended December 31, 2010 (SEC File No. 001-32532), and incorporated herein by reference).
- 10.48 – Credit Agreement dated as of March 14, 2013, among Ashland Inc., as Borrower, The Bank of Nova Scotia, as Administrative Agent, Swing Line Lender and an L/C Issuer, Citibank, N.A., as Syndication Agent, Bank of America, N.A., Deutsche Bank Securities Inc. and PNC Bank, National Association, as Co-Documentation Agents, and the Lenders from time to time party thereto (filed as Exhibit 10.1 to Ashland’s Form 8-K filed on March 15, 2013 (SEC File No.

001-32532), and incorporated herein by reference).

Amendment Agreement, dated as of February 5, 2014, to the Credit Agreement dated as of March 14, 2013, among Ashland Inc., as Borrower, The Bank of Nova Scotia, as Administrative

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- Agent, and each Lender from time to time party thereto and the other agents and arrangers party thereto (filed as Exhibit 10.2 to Ashland's Form 10-Q for the quarter ended March 31, 2015 (SEC File No. 001-32532), and incorporated herein by reference).

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- 10.50 – Amendment No. 2, dated as of February 27, 2015, to the Credit Agreement, dated as of March 14, 2013, as amended by the Amendment Agreement, dated as of February 5, 2014, among Ashland Inc., as Borrower, The Bank of Nova Scotia, as Administrative Agent, each Lender from time to time party thereto and the other agents and arrangers party thereto (filed as Exhibit 10.3 to Ashland’s Form 10-Q for the quarter ended March 31, 2015 (SEC File No. 001-32532), and incorporated herein by reference).
- 10.51 – Credit Agreement dated as of June 23, 2015, among Ashland Inc., as Borrower, The Bank of Nova Scotia, as Administrative Agent, Swing Line Lender and an L/C Issuer, Citibank, N.A., as Syndication Agent, Bank of America, N.A., Deutsche Bank Securities Inc. and PNC Bank, National Association, as Co-Documentation Agents, JPMorgan Chase Bank, N.A., Mizuho Bank LTD., U.S. Bank National Association, and Wells Fargo Bank, National Association, as Managing Agents, and the other Lenders party thereto (filed as Exhibit 10.1 to Ashland’s Form 8-K filed on June 23, 2015 (SEC File No. 001-32532), and incorporated herein by reference).
- 10.52 – Transfer and Administration Agreement, dated as of August 31, 2012, among CVG Capital III LLC, Ashland Inc., Hercules Incorporated, Aqualon Company, ISP Technologies Inc., ISP Synthetic Elastomers LLC, and each other entity from time to time party thereto as an Originator, as Originators, Ashland Inc., as initial Master Servicer, each of Liberty Street Funding LLC, Market Street Funding LLC and Gotham Funding Corporation, as Conduit Investors and Uncommitted Investors, The Bank of Nova Scotia, as the Agent, a Letter of Credit Issuer, a Managing Agent, an Administrator and a Committed Investor, and the Letter of Credit Issuers, Managing Agents, Administrators, Uncommitted Investors and Committed Investors parties thereto from time to time (filed as Exhibit 10.1 to Ashland’s Form 8-K filed on September 7, 2012 (SEC File No. 001-32532), and incorporated herein by reference).
- 10.53 – Sale Agreement, dated as of August 31, 2012, among Ashland Inc., Hercules Incorporated, Aqualon Company, ISP Technologies Inc., ISP Synthetic Elastomers LLC and CVG Capital III LLC (filed as Exhibit 10.2 to Ashland’s Form 8-K filed on September 7, 2012 (SEC File No. 001-32532), and incorporated herein by reference).
- 10.54 – Parent Undertaking, dated as of August 31, 2012, by Ashland Inc. in favor of The Bank of Nova Scotia and the Secured Parties (filed as Exhibit 10.3 to Ashland’s Form 8-K filed on September 7, 2012 (SEC File No. 001-32532), and incorporated herein by reference).
- 10.55 – First Amendment to Transfer and Administration Agreement, dated as of April 30, 2013, among Ashland Inc., CVG Capital III LLC, the Investors, Letter of Credit Issuers, Managing Agents and Administrators party thereto, and the Bank of Nova Scotia, as Agent for the Investors (filed as Exhibit 10.2 to Ashland’s Form 10-Q for the quarter ended June 30, 2013 (SEC File No. 001-32532), and incorporated herein by reference).
- 10.56 – Omnibus Amendment to Transfer and Administration Agreement, dated as of August 21, 2013, among Ashland Inc., CVG Capital III LLC, the Originators, the Investors, Letter of Credit Issuers, Managing Agents and Administrators party thereto, and the Bank of Nova Scotia, as Agent for the Investors (filed as Exhibit 10.34 to Ashland’s Form 10-K for the fiscal year ended September 30, 2013 (SEC File No. 001-32532), and incorporated herein by reference).
- 10.57 – Third Amendment to Transfer and Administration Agreement, dated as of October 15, 2013, among Ashland Inc., CVG Capital III LLC, the Originators, the Investors, Letter of Credit Issuers, Managing Agents and Administrators party thereto, and the Bank of Nova Scotia, as Agent for the Investors (filed as Exhibit 10.35 to Ashland’s Form 10-K for the fiscal year ended September 30, 2013 (SEC File

No. 001-32532), and incorporated herein by reference).

Fourth Amendment to Transfer and Administration Agreement, dated as of June 30, 2014, among Ashland Inc., CVG Capital III LLC, the Originators, the Investors, Letter of Credit

- 10.58 – Issuers, Managing Agents and Administrators party thereto, and the Bank of Nova Scotia, as Agent for the Investors (filed as Exhibit 10.1 to Ashland's Form 10-Q for the quarter ended June 30, 2014 (SEC File No. 001-32532), and incorporated herein by reference).

Receivables Assignment Agreement, dated as of November 25, 2014, among Ashland Inc., as originator and master servicer, CVG Capital III LLC, Ashland Specialty Ingredients G.P., the

- 10.59 – Investors, Letter of Credit Issuers, Managing Agent and Administrators party thereto, and the Bank of Nova Scotia, as Agent for the Investors (filed as Exhibit 10.4 to Ashland's Form 10-Q for the quarter ended December 31, 2014 (SEC File No. 001-32532), and incorporated herein by reference).

- 10.60 – Sixth Amendment to Transfer and Administration Agreement, dated as of November 25, 2014, among Ashland Inc., CVG Capital III LLC, the Originators, the Investors, Letter of Credit Issuers, Managing Agents and Administrators party thereto, and the Bank of Nova Scotia, as Agent for the Investors (filed as Exhibit 10.5 to Ashland’s Form 10-Q for the quarter ended December 31, 2014 (SEC File No. 001-32532), and incorporated herein by reference).
- 10.61 – Seventh Amendment dated as of August 28, 2015 to the Transfer and Administration Agreement dated as of August 31, 2012, among Ashland Inc., CVG Capital III LLC, the Originators, the Investors, Letter of Credit Issuers, Managing Agents and Administrators party thereto, and The Bank of Nova Scotia, as agent for the Investors (filed as Exhibit 10.1 to Ashland’s Form 8-K filed on September 2, 2015 (SEC File No. 001-32532), and incorporated herein by reference).
- 10.62 – Eighth Amendment dated as of September 30, 2015 to the Transfer and Administration Agreement as of August 31, 2012, among Ashland Inc., CVG Capital III LLC, the Originators, the Investors, Letter of Credit Issuers, Managing Agents and Administrators party thereto, and The Bank of Nova Scotia, as agent for the Investors (filed as Exhibit 10.1 to Ashland’s Form 8-K filed on October 6, 2015 (SEC File No. 001-32532), and incorporated herein by reference).
- 10.63 – First Amendment to Sale Agreement, dated as of June 30, 2014, among Ashland Inc., Hercules Incorporated, Ashland Specialty Ingredients G.P., ISP Technologies Inc., Ashland Elastomers LLC and CVG Capital III LLC (filed as Exhibit 10.2 to Ashland’s Form 10-Q for the quarter ended June 30, 2014 (SEC File No. 001-32532), and incorporated herein by reference).
- 10.64 – Originator Removal Agreement and Facility Amendment, dated as of July 28, 2014, by and among Ashland, Hercules Incorporated, Ashland Specialty Ingredients G.P., ISP Technologies Inc., Ashland Elastomers LLC, CVG Capital III LLC, the Investors, the Letter of Credit Issuers, Managing Agents and Administrators party thereto, and the Bank of Nova Scotia, as Agent for the Investors (filed as Exhibit 10.1 to Ashland’s Form 8-K filed on August 1, 2014 (SEC File No. 001-32532), and incorporated herein by reference).
- 10.65 – Master Confirmation - Uncollared Accelerated Share Repurchase, dated August 5, 2014, between Ashland Inc. and Deutsche Bank AG, London Branch (filed as Exhibit 10.1 to Ashland’s Form 8-K filed on August 6, 2014 (SEC File No. 001-32532), and incorporated herein by reference).
- 10.66 – Master Confirmation – Uncollared Accelerated Share Repurchase, dated August 5, 2014, between Ashland Inc. and J.P. Morgan Securities LLC, as agent for JPMorgan Chase Bank, N.A. (filed as Exhibit 10.2 to Ashland’s Form 8-K filed on August 6, 2014 (SEC File No. 001-32532), and incorporated herein by reference).
- 11\*\* – Computation of Earnings Per Share (appearing in Note A of Notes to Consolidated Financial Statements in this annual report on Form 10-K).
- 12\*\* – Computation of Ratio of Earnings to Fixed Charges.
- 21\*\* – List of Subsidiaries.
- 23.1\*\* – Consent of Ernst & Young LLP.
- 23.2\*\* – Consent of PricewaterhouseCoopers LLP.
- 23.3\*\* – Consent of Hamilton, Rabinovitz & Associates, Inc.
- 24\*\* – Power of Attorney.
- 31.1\*\* – Certification of William A. Wulfsohn, Chief Executive Officer of Ashland, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- 31.2\*\* – Certification of J. Kevin Willis, Chief Financial Officer of Ashland, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.





32**	—	Certification of William A. Wulfsohn, Chief Executive Officer of Ashland, and J. Kevin Willis, Chief Financial Officer of Ashland, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS*		XBRL Instance Document.
101.SCH*		XBRL Taxonomy Extension Schema Document.
101.CAL*		XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF*		XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB*		XBRL Taxonomy Extension Label Linkbase Document.
101.PRE*		XBRL Taxonomy Extension Presentation Linkbase Document.

\*Attached as Exhibit 101 to this report are the following documents formatted in XBRL (Extensible Business Reporting Language): (i) Statements of Consolidated Comprehensive Income for years ended September 30, 2015, 2014 and 2013; (ii) Consolidated Balance Sheets at September 30, 2015 and 2014; (iii) Statements of Consolidated Stockholders' Equity at September 30, 2015, 2014 and 2013; (iv) Statements of Consolidated Cash Flows for years ended September 30, 2015, 2014 and 2013; and (v) Notes to Consolidated Financial Statements.

\*\*Filed herewith.

<sup>SM</sup> Service mark, Ashland or its subsidiaries, registered in various countries.

<sup>TM</sup> Trademark, Ashland or its subsidiaries, registered in various countries.

<sup>†</sup>Trademark owned by a third party.

Upon written or oral request, a copy of the above exhibits will be furnished at cost.

SIGNATURES

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

ASHLAND INC.

(Registrant)

By:

/s/ J. Kevin Willis

J. Kevin Willis

Senior Vice President and Chief Financial Officer

Date: November 20, 2015

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant, in the capacities indicated, on November 20, 2015.

Signatures	Capacity
/s/ William A. Wulfsohn	Chairman of the Board, Chief Executive Officer and Director
William A. Wulfsohn	(Principal Executive Officer)
/s/ J. Kevin Willis	Senior Vice President and Chief Financial Officer
J. Kevin Willis	(Principal Financial Officer)
/s/ J. William Heitman	Vice President and Controller
J. William Heitman	(Principal Accounting Officer)
*	Director
Brendan M. Cummins	
*	Director
Roger W. Hale	
*	Director
Stephen F. Kirk	
*	Director
Vada O. Manager	
*	Director
Barry W. Perry	
*	Director
Mark C. Rohr	
*	Director
George A. Schaefer, Jr.	
*	Director
Janice J. Teal	
*	Director
Michael J. Ward	
*By: /s/ Peter J. Ganz	
Peter J. Ganz	
Attorney-in-Fact	

Date: November 20, 2015

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

The following discussion should be read in conjunction with the Consolidated Financial Statements and the accompanying Notes to Consolidated Financial Statements for the years ended September 30, 2015, 2014 and 2013.

### BUSINESS OVERVIEW

#### Ashland profile

Ashland is a global leader in specialty chemicals and, through Valvoline, a premium consumer-branded lubricant supplier. Ashland provides products, services and solutions that meet customers' needs throughout a variety of industries in more than 100 countries. Its chemistry is used in a wide variety of markets and applications, including architectural coatings, adhesives, automotive, construction, energy, food and beverage, personal care, and pharmaceutical. With approximately 10,500 employees worldwide, Ashland serves customers in more than 100 countries.

Ashland's sales generated outside of North America were 47% in 2015 and 2014, and 46% in 2013. Sales by region expressed as a percentage of total consolidated sales were as follows:

Sales by Geography	2015		2014		2013	
North America (a)	53	%	53	%	54	%
Europe	24	%	25	%	24	%
Asia Pacific	16	%	15	%	15	%
Latin America & other	7	%	7	%	7	%
	100	%	100	%	100	%

(a) Ashland includes only U.S. and Canada in its North American designation.

#### Reportable segments

Ashland's reporting structure is composed of three reportable segments: Ashland Specialty Ingredients (Specialty Ingredients), Ashland Performance Materials (Performance Materials) and Valvoline. For further descriptions of each reportable segment, see "Results of Operations – Reportable Segment Review" beginning on page M-13.

Sales by each reportable segment expressed as a percentage of total consolidated sales were as follows:

Sales by Reportable Segment	2015		2014		2013	
Specialty Ingredients	42	%	41	%	41	%
Performance Materials	21	%	26	%	26	%
Valvoline	37	%	33	%	33	%
	100	%	100	%	100	%

### KEY DEVELOPMENTS

During 2015, the following operational decisions and economic developments had an impact on Ashland's current and future cash flows, results of operations and financial position.

#### Business results

Ashland's overall financial performance increased by 4% during 2015 compared to 2014 as adjusted EBITDA results increased to \$1,119 million (see U.S. GAAP reconciliation on page M-7). The increase in adjusted EBITDA was primarily attributable to improved results within the Valvoline reportable segment, partially offset by a decline in the

Performance Materials and Specialty Ingredients reportable segments. Compared to 2014, Valvoline's adjusted EBITDA results increased \$51 million, or 14%, primarily due to lower raw material costs, specifically relating to the price of base oil, which resulted in increased gross profit. Additionally, lower selling, general and administrative expense, primarily due to cost savings from the 2014 global restructuring, contributed to Valvoline's improved results. Performance Materials' adjusted EBITDA results decreased by \$20 million, or 12%, as lower production costs, which contributed to improved gross profit, and selling, general and administrative expense compared to the prior year were more than offset by the lost income from the divestiture of the Elastomers division and significant plant maintenance

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shutdowns at both Intermediates/Solvents manufacturing facilities. Specialty Ingredients' adjusted EBITDA results remained relatively consistent, decreasing only \$2 million compared to the prior year, primarily as a result of improved gross profit from lower raw material costs and cost savings from the 2014 global restructuring. These favorable results were more than offset by weak energy market results and unfavorable foreign currency exchange. The following discussion outlines significant transactions announced or executed during 2015.

#### Ashland Separation of Valvoline

On September 22, 2015, Ashland announced that the Board of Directors approved proceeding with a plan to separate Ashland into two independent, publicly traded companies comprising of the new Ashland and Valvoline. Ashland has begun the process to separate its Valvoline business from its Specialty Ingredients and Performance Materials businesses while it finalizes the transaction structure and obtains customary regulatory and other approvals. Ashland intends for the separation, which is subject to final board approval prior to completion, to be tax free for Ashland shareholders. Immediately following the separation, Ashland shareholders will own shares of both the new Ashland and Valvoline. The separation is expected to be completed as soon as practicable, but not before the end of fiscal 2016.

The new Ashland will be a global leader in providing specialty chemical solutions to customers in a wide range of consumer and industrial markets. These markets are currently served by Specialty Ingredients and Performance Materials. Key markets and applications include pharmaceutical, personal care, food and beverage, architectural coatings, adhesives, automotive, construction and energy. Together these businesses generated approximately \$3.4 billion in sales for the fiscal year ended September 30, 2015.

Valvoline will focus on building the world's leading engine and automotive maintenance business by providing hands-on expertise to customers in each of its primary market channels: Do-It-Yourself (DIY); Installers; Valvoline Instant Oil Change<sup>SM</sup>; and International. Valvoline generated sales of \$2 billion for Ashland during the fiscal year ended September 30, 2015.

#### Acquisition

##### Zeta Fraction<sup>TM</sup>

In September 2015, Specialty Ingredients completed the acquisition of the patented Zeta Fraction<sup>TM</sup> technology from AkzoNobel. The acquisition broadens Ashland's value-added portfolio in the personal care, pharmaceutical, food and beverage, and agriculture markets. The patented Zeta Fraction<sup>TM</sup> process and technology selectively isolates efficacious components from living plants and marine sources to produce a wide range of biofunctional ingredients.

#### Divestitures

##### Industrial Biocides

During May 2015, Ashland entered into a definitive sale agreement to sell the industrial biocides assets within Specialty Ingredients, which closed on July 1, 2015. As a result of the sale, Ashland received net cash proceeds of approximately \$30 million during the fourth quarter of 2015 and recognized a nominal gain before tax and after customary closing costs within the net gain (loss) on divestitures caption within the Statements of Consolidated Comprehensive Income.

The sale of Specialty Ingredients' industrial biocides assets did not qualify for discontinued operations treatment since it did not represent a strategic shift that had or will have a major effect on Ashland's operations and financial results.

##### Valvoline Car Care Products

In April 2015, Ashland entered into a definitive sale agreement to sell Valvoline's car care product assets for \$24 million, which included Car Brite<sup>TM</sup> and Eagle One<sup>TM</sup> automotive appearance products. Prior to the sale, Ashland recognized a loss of \$26 million before tax in 2015 to recognize the assets at fair value less cost to sell. The loss is reported within the net gain (loss) on divestitures caption within the Statements of Consolidated Comprehensive Income. The transaction closed on June 30, 2015 and Ashland received net proceeds of \$19 million after adjusting for certain customary closing costs and final working capital totals.

The sale of Valvoline's car care product assets did not qualify for discontinued operations treatment since it did not represent a strategic shift that had or will have a major effect on Ashland's operations and financial results.

Valvoline Joint Venture

During April 2015, Ashland sold a Valvoline joint venture equity investment in Venezuela. Prior to the sale, Ashland recognized a \$14 million impairment in 2015, for which there was no tax effect, within the equity and other income caption of the Statements of Consolidated Comprehensive Income.

Ashland's decision to sell the equity investment and the resulting charge recorded during 2015 is reflective of the continued devaluation of the Venezuelan currency (bolivar) based on changes to the Venezuelan currency exchange rate mechanisms during the fiscal year. In addition, the continued lack of exchangeability between the Venezuelan bolivar and U.S. dollar had restricted

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the joint venture's ability to pay dividends and obligations denominated in U.S. dollars. These exchange regulations and cash flow limitations, combined with other recent Venezuelan regulations and the impact of declining oil prices on the Venezuelan economy, had significantly restricted Ashland's ability to conduct normal business operations through the joint venture arrangement. Ashland determined this divestiture does not represent a strategic shift that had or will have a major effect on Ashland's operations and financial results, and thus it does not qualify for discontinued operations treatment.

#### Elastomers

On October 9, 2014, Ashland entered into a definitive agreement to sell the Elastomers division within the Performance Materials reportable segment, which operated a 250-person manufacturing facility in Port Neches, Texas, to Lion Copolymer Holdings, LLC. The Elastomers division, which primarily served the North American replacement tire market, accounted for approximately 5% of Ashland's 2014 sales of \$6.1 billion and 18% of Ashland Performance Materials' \$1.6 billion in sales in 2014. The sale was completed on December 1, 2014 in a transaction valued at approximately \$120 million which was subject to working capital adjustments. The total post-closing adjusted cash proceeds received before taxes by Ashland during 2015 was \$105 million, which includes working capital adjustments and transaction costs, as defined in the definitive agreement.

Elastomers' net assets as of November 30, 2014 were \$191 million which primarily included accounts receivable, inventory, property, plant and equipment, non-deductible goodwill and other intangibles and payables. Since the net proceeds received were less than book value, Ashland recorded a loss of \$86 million pre-tax, within the net gain (loss) on divestiture caption of the Statements of Consolidated Comprehensive Income during 2015. The related tax effect was a benefit of \$28 million included in the income tax expense (benefit) caption within the Statements of Consolidated Comprehensive Income.

Ashland determined that the sale of Elastomers did not represent a strategic shift that had or will have a major effect on Ashland's operations and financial results. As such, Elastomers' results were included in the Performance Materials reportable segment results of operations and financial position within the Statements of Consolidated Comprehensive Income and Consolidated Balance Sheets, respectively, until its December 1, 2014 sale. Certain indirect corporate costs of \$11 million for 2015 were included within the selling, general and administrative expense caption of the Statements of Consolidated Comprehensive Income that were previously allocated to the Elastomers division and are now reported as selling, general and administrative expense within continuing operations on a consolidated basis within the Unallocated and other segment.

#### Financial position

During 2015, Ashland has continued its focus on executing its capital allocation strategies. The following highlights key transactions during 2015.

#### Stock repurchase programs

During 2015, Ashland's Board of Directors approved a new \$1 billion share repurchase authorization that will expire on December 31, 2017. This authorization allows for the same repurchase methods as the 2014 repurchase program. During the first quarter of 2016, under this new share repurchase authorization, Ashland announced that it entered into an accelerated share repurchase agreement (November 2015 ASR Agreement) with Goldman, Sachs & Co. Under the November 2015 ASR Agreement, Ashland paid an initial purchase price of \$500 million and received an initial delivery of approximately 3.9 million shares of common stock during November 2015. The November 2015 ASR Agreement is scheduled to terminate no later than May 2016 but may be terminated early in certain circumstances, in whole or in part.

During 2014, the Board of Directors of Ashland authorized a \$1.35 billion common stock repurchase program. Under this program, Ashland's common shares could be repurchased in open market transactions, privately negotiated transactions or pursuant to one or more accelerated stock repurchase programs or Rule 10b5-1 plans. Ashland completed this program during 2015. The following summarizes stock repurchase agreements that were entered into as part of the \$1.35 billion common stock repurchase program.

In 2014, completed a prepaid variable share repurchase agreement for \$80 million and received 0.8 million shares.

In 2014, entered into \$750 million of accelerated share repurchase agreements that were completed during 2015 and received 6.4 million shares, of which 0.5 million shares were received during 2015.

In 2014, entered into \$250 million of share repurchase agreements that were completed during 2015 and received 2.4 million shares, of which 1.2 million were repurchased during 2015.

In 2015, entered into \$270 million of accelerated share repurchase agreements that were completed during 2015 and received 2.2 million shares.

In total, Ashland spent \$1.35 billion in stock repurchase programs and received approximately 11.8 million shares of common stock.

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#### Senior notes refinancing and 2015 Senior Credit Agreement

During June of 2015, Ashland completed certain refinancing transactions related to the \$600 million 3.000% senior notes due in 2016 (2016 senior notes). Ashland commenced and completed a cash tender offer to purchase for cash any and all of its outstanding 2016 senior notes. At the close of the tender offer, \$550 million aggregate principal amount of the 2016 senior notes was tendered by note holders, representing approximately 92% of the outstanding 2016 senior notes, which have been purchased by Ashland. Subsequently, Ashland redeemed the remaining balance of the 2016 senior notes of \$50 million on July 23, 2015.

In connection with the tender offer and redemption, in June 2015, Ashland entered into a new Credit Agreement (the 2015 Senior Credit Agreement). The 2015 Senior Credit Agreement replaced the \$1.2 billion senior unsecured revolving credit facility (the 2013 Senior Credit Facility), and was comprised of a new five-year senior unsecured revolving credit facility in an aggregate amount of \$1.2 billion (the 2015 revolving credit facility), which includes a \$250 million letter of credit sublimit and a \$100 million swing line loan sublimit, and a five-year senior unsecured term loan facility in an aggregate principal amount of \$1.1 billion (the term loan facility). The 2015 Senior Credit Agreement is not guaranteed, is unsecured and can be prepaid at any time without premium or penalty.

During 2015, Ashland used the proceeds from borrowings under the \$1.1 billion term loan facility along with cash on hand (i) to fund the tender offer of the 2016 senior notes, (ii) to pay in full the outstanding loans under the 2013 Senior Credit Facility, (iii) to pay accrued interest, fees and expenses under the 2013 Senior Credit Facility and the 2016 senior notes, (iv) to contribute funds to the U.S. pension plans impacted by the pension plan settlement program discussed in Note M in Notes to Consolidated Financial Statements, and (v) to pay fees and expenses incurred in connection with the entry into the 2015 Senior Credit Agreement. As a result of the tender offer and redemption, Ashland recognized a \$9 million charge related to early redemption premium payments, which is included in the net interest and other financing expense caption of the Statements of Consolidated Comprehensive Income in 2015.

#### Pension plan settlement program

During 2015, Ashland informed approximately 20,000 former employees, who were included in the approximately 53,000 participants within the primary U.S. pension plans, that Ashland was offering these participants the option of receiving a lump sum payment on their vested retirement benefit or a reduced annuity now, in lieu of receiving monthly annuity payments deferred until retirement eligibility or when the participant may choose to initiate payment. During August 2015, approximately 12,000 participants elected to participate in the settlement program which resulted in approximately \$475 million in settlement payments made from the affected pension plans during September 2015. Settlement payments were funded with pension plan assets, which included the \$500 million contribution made during the third quarter of fiscal 2015.

#### Accounts receivable securitization

During 2015, the termination of the commitments under the Transfer and Administration Agreement under the accounts receivable securitization was extended from August 28, 2015 to December 31, 2015. See Note I of the Notes to Consolidated Financial Statements for further information on this agreement.

#### Credit ratings

During 2015, Ashland's corporate credit ratings remained unchanged at BB by Standard & Poor's and Ba1 by Moody's Investor Services. As of September 30, 2015, Moody's Investor Services affirmed Ashland's outlook as stable, while Standard & Poor revised Ashland's outlook to negative following Ashland's announcement of its intent to separate the Valvoline business via a tax-free separation to its shareholders and not as a result of Ashland's ongoing operations. Ashland's ability to access capital markets to provide liquidity has remained largely unchanged as a result of the ratings; however, improvements in the credit markets and Ashland's financial performance has allowed, and should continue in the future to allow, Ashland to borrow on more favorable terms, including less restrictive covenants and lower interest rates.

#### Insurance settlement

On January 13, 2015, Ashland and Hercules entered into a comprehensive settlement agreement related to certain insurance coverage for asbestos bodily injury claims with Underwriters at Lloyd's, certain London companies and Chartis (AIG) member companies, along with National Indemnity Company and Resolute Management, Inc., under which Ashland and Hercules received a total of \$398 million. In exchange, all claims were released against these entities for past, present and future coverage obligations arising out of the asbestos coverage-in-place agreements that were the subject of the pending arbitration proceedings. In addition, as part of this settlement, Ashland and Hercules released all claims against National Indemnity Company and Resolute Management, Inc. in the Kentucky state court action. As a result, the arbitration proceedings and the Kentucky state court action have been terminated.

As a result of this settlement, during 2015, Ashland recorded an after-tax gain of \$120 million within the discontinued operations caption of the Statements of Consolidated Comprehensive Income and a \$249 million reduction in the asbestos insurance receivable

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balance, consisting of \$227 million and \$22 million for Ashland and Hercules, respectively, within the Consolidated Balance Sheets. See Note N of the Notes to Consolidated Financial Statements for further information.

In addition, Ashland placed \$335 million of the settlement funds received into a renewable annual trust restricted for the purpose of paying for ongoing and future litigation defense and claim settlement costs incurred in conjunction with asbestos claims. These funds are presented primarily as noncurrent assets, with \$30 million classified within other current assets in the Consolidated Balance Sheets.

#### Global restructuring

During 2014, in conjunction with the divestitures of Water Technologies and the Casting Solutions joint venture, Ashland initiated a global restructuring program to streamline the resources used across the organization. The global restructuring program improved operational performance while recognizing significant annualized cost savings. As of September 30, 2015, Ashland's global restructuring program, which targeted \$200 million in annualized run-rate cost savings, is complete. The cost savings associated with the restructuring program have been recognized within cost of sales and selling, general, and administrative expenses during 2014 and 2015. See Note E of the Notes to Consolidated Financial Statements for further information.

## RESULTS OF OPERATIONS – CONSOLIDATED REVIEW

### Use of non-GAAP measures

Ashland has included within this document certain non-GAAP measures which include EBITDA (net income, plus income tax expense (benefit), net interest and other financing expenses, and depreciation and amortization), Adjusted EBITDA (EBITDA adjusted for discontinued operations, net gain (loss) on acquisitions and divestitures, other income and (expense) and key items, which may include pro forma effects for significant acquisitions or divestitures, as applicable) and Adjusted EBITDA margin (Adjusted EBITDA, which can include pro forma adjustments, divided by sales). Such measurements are not prepared in accordance with U.S. GAAP and as related to pro forma adjustments, contain Ashland's best estimates of cost allocations and shared resource costs. Management believes the use of non-GAAP measures on a consolidated and reportable segment basis assists investors in understanding the ongoing operating performance by presenting comparable financial results between periods. The non-GAAP information provided is used by Ashland management and may not be determined in a manner consistent with the methodologies used by other companies. EBITDA and Adjusted EBITDA provide a supplemental presentation of Ashland's operating performance on a consolidated and reportable segment basis. Adjusted EBITDA generally includes adjustments for unusual, non-operational or restructuring-related activities. In addition, certain financial covenants related to Ashland's 2015 Senior Credit Agreement are based on similar non-GAAP measures and are defined further in the sections that reference this metric.

In accordance with U.S. GAAP, Ashland recognizes actuarial gains and losses for defined benefit pension and other postretirement benefit plans annually in the fourth quarter of each fiscal year and whenever a plan is determined to qualify for a remeasurement during a fiscal year. Actuarial gains and losses occur when actual experience differs from the estimates used to allocate the change in value of pension and other postretirement benefit plans to expense throughout the year or when assumptions change, as they may each year. Significant factors that can contribute to the recognition of actuarial gains and losses include changes in discount rates used to remeasure pension and other postretirement obligations on an annual basis or upon a qualifying remeasurement, differences between actual and expected returns on plan assets and other changes in actuarial assumptions, for example the life expectancy of plan participants. Management believes Adjusted EBITDA, which includes the expected return on pension plan assets and excludes both the actual return on pension plan assets and the impact of actuarial gains and losses, provides investors with a meaningful supplemental presentation of Ashland's operating performance. Management believes these actuarial gains and losses are primarily financing activities that are more reflective of changes in current conditions in global financial markets (and in particular interest rates) that are not directly related to the underlying business and that do not have an immediate, corresponding impact on the compensation and benefits provided to eligible employees

and retirees. For further information on the actuarial assumptions and plan assets referenced above, see MD&A - Critical Accounting Policies - Employee benefit obligations and Note M of the Notes to Consolidated Financial Statements.

Ashland has included free cash flow as an additional non-GAAP metric of cash flow generation. Ashland believes free cash flow is relevant because capital expenditures are an important element of Ashland's ongoing cash activities. By deducting capital expenditures and certain other adjustments as applicable from operating cash flows, Ashland is able to provide a better indication of the ongoing cash being generated that is ultimately available for both debt and equity holders as well as other investment opportunities. Prior to 2013, Ashland deducted dividends from this calculation but has discontinued this practice to be more comparable to the broader market's calculation of free cash flow.

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## Consolidated review

### Net income

Ashland's net income is primarily affected by results within operating income, net interest and other financing expense, income taxes, discontinued operations and other significant events or transactions that are unusual or nonrecurring. Operating income includes Ashland's adjustment for the immediate recognition of the change in the fair value of the plan assets and net actuarial gains and losses for defined benefit pension plans and other postretirement benefit plans each fiscal year. See "Critical Accounting Policies" for additional details regarding Ashland's accounting policies for benefit plan obligations.

Key financial results for 2015, 2014 and 2013 included the following:

Ashland's net income amounted to \$309 million in 2015, \$233 million in 2014 and \$683 million in 2013, or \$4.48, \$3.00 and \$8.57 diluted earnings per share, respectively.

Discontinued operations, which are reported net of taxes, resulted in income of \$118 million, \$161 million and \$130 million during 2015, 2014 and 2013, respectively.

Income from continuing operations, which excludes results from discontinued operations, amounted to \$191 million in 2015, \$72 million in 2014 and \$553 million in 2013, or \$2.78, \$0.93 and \$6.95 diluted earnings per share, respectively.

The effective income tax benefit rate of 13% for 2015, income tax benefit rate of 162% for 2014, and the income tax expense rate of 26% for 2013, were significantly affected by a number of discrete items.

Ashland incurred pretax net interest and other financing expense of \$174 million, \$166 million and \$282 million during 2015, 2014 and 2013, respectively. Certain charges associated with debt refinancing activity impacted 2015 and 2013.

Operating income was \$458 million, \$46 million and \$1,039 million during 2015, 2014 and 2013, respectively.

For further information on the items reported above, see the discussion in the comparative Statements of Consolidated Comprehensive Income caption review analysis.

### Operating income

Operating income amounted to \$458 million, \$46 million and \$1,039 million in 2015, 2014 and 2013, respectively.

The current and prior years' operating income include certain key items that are excluded to arrive at Adjusted EBITDA. These key items are summarized as follows:

Expense of \$255 million and \$438 million in 2015 and 2014, respectively, and income of \$417 million in 2013 from the immediate recognition from the change in the fair value of the plan assets and net actuarial gains and losses for defined benefit pension plans and other postretirement benefit plans;

Restructuring and integration costs include the following:

\$27 million of restructuring costs (including \$6 million of accelerated depreciation and \$17 million related to the restructuring plan within an existing manufacturing facility) during 2015;

\$147 million of restructuring and integration costs (including \$17 million of accelerated depreciation and \$19 million in asset impairment charges related to a foreign operation) during 2014; and

\$29 million of restructuring and other integration costs during 2013;

a \$14 million impairment related to the Valvoline joint venture equity investment within Venezuela during 2015 and a \$50 million impairment charge related to the ASK joint venture equity investment during 2014;

\$12 million, \$13 million and \$16 million net environmental charges during 2015, 2014 and 2013, respectively;

\$11 million, \$13 million and \$41 million impairment charges related to certain in-process research and development (IPR&D) assets associated with the acquisition of International Specialty Products Inc. (ISP) in 2011 during 2015, 2014 and 2013, respectively;

\$16 million of tax indemnity income, a \$13 million charge related to a customer claim, and a \$7 million charge for a stock incentive plan award modification, each during 2015;

two \$5 million charges for a foreign tax indemnification receivable adjustment and a legal reserve, respectively, during 2014; and

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\$22 million and \$13 million gains resulting from Ashland's settlement of an insurance claim and settlement of a customer claim, respectively, during 2013.

Operating income for 2015, 2014 and 2013 included depreciation and amortization of \$335 million, \$357 million and \$354 million, respectively (which excludes asset impairment charges and accelerated depreciation of \$6 million, \$36 million and \$2 million, respectively, for each year). EBITDA totaled \$796 million, \$568 million and \$1,515 million for 2015, 2014 and 2013, respectively. Adjusted EBITDA results in the following table have been prepared to illustrate the ongoing effects of Ashland's operations, which exclude certain key items since management believes the use of such non-GAAP measures on a consolidated and reportable segment basis assists investors in understanding the ongoing operating performance by presenting the financial results between periods on a more comparable basis.

(In millions)	2015	2014	2013
Net income	\$309	\$233	\$683
Income tax expense (benefit)	(22)	) (188)	) 196
Net interest and other financing expense	174	166	282
Depreciation and amortization (a)	335	357	354
EBITDA	796	568	1,515
Income from discontinued operations (net of taxes)	(118)	) (161)	) (130)
Losses (gain) on pension and other postretirement plan remeasurement (b)	255	438	(417)
Net loss on divestitures	118	—	14
Restructuring and other integration costs	21	111	29
Tax indemnity income	(16)	) —	—
Impairment of equity investments	14	50	—
Environmental reserve adjustments	12	13	16
Customer claim	13	—	—
Stock incentive award modification	7	—	—
Asset impairment and accelerated depreciation	6	36	2
Impairment of IPR&D assets	11	13	41
Foreign tax indemnification receivable adjustment	—	5	—
Legal reserve charge	—	5	—
Insurance settlement	—	—	(22)
Settled claim	—	—	(13)
Other	—	—	2
Adjusted EBITDA	\$1,119	\$1,078	\$1,037

(a) Excludes \$6 million, \$36 million and \$2 million of asset impairment charges and accelerated depreciation during 2015, 2014 and 2013, respectively.

(b) For supplemental information on the components of this adjustment, see page M-30 within the MD&A - Critical Accounting Policies - Employee benefit obligations.

#### Statements of Consolidated Comprehensive Income – caption review

A comparative analysis of the Statements of Consolidated Comprehensive Income by caption is provided as follows for the years ended September 30, 2015, 2014 and 2013.

(In millions)	2015	2014	2013	2015 change	2014 change
Sales	\$5,387	\$6,121	\$6,091	\$(734)	) \$30

The following table provides a reconciliation of the change in sales between fiscal years 2015 and 2014 and between fiscal years 2014 and 2013.

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(In millions)	2015 change	2014 change
Pricing	\$(166	) \$(88
Volume and product mix	(19	) 110
Currency exchange	(266	) 8
Divestitures	(283	) —
Change in sales	\$(734	) \$30

Sales for 2015 decreased \$734 million, or 12%, compared to 2014 primarily due to the divestiture of certain divisions and product lines of \$283 million, or 5%. The divestitures impact on sales was primarily due to the Elastomers division within the Performance Materials reportable segment. Unfavorable foreign currency exchange decreased sales by \$266 million, or 4%, as a result of the U.S. dollar strengthening against foreign currencies, primarily the Euro. Additionally, pricing declines, primarily due to raw materials declines, across all reportable segments decreased sales by \$166 million, or 3%, while volume and changes in product mix combined to decrease sales by \$19 million, with the primary driver of the decline within Specialty Ingredients' energy market.

Sales for 2014 increased \$30 million compared to 2013 primarily due to a combined change in volume and product mix which increased sales by \$110 million, or 2%. Favorable currency exchange increased sales by \$8 million. These increases were partially offset by pricing declines of \$88 million, or 1%, primarily within the Performance Materials and Specialty Ingredients reportable segments.

(In millions)	2015	2014	2013	2015 change	2014 change
Cost of sales	\$3,814	\$4,605	\$4,304	\$(791	) \$301
Gross profit as a percent of sales	29.2	% 24.8	% 29.3	%	

Fluctuations in cost of sales are driven primarily by raw material prices, volume and changes in product mix, currency exchange, losses or gains on pension and other postretirement benefit plan remeasurements, and other certain charges incurred as a result of changes or events within the businesses or restructuring activities.

The following table provides a reconciliation of the changes in cost of sales between fiscal years 2015 and 2014 and between fiscal years 2014 and 2013.

(In millions)	2015 change	2014 change
Production costs	\$(279	) \$(70
Divestitures	(245	) —
Currency exchange	(181	) 4
Volume and product mix	(30	) 80
Pension and other postretirement benefit plans expense (income) (including remeasurements)	(43	) 269
Asset impairment and accelerated depreciation	(30	) 34
Inventory/customer claim charges	13	(51
Severance and other costs	4	13
Insurance claim settlement	—	22
Change in cost of sales	\$(791	) \$301

Cost of sales for 2015 decreased \$791 million, or 17%, compared to 2014 primarily due to lower production costs, the divestiture of certain divisions and product lines, and favorable foreign currency exchange, which decreased cost of sales by \$279 million, \$245 million, and \$181 million, respectively. The divestiture of the Elastomers division within the Performance Materials reportable segment accounted for \$202 million, or 82%, of the \$245 million divestiture

impact on cost of sales. Volume and change in product mix combined also decreased cost of sales by \$30 million. Pension and other postretirement plans expense decreased cost of sales by \$43 million, primarily as a result of decreased remeasurement losses in 2015 compared to 2014, primarily due to lower than expected return on pension plan assets (see "Critical Accounting Policies" for additional details). The current year includes certain key items such as \$17 million of severance and other costs and \$6 million of accelerated depreciation related to a manufacturing facility within the Specialty Ingredients reportable segment, as well as \$13 million in additional costs related to a customer claim.

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The prior period includes certain key items such as \$30 million of costs associated with plant closures within the Performance Materials reportable segment, which includes \$17 million of accelerated depreciation, and also \$19 million of asset impairment charges related to a foreign operation within the Specialty Ingredients reportable segment. Cost of sales for 2014 increased \$301 million, or 7%, compared to 2013 primarily due to increased expense of \$269 million related to the pension and other postretirement plans' remeasurement losses in 2014 compared to a gain in 2013, which was primarily due to lower discount rates and a change in mortality tables (see "Critical Accounting Policies" for additional details). Lower production costs decreased cost of sales \$70 million while higher volume and product mix resulted in an increase of \$80 million. As previously discussed, cost of sales for 2014 also includes certain key items such as \$49 million of costs associated with plant closures and a foreign operation. Cost of sales for 2013 included a \$51 million inventory charge for certain guar-based products and inventory adjustments within Elastomers, a \$22 million gain resulting from Ashland's settlement of an insurance claim, and \$2 million of accelerated depreciation.

(In millions)	2015	2014	2013	2015 change	2014 change
Selling, general and administrative expense	\$1,028	\$1,358	\$670	\$(330)	\$688
As a percent of sales	19.1	% 22.2	% 11.0	%	

Selling, general and administrative expense for 2015 decreased 24% compared to 2014, while expenses as a percent of sales decreased 3.1 percentage points. Key drivers of the fluctuation in selling, general and administrative expense compared to 2014 were:

- a \$146 million decrease in expense compared to the prior year due to fluctuations in adjustments from the gains and losses for pension and postretirement benefit plans (costs of \$155 million in 2015 and \$301 million in 2014). As previously discussed within the cost of sales analysis, the 2015 remeasurement loss was driven primarily by a lower than expected return on pension plan assets (see "Critical Accounting Policies" for additional details);

- Approximately \$100 million of current year cost savings related to the 2014 global restructuring compared to approximately \$40 million of cost savings in the prior year;

- \$98 million key item expense during 2014 for severance and other restructuring costs associated with the 2014 global restructuring;

- Environmental reserve expense adjustments of \$32 million and \$29 million during 2015 and 2014, respectively;

- Favorable foreign currency exchange of \$36 million during 2015;

- Increased employee related costs of approximately \$22 million during 2015;

- \$21 million decrease in expense for certain divestitures, primarily the Elastomers division during 2015; and

- Tax indemnification income of \$16 million and a stock incentive award modification resulting in expense of \$7 million during 2015.

Selling, general and administrative expense for 2014 increased 103% compared to 2013, while expenses as a percent of sales increased 11.2 percentage points. Key drivers of the fluctuation in selling, general and administrative expense compared to 2013 were:

- a \$590 million increase in expense compared to the prior year due to fluctuations in adjustments from the gains and losses for pension and postretirement benefit plans (cost of \$301 million in 2014 and income of \$289 million in 2013).

- As previously discussed within the cost of sales analysis, the 2014 remeasurement loss was driven primarily by lower discount rates and a change in mortality tables (see "Critical Accounting Policies" for additional details);

- Certain key item expense in 2014 and 2013 of \$98 million and \$29 million, respectively, for severance, restructuring and integration charges;

- Increased incentive compensation of approximately \$50 million during 2014;

- Approximately \$40 million in cost savings during 2014 resulting from the 2014 global restructuring program; and

- Environmental reserve expense adjustments of \$29 million and \$22 million during 2014 and 2013, respectively.

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(In millions)	2015	2014	2013	2015 change	2014 change
Research and development expense	\$110	\$114	\$142	\$(4	) \$(28

Research and development expenses during 2015 decreased \$4 million as compared to 2014. The current year includes an impairment of \$11 million compared to \$13 million in the prior year related to certain IPR&D assets associated with the acquisition of ISP.

Research and development expenses for 2014 decreased \$28 million as compared to 2013. As noted previously, 2014 included an impairment related to certain IPR&D assets associated with the acquisition of ISP of \$13 million compared to a \$41 million impairment in 2013.

(In millions)	2015	2014	2013	2015 change	2014 change
Equity and other income (loss)					
Equity income (loss)	\$1	\$(25	) \$26	\$26	\$(51
Other income	22	27	38	(5	) (11
	\$23	\$2	\$64	\$21	\$(62

Total equity and other income increased \$21 million during 2015 compared to 2014. Equity income increased \$26 million in the current year primarily due to a \$50 million impairment during the prior year related to the ASK joint venture equity investment within the Performance Materials reportable segment, partially offset by \$10 million of lost income from the ASK joint venture as a result of its June 2014 sale. The current year included a \$14 million impairment related to the Venezuelan joint venture equity investment within the Valvoline reportable segment. Other income in the prior year included income of \$8 million from a favorable arbitration ruling on a commercial contract within the Valvoline reportable segment.

Total equity and other income decreased \$62 million during 2014 compared to 2013. Equity income (loss) declined \$51 million during 2014 primarily due to the \$50 million impairment during the period within the ASK joint venture equity investment. The decrease in other income during 2014 is primarily due to a gain during 2013 of \$13 million resulting from Ashland's settlement of a claim related to sales commissions and receivables within the Specialty Ingredients reportable segment. These decreases were partially offset by income of \$8 million from a favorable arbitration ruling on a commercial contract within the Valvoline reportable segment during 2014.

(In millions)	2015	2014	2013	2015 change	2014 change
Net interest and other financing expense (income)					
Interest expense	\$166	\$163	\$273	\$3	\$(110
Interest income	(6	) (6	) (4	) —	(2
Available-for-sale securities income	(3	) —	—	(3	) —
Other financing costs	17	9	13	8	(4
	\$174	\$166	\$282	\$8	\$(116

Interest expense and other financing costs, excluding interest income and available-for-sale income, increased \$11 million in 2015 compared to 2014. Excluding certain current year charges associated with the 2015 refinancing, interest expense remained relatively consistent with the prior year as generally lower interest rates offset higher debt levels during the year. As previously noted, 2015 included certain charges related to the 2015 refinancing. These included \$2 million of accelerated amortization for previously capitalized debt issuance costs and \$2 million of new debt issuance costs recognized immediately associated with the 2015 refinancing activities. Other financing costs

included a \$9 million charge related to the early redemption premium payment for the tender of the 2016 senior notes. The available-for-sale securities income of \$3 million represents investment income related to the restricted investments discussed in Note F of the Notes to Consolidated Financial Statements.

Interest expense and other financing costs, excluding interest income, declined \$114 million in 2014 compared to 2013. During 2013 there were significant charges included within the interest expense captions. Interest expense included a \$47 million charge for the accelerated amortization of debt issuance and other costs resulting from the repayment of the 2011 Senior Credit Facility, as well as a \$52 million charge resulting from the termination of the interest rate swap agreements associated with the 2011 Senior

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Credit Facility. The 2013 period also included a \$3 million charge for debt issuance costs and the original issue discount from certain instruments, as well as a \$4 million charge related to an early redemption premium payment, both resulting from Ashland's repayment of the remaining 9.125% senior notes during 2013. Excluding these charges of \$106 million during 2013, interest expense and other financing costs declined \$8 million during 2014 primarily due to a lower outstanding debt balance for most of 2014 compared to 2013.

(In millions)	2015	2014	2013	2015 change	2014 change
Net gain (loss) on divestitures					
Elastomers	\$(86 )	\$—	\$—	\$(86 )	\$—
Valvoline car care products	(26 )	—	—	(26 )	—
MAP Transaction adjustments	(6 )	4	(8 )	(10 )	12
PVAc divestiture	—	—	1	—	(1 )
Other	3	—	(1 )	3	1
	\$(115 )	\$4	\$(8 )	\$(119 )	\$12

Net loss on divestitures during 2015 includes the pre-tax loss on sale related to Elastomers of \$86 million, the \$26 million impairment for the Valvoline car care products assets, and the \$6 million reduction related to the 2005 transfer of Ashland's 38% interest in the Marathon Ashland Petroleum joint venture and two other small businesses to Marathon Oil Corporation (Marathon) (the MAP Transaction) receivable, primarily due to the January 2015 asbestos insurance settlement.

Net gain on divestitures during 2014 includes a gain resulting from the receipt of a tax credit reimbursement and other subsequent adjustments related to the MAP Transaction for certain state tax attributes.

Net loss on divestitures during 2013 includes a \$14 million expense settlement and several favorable tax adjustments related to the MAP Transaction.

(In millions)	2015	2014	2013	2015 change	2014 change
Income tax expense (benefit)	\$(22 )	\$(188 )	\$196	\$166	\$(384 )
Effective tax rate	(13 )%	(162 )%	26 %	%	%
Effective tax rate (excluding key items)	23 %	20 %	22 %	%	%

The fiscal 2015 effective tax rate was impacted by net favorable items predominantly due to certain valuation allowance releases related to state deferred tax assets. These favorable adjustments were partially offset by an accrual for an unrecognized tax benefit and tax related to certain global restructuring steps.

Income tax benefit for 2014 included a \$168 million tax benefit related to the reversal of deferred tax liabilities for outside basis differences and other related matters, a charge of \$39 million for taxes associated with the sale of shares of subsidiaries included in the sale of the Water Technologies business, net charges of \$32 million for uncertain tax positions and related matters, a charge of \$14 million for a foreign income tax rate change and other net discrete item charges of \$7 million primarily related to changes in valuation allowances. During the quarter ended September 30, 2014, as a result of an updated analysis of future cash needs in the U.S. and opportunities for investment outside the U.S., including the use of proceeds from the Water Technologies sale, Ashland changed its assertion related to the historical earnings of certain subsidiaries, and reversed deferred tax liabilities of \$168 million (as noted previously), resulting in a tax benefit in 2014.

Income tax expense for 2013 included a zero benefit recorded on the MAP Transaction charge of \$14 million and a net benefit of \$16 million primarily attributable to a foreign income tax rate change.

(In millions)	2015	2014	2013	2015 change	2014 change
Income (loss) from discontinued operations (net of taxes)					
Asbestos-related litigation matters	\$ 110	\$ 6	\$ 2	\$ 104	\$ 4
Water Technologies	6	151	124	(145)	) 27
Distribution	1	—	(6	) 1	6
APAC	1	4	10	(3	) (6
	\$ 118	\$ 161	\$ 130	\$(43	) \$31

The current year included an after-tax gain of \$120 million related to the January 2015 asbestos insurance settlement, partially offset by after-tax net expense adjustments to the asbestos reserves and receivables, including the adjustments for changes in estimates as well as a deferred tax adjustment. The results for income from discontinued operations for 2014 and 2013 also includes favorable net adjustments (after-tax) to the asbestos reserve and related receivables of \$6 million and \$2 million during 2014 and 2013, respectively.

Water Technologies activity during 2015 related primarily to income of \$5 million due to a foreign pension plan remeasurement discussed in Note M in Notes to Consolidated Financial Statements as well as other post-closing adjustments. The 2014 period includes an after-tax gain of \$92 million on the sale of Water Technologies and ten months of Water Technologies' operating results as compared to a full year of operating results for 2013 as a result of the July 31, 2014 sale of the Water Technologies business to CD&R. Water Technologies sales for 2014 and 2013 included in discontinued operations were \$1,475 million and \$1,722 million, respectively. Gross profit margin, on a comparable and adjusted basis, was 35.0% and 33.7%, respectively. On a comparable and adjusted basis the operating income for Water Technologies during 2014 and 2013 was \$111 million and \$92 million, respectively.

The reported results for Water Technologies in 2014 included \$29 million from depreciation and amortization that was recorded before the announced definitive agreement signed in February 2014. Due to Water Technologies designation as held for sale within the Consolidated Balance Sheets, no future depreciation or amortization was recorded. Additionally, 2014 and 2013 reported results included a loss of \$19 million and a gain of \$81 million, respectively for pension and other postretirement plan remeasurement net losses or gains, which is discussed further in Note M of the Notes to the Consolidated Financial Statements. Also, 2013 included an \$11 million charge for restructuring.

The operational results for income from discontinued operations for 2015, 2014 and 2013 also include subsequent environmental and tax adjustments to the previously divested businesses of Ashland Distribution (Distribution) and Ashland Paving And Construction, Inc. (APAC).

#### Other comprehensive income (loss)

A comparative analysis of the components of other comprehensive income (loss) is provided below for the last three fiscal years ended September 30.

(In millions)	2015	2014	2013	2015 change	2014 change
Other comprehensive income (loss) (net of taxes)					
Unrealized translation gain (loss)	\$(369	) \$(160	) \$37	\$(209	) \$(197
Pension and postretirement obligation adjustment	(18	) (21	) (5	) 3	(16
Unrealized loss on available-for-sale securities	(11	) —	—	(11	) —
Net change in interest rate hedges	—	—	38	—	(38
	\$(398	) \$(181	) \$70	\$(217	) \$(251

Total other comprehensive loss, net of tax, decreased \$217 million in 2015 as compared to 2014 as a result of the following components.

In 2015, other comprehensive loss, net of tax, from foreign currency translation adjustments was \$369 million, compared to \$160 million in 2014, mainly as a result of the strengthening of the U.S. Dollar against other global currencies, including the Euro and Australian dollar. The fluctuations in unrealized translation losses are primarily due to translating foreign subsidiary financial statements from local currencies to U.S. Dollars.

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Pension and postretirement obligation adjustment was \$18 million and \$21 million in 2015 and 2014, respectively. Of these amounts, \$17 million and \$25 million during 2015 and 2014, respectively, of

- unrecognized prior service credits, net of tax, related to pension and other postretirement benefit plans were amortized and reclassified into net income, while cost of \$1 million and credit of \$4 million, respectively, of additional unrecognized prior service, net of tax, was included in other comprehensive loss.

\$11 million of unrealized loss on available-for-sale securities, net of tax, related to the restricted investments, was recognized within other comprehensive loss during 2015.

Total other comprehensive income (loss), net of tax, decreased \$251 million in 2014 as compared to 2013 as a result of the following components.

In 2014, other comprehensive loss, net of tax, from foreign currency translation adjustments was \$160 million, of which \$166 million was recognized within other comprehensive income during 2014, compared to a gain of \$37 million in 2013. The fluctuations in unrealized translation are primarily due to translating foreign subsidiary financial statements from local currencies to U.S. Dollars. The change in this caption is a result of the U.S. dollar strengthening against the Euro during the last quarter of 2014. Additionally, as a result of the sale of Water Technologies during 2014, \$6 million of translation losses were reclassified into net income.

Pension and postretirement obligation adjustment was \$21 million and \$5 million in 2014 and 2013, respectively. Of these amounts, \$25 million and \$15 million during 2014 and 2013, respectively, of unrecognized prior service credits, net of tax, related to pension and other postretirement benefit plans were amortized and reclassified into net income, while \$4 million and \$10 million, respectively, of additional unrecognized prior service credit, net of tax, was included in other comprehensive income (loss).

During 2013, \$38 million of a net change related to interest rate hedges was recognized. Of this amount, \$41 million, net of tax, was reclassified into net income for losses related to the interest rate hedges terminated during the year, while \$3 million of an unrealized loss was recorded prior to the termination.

#### RESULTS OF OPERATIONS – REPORTABLE SEGMENT REVIEW

Subsequent to the sale of Water Technologies and a business realignment during 2014, Ashland's businesses are managed within three reportable segments: Specialty Ingredients, Performance Materials and Valvoline.

The 2014 business realignment resulted in the re-organization of Specialty Ingredients into two divisions: Consumer Specialties and Industrial Specialties, with the adhesives category joining the Industrial Specialties division, moving over from Performance Materials. While, Performance Materials became comprised of three divisions: 1) Intermediates/Solvents, which moved over from Specialty Ingredients and serves both Ashland's internal butanediol needs as well as the merchant market; 2) Composites, which serves construction, transportation, marine and other markets; and 3) Elastomers, which primarily served the North American replacement tire market prior to its December 1, 2014 sale. The business realignment during 2014 did not affect the Valvoline business, as it remained unchanged compared to prior year periods.

Results of Ashland's reportable segments are presented based on its management structure and internal accounting practices. The structure and practices are specific to Ashland; therefore, the financial results of Ashland's reportable segments are not necessarily comparable with similar information for other comparable companies. Ashland allocates all costs to its reportable segments except for certain significant company-wide restructuring activities, such as certain restructuring plans described in Note E of Notes to Consolidated Financial Statements, and other costs or adjustments that relate to former businesses that Ashland no longer operates. The service cost component of pension and other postretirement benefits costs is allocated to each reportable segment on a ratable basis; while the remaining components of pension and other postretirement benefits costs are recorded to Unallocated and other. Ashland refines its expense allocation methodologies to the reportable segments from time to time as internal accounting practices are improved, more refined information becomes available and the industry or market changes. Revisions to Ashland's methodologies that are deemed insignificant are applied on a prospective basis.

The EBITDA and Adjusted EBITDA amounts presented within this business section are provided as a means to enhance the understanding of financial measurements that Ashland has internally determined to be relevant measures of comparison for each reportable segment. Each of these non-GAAP measures is defined as follows: EBITDA (operating income plus depreciation and amortization), Adjusted EBITDA (EBITDA adjusted for key items, which may include pro forma effects for significant acquisitions or divestitures, as applicable), and Adjusted EBITDA margin (Adjusted EBITDA, which may include pro forma adjustments, divided by sales or sales adjusted for pro forma results). Ashland does not allocate items to each reportable segment below operating income, such as interest expense and income taxes. As a result, reportable segment EBITDA and Adjusted EBITDA are reconciled directly to operating income since it is the most directly comparable U.S. GAAP measure.

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The following table shows sales, operating income and statistical operating information by reportable segment for each of the last three years ended September 30.

(In millions)	2015	2014	2013		
Sales					
Specialty Ingredients	\$2,263	\$2,498	\$2,478		
Performance Materials	1,157	1,582	1,617		
Valvoline	1,967	2,041	1,996		
	\$5,387	\$6,121	\$6,091		
Operating income (loss)					
Specialty Ingredients	\$239	\$253	\$243		
Performance Materials	87	7	106		
Valvoline	359	323	295		
Unallocated and other	(227)	(537)	395	)	)
	\$458	\$46	\$1,039		
Depreciation and amortization					
Specialty Ingredients	\$244	\$262	\$242		
Performance Materials	59	91	75		
Valvoline	38	37	35		
Unallocated and other	—	3	4		
	\$341	\$393	\$356		
Operating information					
Specialty Ingredients (a)					
Sales per shipping day	\$8.9	\$9.9	\$9.8		
Metric tons sold (thousands)	324.3	355.2	336.1		
Gross profit as a percent of sales	32.4	% 31.2	% 30.8	%	%
Performance Materials (a)					
Sales per shipping day	\$4.6	\$6.3	\$6.4		
Metric tons sold (thousands)	476.6	591.1	582.8		
Gross profit as a percent of sales	18.8	% 13.1	% 14.9	%	%
Valvoline (a)					
Lubricant sales gallons	167.4	162.6	158.4		
Premium lubricants (percent of U.S. branded volumes)	40.2	% 37.1	% 33.6	%	%
Gross profit as a percent of sales	35.6	% 31.8	% 31.6	%	%

(a) Sales are defined as sales and operating revenues. Gross profit is defined as sales, less cost of sales.

Sales by region expressed as a percentage of reportable segment sales for each of the last three fiscal years ended September 30 were as follows. Ashland includes only U.S. and Canada in its North American designation.

Sales by Geography	2015				
	Specialty Ingredients		Performance Materials		Valvoline
North America	39	%	43	%	73
Europe	32	%	37	%	8
Asia Pacific	19	%	14	%	14
Latin America & other	10	%	6	%	5
	100	%	100	%	100

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	2014				
Sales by Geography	Specialty Ingredients		Performance Materials		Valvoline
North America	39	%	48	%	72 %
Europe	33	%	33	%	9 %
Asia Pacific	18	%	14	%	14 %
Latin America & other	10	%	5	%	5 %
	100	%	100	%	100 %

  

	2013				
Sales by Geography	Specialty Ingredients		Performance Materials		Valvoline
North America	42	%	48	%	73 %
Europe	31	%	34	%	9 %
Asia Pacific	17	%	12	%	14 %
Latin America & other	10	%	6	%	4 %
	100	%	100	%	100 %

#### Specialty Ingredients

Specialty Ingredients is a global leader in cellulose ethers, vinyl pyrrolidones and biofunctionals. It offers industry-leading products, technologies and resources for solving formulation and product-performance challenges. Specialty Ingredients uses natural, synthetic and semisynthetic polymers derived from plant and seed extract, cellulose ethers, vinyl pyrrolidones, acrylic polymers as well as polyester and polyurethane-based adhesives. Specialty Ingredients includes two divisions, Consumer Specialties and Industrial Specialties, that offer comprehensive and innovative solutions for today's demanding consumer and industrial applications. Key customers include: pharmaceutical companies; makers of personal care products, food and beverages; manufacturers of paint, coatings and construction materials; packaging and converting; and oilfield service companies.

During 2015, Ashland sold the industrial biocides assets within Specialty Ingredients. For additional information on this divestiture, see the "Key Developments" section of Management's Discussion and Analysis herein.

#### 2015 compared to 2014

Specialty Ingredients' sales decreased \$235 million, or 9%, to \$2,263 million in 2015. Energy market sales decreased \$106 million compared to the prior year primarily due to lower volume, in part due to the exit of the straight guar powder market. Excluding this effect of the energy market, sales decreased by \$129 million with unfavorable foreign currency exchange decreasing sales by \$105 million due to the U.S. dollar strengthening compared to various foreign currencies. Pricing declines, the exit from the redispersible powders product line and the divestiture of the industrial biocides assets decreased sales by \$27 million, \$19 million and \$11 million, respectively, while changes in volume and product mix increased sales by \$33 million.

Gross profit during 2015 decreased \$47 million compared to 2014. The current year includes \$17 million of severance and other costs, \$6 million of accelerated depreciation relating to a manufacturing facility restructuring plan and a \$13 million charge related to a customer claim, while the prior year included a \$19 million impairment charge related to a foreign operation. Gross profit decreased \$22 million compared to the prior year primarily driven by lower volumes for customers within the energy market. Excluding the energy market and the costs noted previously, gross profit decreased by \$8 million compared to 2014. Unfavorable foreign currency exchange decreased gross profit by \$51 million as the U.S. dollar strengthened compared to various foreign currencies. Favorable costs, primarily due to lower raw material costs, were partially offset by pricing declines, and increased gross profit by \$23 million while volume and product mix combined to increase gross profit by \$20 million. In total, gross profit margin during 2015 increased 1.2 percentage points as compared to 2014 to 32.4%.



Selling, general and administrative expense (which includes research and development expenses throughout the reportable segment discussion and analysis) decreased \$33 million, or 6%, during 2015 as compared to 2014. This decrease was primarily due to \$41 million expense savings realized from the 2014 global restructuring program and a favorable foreign currency exchange of \$22 million. Additionally, research and development expenses decreased \$2 million compared to the prior year as the current and prior year included \$11 million and \$13 million of noncash impairments related to certain IPR&D assets, respectively. These decreases were partially offset by increased general company allocated resource costs of \$21 million and increased employee benefit costs of \$4 million. The current year also included a \$3 million environmental charge compared to \$1 million in the prior year. Equity and other income remained consistent with the prior year.

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Operating income totaled \$239 million for 2015 compared to \$253 million in 2014. EBITDA decreased \$19 million to \$477 million in 2015. Adjusted EBITDA decreased \$2 million to \$527 million in 2015. Adjusted EBITDA margin increased 2.1 percentage points in 2015 to 23.3%.

2014 compared to 2013

Specialty Ingredients' sales increased \$20 million, or 1%, to \$2,498 million in 2014. Excluding the effect of guar products, sales increased by \$85 million with volume and mix combined increasing sales by \$80 million and currency exchange increasing sales by \$19 million. These increases were partially offset by pricing which decreased sales by \$14 million. Guar product sales decreased \$65 million compared to 2013 as guar powder sales declined by \$77 million.

Gross profit during 2014 increased \$16 million compared to 2013. Gross profit in 2014 included a \$19 million impairment charge related to a foreign operation. Gross profit in 2013 included a \$31 million loss on guar inventory, as well as a \$22 million gain resulting from Ashland's settlement of an insurance claim. Volume and product mix combined to increase gross profit by \$17 million while improved sales pricing compared to costs resulted in a net favorable impact of \$2 million. In addition, favorable currency exchange increased gross profit by \$7 million. In total, gross profit margin during 2014 increased 0.4 percentage points as compared to 2013 to 31.2%.

Selling, general and administrative expense decreased \$12 million, or 2%, during 2014 as compared to 2013.

Research and development expenses decreased by \$27 million primarily due to 2013 including \$41 million of noncash impairment charges related to certain IPR&D assets compared to \$13 million in 2014. This decrease was partially offset by increased general company allocated resource costs of \$14 million. Equity and other income decreased \$18 million in 2014 compared to 2013 primarily due to income of \$13 million recorded during 2013 to resolve a claim, as well as \$5 million of a decrease in equity income and other items.

Operating income totaled \$253 million during 2014 compared to \$243 million in 2013. EBITDA increased \$11 million to \$496 million in 2014. Adjusted EBITDA increased \$38 million to \$529 million in 2014. Adjusted EBITDA margin increased 1.4 percentage points in 2014 to 21.2%.

EBITDA and Adjusted EBITDA reconciliation

The following EBITDA and Adjusted EBITDA presentation for the three annual periods is provided as a means to enhance the understanding of financial measurements that Ashland has internally determined to be relevant measures of comparison for the results of Specialty Ingredients. Adjusted EBITDA results have been prepared to illustrate the ongoing effects of Ashland's operations, which exclude certain key items such as the \$17 million of severance and other costs related to a manufacturing facility restructuring plan during the current year. The impairments of \$11 million during 2015, \$13 million during 2014, and \$41 million during 2013 relate to certain IPR&D assets associated with the acquisition of ISP during 2011. The \$19 million charge during 2014 related to the impairment of a foreign operation while the \$6 million of accelerated depreciation in the current year relates to a manufacturing facility restructuring plan. The \$13 million adjustments during 2015 and 2013 related to a customer claim and Ashland's settlement of a customer claim, respectively, during each fiscal year and the \$22 million adjustment during 2013 related to a gain resulting from Ashland's settlement of an insurance claim.

(In millions)	September 30		
	2015	2014	2013
Operating income	\$239	\$253	\$243
Depreciation and amortization (a)	238	243	242
EBITDA	477	496	485
Severance and other costs	17	—	—
Impairment of IPR&D assets	11	13	41
Customer claim	13	—	—
Accelerated depreciation and asset impairment	6	19	—
Environmental reserve adjustment	3	1	—

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Insurance settlement	—	—	(22	)
Settled claim	—	—	(13	)
Adjusted EBITDA	\$527	\$529	\$491	

(a) Excludes \$6 million and \$19 million of accelerated depreciation and asset impairment charges during 2015 and 2014, respectively.

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### Performance Materials

Performance Materials is a global leader in unsaturated polyester resins and vinyl ester resins. The business unit has leading positions in gelcoats, maleic anhydride, butanediol, tetrahydrofuran, N-Methylpyrrolidone and other intermediates and solvents. Key customers include: manufacturers of residential and commercial building products; industrial product specifiers and manufacturers; wind blade and pipe manufacturers; automotive and truck OEM suppliers; boatbuilders; engineered plastics and electronic producers; and specialty chemical manufacturers. Performance Materials is composed of two divisions: Composites and Intermediates/Solvents. Results from the former Elastomers division, which primarily served the North American replacement tire market, accounted for approximately 18% of Ashland Performance Materials' \$1.6 billion in sales in 2014 and operated a 250-person manufacturing facility in Port Neches, Texas. Elastomers results were included in the Performance Materials reportable segment results of operations within the Statements of Consolidated Comprehensive Income until its December 1, 2014 sale.

For additional information on the divestiture of the Elastomers division, see the "Key Developments" section of Management's Discussion and Analysis herein.

#### 2015 compared to 2014

Performance Materials' sales decreased \$425 million, or 27%, to \$1,157 million in 2015. The divestiture of the Elastomers division decreased sales by \$237 million, or 15%. Unfavorable foreign currency exchange and lower product pricing within both Composites and Intermediates/Solvents divisions decreased sales by \$87 million, or 5%, and \$81 million, or 5%, respectively. Unfavorable foreign currency exchange was due to the U.S. dollar strengthening compared to various foreign currencies, primarily the Euro. Volume and changes in product mix decreased sales by \$13 million and \$7 million, respectively.

Gross profit increased \$10 million in 2015 compared to 2014. The prior year included \$30 million of costs associated with plant closures resulting from the 2014 global restructuring program as well as \$35 million of gross profit related to the Elastomers division. The current year was negatively impacted by plant maintenance shutdowns at both Intermediates/Solvents manufacturing facilities which resulted in a \$14 million decrease in gross profit. Excluding the impact of these shutdowns, lower input costs, partially offset by pricing declines, within both Composites and Intermediates/Solvents combined to increase gross profit by \$55 million. Unfavorable currency exchange, driven by the U.S. dollar strengthening compared to certain foreign currencies, and changes in volume and product mix combined to decrease gross profit by \$14 million and \$12 million, respectively. In total, gross profit margin during 2015 increased 5.7 percentage points as compared to 2014 to 18.8%.

Selling, general and administrative expense decreased \$30 million, or 18%, during 2015 compared to 2014, primarily due to the sale of the Elastomers division, which included \$19 million of costs in the prior year, as well as \$4 million in expense savings realized from the 2014 global restructuring program, and favorable foreign currency exchange of \$5 million. These decreases were partially offset by an increase in incentive compensation. The prior year also included a \$5 million legal reserve charge.

Equity and other income increased \$40 million during 2015 compared to 2014, primarily due to a \$50 million impairment for the ASK joint venture equity investment during the prior year, partially offset by a \$10 million decrease due to the loss of equity income from the ASK joint venture as a result of its June 2014 sale.

Operating income totaled \$87 million in 2015 compared to \$7 million in 2014. EBITDA increased \$65 million to \$146 million in 2015. Adjusted EBITDA decreased \$20 million to \$146 million in 2015. Adjusted EBITDA margin increased 2.1 percentage points to 12.6% in 2015.

#### 2014 compared to 2013

Performance Materials' sales decreased \$35 million, or 2%, to \$1,582 million in 2014. Lower product pricing decreased sales \$41 million, or 3%, and changes in product mix decreased sales by \$11 million. Volume increased sales by \$17 million as metric tons sold increased to 591.1 thousand metric tons.

Gross profit decreased \$34 million in 2014 compared to 2013. Both 2014 and 2013 included \$30 million and \$2 million, respectively, of costs associated with plant closures. The prior year plant closure costs are associated with the global restructuring program implemented in 2014, while the 2013 plant closure charges were incurred as part of the ongoing stranded cost and ISP integration programs. In addition, 2013 included a \$20 million inventory charge in the Elastomers division. Pricing declines during 2014, primarily within the Intermediates/Solvents division, reduced gross profit by \$25 million. Volume and changes in product mix combined to decrease gross profit by \$2 million, while favorable currency exchange increased gross profit by \$1 million. In total, gross profit margin during 2014 increased 1.8 percentage points as compared to 2013 to 13.1%.

Selling, general and administrative expense increased \$16 million, or 11%, during 2014 compared to 2013, primarily due to increased incentive compensation of \$5 million and general company allocated resource costs of \$9 million, as well as a \$5 million legal reserve charge, partially offset by decreases in employee expenses of \$3 million. Equity and other income decreased \$49

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million during 2014 compared to 2013, primarily due to a \$50 million impairment charge for the ASK joint venture equity investment during 2014.

Operating income totaled \$7 million in 2014 compared to \$106 million in 2013. EBITDA decreased \$98 million to \$81 million in 2014. Adjusted EBITDA decreased \$15 million to \$166 million in 2014. Adjusted EBITDA margin decreased 0.7 percentage points to 10.5% in 2014.

#### Out-of-Period Adjustments

In fiscal year 2013, Ashland identified an error in the application of lower-of-cost-or-market ("LCM") valuation principles to the inventory of the Elastomers division. As a result, fiscal year 2013 results included out-of-period inventory valuation charges related to the Elastomers division of approximately \$20 million, of which \$8 million related to fiscal year 2013 and \$12 million related to fiscal year 2012. Ashland concluded that the out-of-period inventory valuation charges related to the Elastomers division were immaterial when considered from both a quantitative and a qualitative perspective.

#### EBITDA and Adjusted EBITDA reconciliation

The following EBITDA and Adjusted EBITDA presentation for the three annual periods is provided as a means to enhance the understanding of financial measurements that Ashland has internally determined to be relevant measures of comparison for the results of Performance Materials. Adjusted EBITDA results have been prepared to illustrate the ongoing effects of Ashland's operations, which exclude certain key items such as the \$50 million charge during 2014 related to the impairment of the ASK joint venture equity investment. The \$13 million and \$17 million of severance and accelerated depreciation, respectively, during 2014 related to the 2014 global restructuring program. The \$2 million of accelerated depreciation and other plant closure costs in 2013 were incurred as part of the ongoing stranded cost and ISP integration programs. The \$5 million during 2014 relates to a legal reserve charge.

(In millions)	September 30		
	2015	2014	2013
Operating income	\$87	\$7	\$106
Depreciation and amortization (a)	59	74	73
EBITDA	146	81	179
Impairment of equity investment	—	50	—
Severance	—	13	—
Legal reserve charge	—	5	—
Accelerated depreciation	—	17	2
Adjusted EBITDA	\$146	\$166	\$181

(a) Excludes \$17 million and \$2 million of accelerated depreciation during 2014 and 2013, respectively.

#### Valvoline

Valvoline is a leading, worldwide producer and distributor of premium-branded automotive, commercial and industrial lubricants and automotive chemicals. It ranks as the #2 quick-lube chain and #3 passenger car motor oil brand in the United States. The brand operates and franchises approximately 940 Valvoline Instant Oil Change<sup>SM</sup> centers in the United States. It also markets Valvoline<sup>TM</sup> lubricants and automotive chemicals; MaxLife<sup>TM</sup> lubricants created for higher-mileage engines; SynPower<sup>TM</sup> synthetic motor oil; and Zerex<sup>TM</sup> antifreeze. Key customers include: retail auto parts stores and mass merchandisers who sell to consumers; installers, such as car dealers, repair shops and quick lubes; commercial fleets; and distributors.

During 2015, Ashland sold its Valvoline car care product assets, including Car Brite<sup>TM</sup> and Eagle One<sup>TM</sup> automotive appearance products, and sold its joint venture equity investment within Venezuela. Additionally during 2015, Ashland announced a plan to separate Valvoline. The separation is expected to be completed as soon as practicable, but not before the end of fiscal 2016. For additional information on the divestitures, see the "Key Developments"

section of Management's Discussion and Analysis herein.

2015 compared to 2014

Valvoline's sales decreased \$74 million, or 4%, to \$1,967 million in 2015. Unfavorable foreign currency exchange and lower product pricing decreased sales by \$70 million, or 3%, and \$53 million, or 3%, respectively. Unfavorable foreign currency exchange was due to the U.S. dollar strengthening compared to various foreign currencies, primarily the Euro and Australian dollar. Higher volume levels and changes in product mix increased sales by \$55 million, or 3%, and \$10 million, respectively. The divestiture of Valvoline car care product assets on June 30, 2015 decreased sales by \$16 million compared to the prior year.

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Gross profit increased \$51 million during 2015 compared to 2014. Lower raw material costs, partially offset by lower product pricing, increased gross profit by \$52 million. Changes in volume and product mix combined to increase gross profit by \$20 million, while unfavorable foreign currency exchange decreased gross profit by \$18 million. The divestiture of Valvoline car care product assets also decreased gross profit by \$3 million. In total, gross profit margin during 2015 increased 3.8 percentage points to 35.6%.

Selling, general and administrative expense decreased \$7 million, or 2%, during 2015 as compared to 2014, primarily as a result of \$20 million of cost savings from the 2014 global restructuring as well as declines from favorable foreign currency exchange of \$9 million. These decreases were partially offset by increased employee and general company allocated resource costs of \$9 million, as well as legal and technology expenses of \$5 million and advertising costs of \$5 million.

Equity and other income decreased by \$22 million during 2015 compared to 2014, primarily due to an \$8 million favorable arbitration ruling on a commercial contract in the prior year and the \$14 million impairment of a joint venture equity investment within Venezuela in the current year. For additional information see Note B in the Notes to Condensed Consolidated Financial Statements.

Operating income totaled \$359 million in 2015 as compared to \$323 million in 2014. EBITDA increased \$37 million to \$397 million in 2015. Adjusted EBITDA increased \$51 million to \$411 million in 2015. Adjusted EBITDA margin increased 3.3 percentage points to 20.9% in 2015.

2014 compared to 2013

Valvoline's sales increased \$45 million, or 2%, to \$2,041 million in 2014. Volume increased sales by \$37 million, or 2%, as lubricant gallons sold increased to 162.6 million gallons during 2014. Changes in product mix and improved pricing increased sales by \$15 million and \$4 million, respectively. Unfavorable currency exchange decreased sales \$11 million.

Gross profit increased \$17 million during 2014 compared to 2013. Changes in volume and product mix combined to increase gross profit by \$16 million, while price improvements increased gross profit by \$4 million. The currency exchange effect during the year reduced gross profit by \$3 million. In total, gross profit margin during 2014 increased 0.2 percentage points to 31.8%.

Selling, general and administrative expense decreased \$5 million, or 1%, during 2014 as compared to 2013, primarily as a result of decreased advertising and promotional expenses of \$13 million, partially offset by increased general company allocated resource costs of \$8 million. Equity and other income increased by \$6 million during 2014 compared to 2013, primarily due to a favorable arbitration ruling on a commercial contract during 2014.

Operating income totaled \$323 million in 2014 as compared to \$295 million in 2013. EBITDA increased \$30 million to \$360 million in 2014. EBITDA margin increased 1.1 percentage points to 17.6% in 2014. There were no unusual or key items that affected comparability for EBITDA during 2014 and 2013.

EBITDA and Adjusted EBITDA reconciliation

The following EBITDA and Adjusted EBITDA presentation for the three annual periods is provided as a means to enhance the understanding of financial measurements that Ashland has internally determined to be relevant measures of comparison for the results of Valvoline. Adjusted EBITDA results have been prepared to illustrate the ongoing effects of Ashland's operations, which exclude certain key items. The \$14 million adjustment in the current year related to the impairment of a joint venture equity investment within Venezuela. There were no unusual or key items that affected comparability for Adjusted EBITDA during 2014 and 2013.

(In millions)	September 30		
	2015	2014	2013
Operating income	\$359	\$323	\$295
Depreciation and amortization	38	37	35
EBITDA	397	360	330
Impairment of equity investment	14	—	—



Adjusted EBITDA	\$411	\$360	\$330
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Unallocated and other

The following table summarizes the key components of the Unallocated and other segment's operating income (loss) for each of the last three years ended September 30.

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(In millions)	September 30		
	2015	2014	2013
Gain (losses) on pension and other postretirement plan remeasurement	\$(255 )	\$(438 )	\$417 )
Pension and other postretirement net periodic income (a)	54	54	68
Restructuring activities (includes stranded costs from Water Technologies)	(8 )	(129 )	(64 )
Environmental reserves for divested businesses	(29 )	(28 )	(22 )
Tax indemnity income	16	—	—
Other income (expense)	(5 )	4	(4 )
Total unallocated income (expense)	\$(227 )	\$(537 )	\$395

(a) Amounts exclude service costs of \$27 million during 2015 and \$30 million during each of 2014 and 2013 which are allocated to Ashland's reportable segments.

Unallocated and other recorded expense of \$227 million for 2015, expense of \$537 million for 2014, and income of \$395 million for 2013. Unallocated and other includes pension and other postretirement net periodic costs and income within continuing operations that have not been allocated to reportable segments. These costs include interest cost, expected return on assets and amortization of prior service credit, which resulted in income of \$54 million during each of 2015 and 2014, and \$68 million in 2013. Unallocated and other also includes gains and losses on pension and other postretirement plan remeasurements, which resulted in a loss of \$255 million in 2015, a loss of \$438 million in 2014, and a gain of \$417 million in 2013. Fluctuations in these amounts from year to year result primarily from changes in the discount rate but are also partially affected by differences between the expected and actual return on plan assets during each year as well as other changes in other actuarial assumptions such as changes in demographic data or mortality assumptions. For additional information regarding the actual remeasurement for certain key assumptions for each year, see MD&A - Critical Accounting Policies - Employee benefit obligations and Note M of Notes to Consolidated Financial Statements.

Unallocated and other also includes restructuring expense of \$8 million, \$98 million, and \$30 million during 2015, 2014, and 2013, respectively, primarily related to severance programs as well as certain indirect corporate costs of \$31 million and \$34 million in 2014 and 2013, respectively, previously allocated to the Water Technologies business. Restructuring expense in 2015 and 2014 was associated with the 2014 global restructuring program while 2013 related primarily to certain severance programs and other ISP integration activities.

Additionally, unallocated and other includes environmental charges related to previously divested businesses of \$29 million, \$28 million and \$22 million during 2015, 2014, and 2013, respectively. The current year also includes \$16 million of tax indemnity income and expense of \$7 million for the stock incentive plan award modification.

## FINANCIAL POSITION

### Liquidity

Ashland had \$1,257 million in cash and cash equivalents as of September 30, 2015, of which \$1,223 million was held by foreign subsidiaries and had no significant limitations that would prohibit remitting the funds to satisfy corporate obligations. However, if this amount was repatriated to the United States, additional taxes would likely need to be accrued and paid depending upon the source of the earnings remitted. Ashland currently has no plans to repatriate any amounts for which additional U.S. taxes would need to be accrued.

Ashland's cash flows from operating, investing and financing activities, as reflected in the Statements of Consolidated Cash Flows, are summarized as follows.

(In millions)	2015	2014	2013
Cash provided (used) by:			

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Operating activities from continuing operations	\$89	\$580	\$653
Investing activities from continuing operations	(417	) (168	) (272 )
Financing activities from continuing operations	(30	) (1,034	) (592 )
Discontinued operations	269	1,671	32
Effect of currency exchange rate changes on cash and cash equivalents	(47	) (2	) 2
Net increase (decrease) in cash and cash equivalents	\$(136	) \$1,047	\$(177 )

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Ashland paid income taxes of \$226 million during 2015 compared to \$88 million in 2014 and \$69 million in 2013. Cash receipts for interest income were \$6 million in each of 2015 and 2014, and \$4 million in 2013, while cash payments for interest expense amounted to \$149 million in 2015, \$154 million in 2014 and \$182 million in 2013.

Foreign currency exchange had an unfavorable impact on cash and cash equivalents during 2015 primarily as a result of the strengthening of the U.S. dollar compared to foreign currencies, primarily the Euro.

#### Operating activities

The following discloses the cash flows associated with Ashland's operating activities for 2015, 2014 and 2013, respectively.

(In millions)	2015	2014	2013
Cash flows provided (used) by operating activities from continuing operations			
Net income	\$309	\$233	\$683
Income from discontinued operations (net of taxes)	(118)	) (161)	) (130)
Adjustments to reconcile income from continuing operations to cash flows from operating activities			
Depreciation and amortization	341	393	356
Debt issuance cost amortization	18	14	65
Deferred income taxes	(57)	) (294)	) 153
Equity income from affiliates	(15)	) (25)	) (26)
Distributions from equity affiliates	22	14	11
Stock based compensation expense - Note P	30	34	30
Loss on early retirement of debt	9	—	—
Gain on available-for-sale securities	(3)	) —	—
Net loss (gain) on divestitures - Note B	115	(4)	) 8
Impairments of equity investments and in-process research and development	25	63	41
Pension contributions	(610)	) (38)	) (124)
Losses (gain) on pension and postretirement plan remeasurement	255	438	(417)
Change in operating assets and liabilities (a)	(232)	) (87)	) 3
Total cash flows provided by operating activities from continuing operations	\$89	\$580	\$653

(a) Excludes changes resulting from operations acquired or sold.

Cash flows generated from operating activities from continuing operations, a major source of Ashland's liquidity, amounted to \$89 million in 2015, \$580 million in 2014 and \$653 million in 2013. The cash generated during each period is primarily driven by net income results, excluding results from discontinued operations, and adjusted for certain non-cash items such as depreciation and amortization (including debt issuance cost amortization) and remeasurement adjustments to the pension and other postretirement plans, as well as changes in working capital, which are fluctuations within accounts receivable, inventory, and trade and other payables. Ashland continues to emphasize working capital management as a high priority and focus.

The significant decline in operating cash flow during the current year related primarily to \$610 million of pension contributions, which includes the \$500 million voluntary pension plan contribution made during 2015 for plans impacted by the pension plan settlement program. See Note M in Notes to Consolidated Financial Statements for further information. Operating cash flows for 2014 and 2013 also included pension contributions of \$38 million and \$124 million, respectively.

The following details certain changes in key operating assets and liabilities for 2015, 2014 and 2013, respectively.

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(In millions)	2015	2014	2013
Changes in assets and liabilities (a)			
Accounts receivable	\$261	\$(16)	) \$43
Inventories	39	(4)	) 106
Trade and other payables	(229)	) 64	(7)
Other assets and liabilities	(303)	) (131)	) (139)
Change in operating assets and liabilities	\$(232)	) \$(87)	) \$3

(a) Excludes changes resulting from operations acquired or sold.

Changes in net working capital accounted for inflows of \$71 million, \$44 million and \$142 million in 2015, 2014 and 2013, respectively, and were driven by the following:

Accounts receivable - Changes in accounts receivable resulted in a \$261 million inflow of cash in 2015 compared to \$16 million of cash outflows in 2014 and \$43 million of cash inflows in 2013. The larger use of cash during 2014 was due to increased sales compared to 2015 and 2013.

Inventory - Changes in inventory resulted in cash inflows of \$39 million in 2015 compared to cash outflows of \$4 million in 2014 and cash inflows of \$106 million in 2013. During 2013, there were decreased inventory levels, primarily within the Specialty Ingredients reportable segment, resulting from lower value guar-based product sold during the year.

Trade and other payables - Changes in trade and other payables resulted in cash outflows of \$229 million in 2015 compared to cash inflows of \$64 million in 2014 and cash outflows of \$7 million in 2013. During 2014, there were increased accruals for incentive compensation and severance related to the 2014 global restructuring which resulted in large cash outflows in 2015. Approximately \$60 million of incentive compensation payments and \$45 million of severance payments related to restructuring activities were made during 2015 compared to 2014 which had approximately \$15 million of incentive compensation payments and \$52 million of severance payments. The remaining cash outflows during 2015, 2014, and 2013 of \$303 million, \$131 million and \$139 million, respectively, were primarily due to income taxes paid, interest paid, and adjustments to certain accruals and long term assets and liabilities.

Operating cash flows for 2015 included income from continuing operations of \$191 million, \$255 million of net losses on pension and other postretirement plan remeasurements and noncash adjustments of \$341 million for depreciation and amortization, and \$18 million for debt issuance cost amortization. Operating cash flows for 2015 also included noncash adjustments of \$25 million related to the impairment of the Venezuelan joint venture equity investment and certain IPR&D assets associated with the acquisition of ISP.

Operating cash flows for 2014 included income from continuing operations of \$72 million, \$438 million of net losses on pension and other postretirement plan remeasurements and noncash adjustments of \$393 million for depreciation and amortization, which includes a \$19 million impairment related to a foreign operation and \$14 million for debt issuance cost amortization. Operating cash flows for 2014 also included impairments totaling \$63 million related to the ASK joint venture equity investment and IPR&D assets.

Operating cash flows for 2013 included income from continuing operations of \$553 million, a \$417 million actuarial gain on pension and other postretirement plan remeasurement and noncash adjustments of \$356 million for depreciation and amortization, and \$65 million for debt issuance cost amortization. Operating cash flows for 2013 also included impairments totaling \$41 million related to certain IPR&D assets associated with the acquisition of ISP.

## Investing activities

The following discloses the cash flows associated with Ashland's investing activities for 2015, 2014 and 2013.

(In millions)	2015	2014	2013
Cash flows provided (used) by investing activities from continuing operations			
Additions to property, plant and equipment	\$(265 )	\$(248 )	\$(264 )
Proceeds from disposal of property, plant and equipment	3	3	5
Purchase of operations - net of cash acquired	(13 )	—	—
Proceeds (uses) from sale of operations or equity investments	161	92	(13 )
Proceeds from sales of available-for-sale securities	315	—	—
Purchase of available-for-sale securities	(315 )	—	—
Funds restricted for specific transactions	(320 )	(15 )	—
Reimbursements from restricted investments	6	—	—
Proceeds from the settlement of derivative instruments	18	—	—
Payments from the settlement of derivative instruments	(7 )	—	—
Total cash flows used by investing activities from continuing operations	\$(417 )	\$(168 )	\$(272 )

Cash used by investing activities was \$417 million in 2015 compared to \$168 million and \$272 million for 2014 and 2013, respectively. The current period included capital expenditures of \$265 million and proceeds of \$105 million from the sale of the Elastomers division, approximately \$30 million from the sale of industrial biocides assets and \$24 million from the sale of Valvoline car care product assets. Funds restricted for specific transactions represent the receipt of the January 2015 asbestos insurance settlement funds of \$335 million into a restrictive renewable annual trust, partially offset by the reclassification into cash and cash equivalents of \$15 million of assets previously restricted in use for property transactions. The previous restriction of the \$15 million for property transactions occurred in 2014 and is reflected as an investing outflow during 2014. From the restrictive renewable annual trust (derived from the asbestos proceeds received during 2015), Ashland received a \$6 million reimbursement for certain 2015 asbestos disbursements. Additionally, the purchase of and proceeds from the sale of available-for-sale securities of \$315 million relate to investment activity involving equity and corporate bond funds within the asbestos trust. The significant cash investing activities for 2014 included cash outflows of \$248 million for capital expenditures and restricted cash for property transactions of \$15 million previously discussed. These outflows were partially offset by cash inflows related to the sale of the ASK equity investment of \$87 million and \$5 million related to tax receipt from a previously divested business. The significant cash investing activities for 2013 included cash outflows of \$264 million for capital expenditures.

## Financing activities

The following discloses the cash flows associated with Ashland's financing activities for 2015, 2014 and 2013, respectively.

(In millions)	2015	2014	2013
Cash flows provided (used) by financing activities from continuing operations			
Proceeds from issuance of long-term debt	\$1,100	\$—	\$2,320
Repayment of long-term debt	(623 )	(11 )	(2,613 )
Premium on long-term debt repayment	(9 )	—	—
Proceeds (repayment) from short-term debt	(3 )	22	(36 )
Repurchase of common stock	(397 )	(954 )	(150 )
Debt issuance costs	(9 )	—	(38 )
Cash dividends paid	(98 )	(103 )	(88 )

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Excess tax benefits related to share-based payments	9	12	13
Total cash flows used by financing activities from continuing operations	\$(30	) \$(1,034	) \$(592

Cash used by financing activities was \$30 million for 2015, \$1,034 million for 2014, and \$592 million for 2013. Significant cash financing activities during 2015 primarily included the 2015 Senior Credit Agreement, the redemption of the 2016 senior notes, and the repurchase of common stock. As a result of the 2015 Senior Credit Agreement and redemption of the 2016 senior notes, Ashland received \$1,100 million from the issuance of the term loan facility, repaid \$600 million related to the 2016 senior

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notes, paid early redemption premiums of \$9 million and debt issuance costs of \$9 million. In addition, Ashland repurchased \$397 million of common stock under the \$1.35 billion common stock repurchase program and paid cash dividends of \$1.46 per share, for a total of \$98 million.

Significant cash financing activities for 2014 included a \$954 million cash outflow related to the repurchase of common stock under the \$1.35 billion common stock repurchase program. Other significant cash financing activities for 2014 included cash outflows of \$11 million in repayments of long-term debt and \$103 million in cash dividends paid at \$1.36 per share, as well as cash inflows of \$22 million primarily related to draw on the revolver and \$12 million for proceeds from the exercise of stock options and excess tax benefits related to share-based payments.

Significant cash financing activities for 2013 included the proceeds of \$2.3 billion related to Ashland's issuance of the senior notes, offset by repayments of short term debt of \$36 million, as well as \$2.6 billion in repayments of long-term debt, primarily a result of Ashland's repayment of its term loan A and term loan B facilities. Other significant financing activities for 2013 included \$150 million in common stock repurchased, cash dividends paid of \$1.13 per share, that totaled \$88 million, \$38 million in cash paid for debt issuance costs, as well as cash inflows of \$13 million for proceeds from the exercise of stock options and excess tax benefits related to share-based payments.

Cash provided by discontinued operations

The following discloses the cash flows associated with Ashland's discontinued operations for 2015, 2014 and 2013, respectively.

(In millions)	2015	2014	2013
Cash provided (used) by discontinued operations			
Operating cash flows	\$245	\$63	\$80
Investing cash flows	24	1,608	(48)
Total cash flows provided by discontinued operations	\$269	\$1,671	\$32

Cash provided by discontinued operations during 2015 included \$398 million of cash received, before taxes, related to the January 2015 asbestos insurance settlement, and \$48 million of delayed cash proceeds for a foreign entity from the sale of Water Technologies. These inflows were partially offset by \$91 million in tax payments primarily from the Water Technologies sale and a \$20 million payment for the working capital settlement related to the disposition of Water Technologies.

Cash provided by discontinued operations during 2014 included \$1.6 billion of net proceeds from the sale of Water Technologies, net of working capital and other adjustments as defined in the definitive sale agreement as well as transaction costs. Excluding the \$1.6 billion of proceeds, the remaining cash flows related to Water Technologies were \$68 million in 2014. Cash provided by discontinued operations during 2013 includes Water Technologies activities of \$125 million.

The remaining cash flows in each fiscal year principally related to other previously divested businesses and to payment of asbestos and certain environmental liabilities.

Free cash flow and other liquidity information

The following represents Ashland's calculation of free cash flow for the disclosed periods and reconciles free cash flow to cash flows provided by operating activities from continuing operations. Free cash flow does not reflect adjustments for certain non-discretionary cash flows such as mandatory debt repayments. See "Results of Operations - Consolidated Review - Use of non-GAAP measures" for additional information.

(In millions)	September 30		
	2015	2014	2013
Cash flows provided by operating activities from continuing operations	\$89	\$580	\$653
Less:			
Additions to property, plant and equipment	(265)	(248)	(264)

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Discretionary contribution to pension plans	500	—	—
Payment resulting from termination of interest rate swaps (a)	—	—	52
Free cash flows	\$324	\$332	\$441

(a) Since payment was generated from financing activity, this amount has been included within this calculation.

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At September 30, 2015, working capital (current assets minus current liabilities, excluding long-term debt due within one year) amounted to \$1,855 million, compared to \$1,883 million at the end of 2014. Ashland's working capital is affected by its use of the LIFO method of inventory valuation that valued inventories below their replacement costs by \$34 million at September 30, 2015 and \$31 million at September 30, 2014. Liquid assets (cash, cash equivalents and accounts receivable) amounted to 153% of current liabilities at September 30, 2015 and 154% at September 30, 2014. The following summary reflects Ashland's cash, investment securities and unused borrowing capacity as of September 30, 2015, 2014 and 2013.

(In millions)	September 30		
	2015	2014	2013
Cash and cash equivalents	\$ 1,257	\$ 1,393	\$ 346
Unused borrowing capacity			
Revolving credit facility	\$ 1,013	\$ 1,084	\$ 1,119
Accounts receivable securitization facility	\$ 10	\$ —	\$ 80

Total borrowing capacity remaining under the \$1.2 billion senior unsecured revolving credit facility (the 2015 revolving credit facility) was \$1,013 million, due to an outstanding balance of \$110 million, as well as a reduction of \$77 million for letters of credit outstanding at September 30, 2015. In total, Ashland's available liquidity position, which includes cash, the revolving credit facility and accounts receivable securitization facility, was \$2,280 million at September 30, 2015 as compared to \$2,477 million at September 30, 2014 and \$1,545 million at September 30, 2013. For further information, see Note I within Notes to Consolidated Financial Statements.

#### Capital resources

##### Debt

The following summary reflects Ashland's debt as of September 30, 2015 and 2014.

(In millions)	September 30	
	2015	2014
Short-term debt	\$ 326	\$ 329
Long-term debt (including current portion and debt issuance cost discounts) (a)	3,403	2,920
Total debt	\$ 3,729	\$ 3,249

(a) Includes \$28 million and \$31 million of debt issuance cost discounts as of September 30, 2015 and 2014, respectively.

The current portion of long-term debt was \$55 million at September 30, 2015 and \$9 million at September 30, 2014. Debt as a percent of capital employed was 55% at September 30, 2015 and 48% at September 30, 2014. At September 30, 2015, Ashland's total debt had an outstanding principal balance of \$3,907 million, discounts of \$150 million, and debt issuance costs of \$28 million. The scheduled aggregate maturities of debt for the next five fiscal years are as follows: \$381 million in 2016, \$69 million in 2017, \$810 million in 2018, \$143 million in 2019 and \$715 million in 2020.

##### Debt activity during 2015

During June of 2015, Ashland completed certain refinancing transactions related to the \$600 million 3.000% senior notes due in 2016 (2016 senior notes). Ashland commenced and completed a cash tender offer to purchase for cash any and all of its outstanding 2016 senior notes. At the close of the tender offer, \$550 million aggregate principal amount of the 2016 senior notes was tendered by note holders, representing approximately 92% of the outstanding 2016 senior notes, which have been purchased by Ashland. Subsequently, Ashland redeemed the remaining balance of

the 2016 senior notes of \$50 million on July 23, 2015.

In connection with the tender offer and redemption, in June 2015, Ashland entered into a new Credit Agreement (the 2015 Senior Credit Agreement). The 2015 Senior Credit Agreement replaced the \$1.2 billion senior unsecured revolving credit facility (the 2013 Senior Credit Facility), and was comprised of a new five-year senior unsecured revolving credit facility in an aggregate amount of \$1.2 billion (the 2015 revolving credit facility), which includes a \$250 million letter of credit sublimit and a \$100 million swing line loan sublimit, and a five-year senior unsecured term loan facility in an aggregate principal amount of \$1.1 billion (the

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term loan facility). The 2015 Senior Credit Agreement is not guaranteed, is unsecured and can be prepaid at any time without premium or penalty.

At Ashland's option, borrowings under the 2015 revolving credit facility will bear interest at either LIBOR or an alternate base rate, in each case plus the applicable interest rate margin. The loans' interest rate will fluctuate between LIBOR plus 1.375% per annum and LIBOR plus 2.50% per annum (or between the alternate base rate plus 0.375% per annum and the alternate base rate plus 1.50% per annum), based upon Ashland's corporate credit ratings or the consolidated gross leverage ratio (as defined in the 2015 Senior Credit Agreement) (whichever yields a lower applicable interest rate margin) at such time. In addition, Ashland was required to pay fees of 0.25% per annum on the daily unused amount of the 2015 revolving credit facility through and including June 30, 2015, and thereafter the fee rate will fluctuate between 0.175% and 0.40% per annum, based upon Ashland's corporate credit ratings or the consolidated gross leverage ratio (whichever yields a lower fee rate).

During 2015, the potential funding for qualified receivables was reduced from \$275 million to \$250 million. Under the terms of the Transfer and Administration Agreement, CVG Capital III LLC, a wholly-owned "bankruptcy remote" special purpose subsidiary of the Originators (CVG) may, from time to time, obtain up to now \$250 million (in the form of cash or letters of credit for the benefit of Ashland and its subsidiaries) from the Conduit Investors, the Uncommitted Investors and/or the Committed Investors through the sale of an undivided interest in such accounts receivable, related assets and collections. Additionally, during 2015, the termination of the commitments under the Transfer and Administration Agreement under the accounts receivable securitization was extended from August 28, 2015 to December 31, 2015. See Note I of the Notes to Consolidated Financial Statements for further information on this agreement.

At September 30, 2015 and 2014, the outstanding amount of accounts receivable transferred by Ashland to CVG was \$381 million and \$493 million, respectively. Ashland had drawn \$190 million and \$255 million, respectively, under the facility as of September 30, 2015 and 2014 in available funding from qualifying receivables. The weighted-average interest rate for this instrument was 1.8% for 2015 and 1.0% for 2014.

#### Debt activity during 2014

During 2014, the available funding for qualifying receivables under the accounts receivable securitization facility, entered into in 2012, was reduced from \$350 million to \$275 million due to the elimination of Water Technologies as a participant in the accounts receivable securitization. No other material terms of the agreement were amended. The Transfer and Administration Agreement had a term of three years, expiring in August 2015, but was extendable at the discretion of the Investors. See previous discussion on extension during 2015.

#### Debt covenant restrictions

The 2015 Senior Credit Agreement contains usual and customary representations, warranties and affirmative and negative covenants, including financial covenants for leverage and interest coverage ratios, limitations on liens, additional subsidiary indebtedness, restrictions on subsidiary distributions, investments, mergers, sale of assets and restricted payments and other customary limitations. As of September 30, 2015, Ashland is in compliance with all debt agreement covenant restrictions.

The 2015 Senior Credit Agreement defines the consolidated leverage ratio as the ratio of consolidated indebtedness minus cash and cash equivalents to consolidated EBITDA (Covenant Adjusted EBITDA) for any measurement period. In general, the 2015 Senior Credit Agreement defines Covenant Adjusted EBITDA as net income plus consolidated interest charges, taxes, depreciation and amortization expense, fees and expenses related to capital market transactions, restructuring and integration charges, noncash stock and equity compensation expense, and any other nonrecurring expenses or losses that do not represent a cash item in such period or any future period; less any noncash gains or other items increasing net income. The computation of Covenant Adjusted EBITDA differs from the calculation of EBITDA and Adjusted EBITDA, which have been reconciled previously on page M-7. In general, consolidated indebtedness includes debt plus all purchase money indebtedness, banker's acceptances and bank guaranties, deferred purchase price of property or services, attributable indebtedness and guaranties. The maximum

consolidated leverage ratios permitted under the 2015 Senior Credit Agreement are as follows: 3.75 from June 30, 2015 through December 31, 2016 and 3.5 from March 31, 2017 and each fiscal quarter thereafter.

The 2015 Senior Credit Agreement defines the consolidated interest coverage ratio as the ratio of Covenant Adjusted EBITDA to consolidated interest charges for any measurement period. The minimum required consolidated interest coverage ratio under the 2015 Senior Credit Agreement during its entire duration is 3.0.

At September 30, 2015, Ashland's calculation of the consolidated leverage ratio was 2.6 compared to the maximum consolidated leverage ratio permitted under the 2015 Senior Credit Agreement of 3.75. At September 30, 2015, Ashland's calculation of the consolidated interest coverage ratio was 6.4 compared to the minimum required ratio of 3.0. Any change in Covenant Adjusted EBITDA of \$100 million would have an approximate 0.3x effect on the consolidated leverage ratio and a 0.7x effect on the consolidated interest coverage ratio. Any change in consolidated indebtedness of \$100 million would affect the consolidated leverage ratio by approximately 0.1x.

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#### Cash projection

Ashland projects that cash flow from operations and other available financial resources such as cash on hand and revolving credit should be sufficient to meet investing and financing requirements to enable Ashland to comply with the covenants and other terms of its financing obligations. These projections are based on various assumptions that include, but are not limited to: operational results, working capital cash generation, capital expenditures, pension funding requirements and tax payment and receipts.

Based on Ashland's current debt structure, future annual interest expense is expected to be approximately \$170 million based on applicable fixed and floating interest rates, assuming interest rates remain stable.

#### Stockholders' equity

Stockholders' equity decreased \$546 million since September 30, 2014 to \$3,037 million at September 30, 2015. This decrease was primarily due to \$397 million related to share repurchase programs, deferred translation losses of \$369 million, cash dividends of \$98 million, adjustments to pension and other postretirement obligations of \$18 million, and \$11 million for an unrealized loss on available-for-sale securities. These decreases were partially offset by net income during the period of \$309 million and \$38 million in common shares issued under stock incentive and other plans.

#### Stock repurchase programs

During the past three fiscal years, Ashland's Board of Directors has authorized multiple share repurchase programs which are summarized below.

During 2015, Ashland's Board of Directors approved a new \$1 billion share repurchase authorization that will expire on December 31, 2017. This authorization allows for common shares to be repurchased in open market transactions, privately negotiated transactions or pursuant to one or more accelerated stock repurchase programs or Rule 10b5-1 plans. See the "Key Developments" section of Management's Discussion and Analysis herein for information on 2016 stock repurchase activity.

During 2014, the Board of Directors of Ashland authorized a \$1.35 billion common stock repurchase program (the 2014 stock repurchase program). Under the program, Ashland's common shares were repurchased pursuant to accelerated stock repurchase agreements, a Rule 10b5-1 plan, and a prepaid variable share repurchase agreement. This repurchase program was completed during 2015. The 2014 stock repurchase program authorization replaced Ashland's previous \$600 million share repurchase authorization (the 2013 stock repurchase program), approved in May 2013, which had \$450 million remaining when it was terminated.

The following stock repurchase agreements were entered into as part of the \$1.35 billion common stock repurchase program.

#### Accelerated stock repurchase agreements

During 2014, Ashland announced that it has entered into accelerated share repurchase agreements (2014 ASR Agreements) with Deutsche Bank AG, London Branch (Deutsche Bank), and JPMorgan Chase Bank, N.A. (JPMorgan) to repurchase an aggregate of \$750 million of Ashland's common stock. Under the 2014 ASR Agreements, Ashland paid an initial purchase price of \$750 million, split evenly between the financial institutions. As of September 30, 2014, Ashland received an initial delivery of approximately 5.9 million shares of common stock under the 2014 ASR Agreements. The 2014 ASR Agreements had a variable maturity, at the financial institutions option, with a maximum pricing period termination date of June 30, 2015. During 2015, the 2014 ASR Agreements terminated pursuant to their terms and the pricing period was closed. The settlement price, which represents the weighted average price of Ashland's common stock over the pricing period less a discount, was \$116.33 per share. Based on this settlement price, the final number of shares repurchased by Ashland that were delivered by the financial institutions under the 2014 ASR Agreements was 6.4 million shares. Ashland received the additional 0.5 million shares from the financial institutions during 2015 to settle the difference between the initial share delivery and the total number of shares repurchased.

During 2015, Ashland announced and completed accelerated share repurchase agreements (2015 ASR Agreements) with Deutsche Bank and JPMorgan to repurchase an aggregate of \$270 million of Ashland's common stock. Under the 2015 ASR Agreements, Ashland paid an initial purchase price of \$270 million, split evenly between the financial institutions and received an initial delivery of approximately 1.9 million shares of common stock. The 2015 ASR Agreements had a variable maturity, at the financial institutions option, with a maximum pricing period termination date of July 31, 2015. During 2015, Deutsche Bank and JPMorgan exercised their early termination option under the 2015 ASR Agreements and the pricing period was closed. The settlement price, which represents the weighted average price of Ashland's common stock over the pricing period less a discount, was \$125.22 per share. Based on this settlement price, the final number of shares repurchased by Ashland that were delivered by the financial institutions under the 2015 ASR Agreements was 2.2 million shares. Ashland received the additional 0.3 million shares from the financial institutions during 2015 to settle the difference between the initial share delivery and the total number of shares repurchased.

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#### Additional stock repurchase agreements

Ashland entered into and completed a \$125 million prepaid variable share repurchase agreement during 2014. The settlement price, which represents the weighted average price of Ashland's common stock over the pricing period less a discount, was \$105.22 per share. Ashland received 0.8 million shares and \$45 million in cash for the unused portion of the \$125 million prepayment, for a net cash outlay of \$80 million.

During 2014, Ashland announced that it had entered into an agreement with each of Deutsche Bank Securities Inc. and JPMorgan to repurchase an aggregate of \$250 million of Ashland's common stock. Under the terms of the agreement, the financial institutions purchased a pre-determined number of shares on various trading days dependent upon Ashland's prevailing stock price on that date. During 2014, Ashland received 1.2 million shares of common stock for a total cost of \$124 million. During 2015, Ashland completed these agreements, receiving an additional 1.2 million shares of common stock for a total cost of \$127 million. The settlement price, which represents the average amount spent after commissions over the common shares repurchased throughout the program, was \$104.51 per share. In total, Ashland paid \$250 million and received 2.4 million shares of common stock under the agreements.

#### 2013 stock repurchase program agreement

As part of the \$600 million common stock repurchase program, Ashland announced and completed an accelerated share repurchase agreement (2013 ASR Agreement) with Citibank, N.A. (Citibank) during 2013. Under the 2013 ASR Agreement, Ashland paid an initial purchase price of \$150 million to Citibank and received an initial delivery of approximately 1.3 million shares of its common stock. The 2013 ASR Agreement had a variable maturity, at Citibank's option, with a maximum pricing period termination date of August 21, 2013. In June 2013, Citibank exercised its early termination option under the 2013 ASR Agreement and the pricing period was closed. The settlement price, which represents the weighted average price of Ashland's common stock over the pricing period less a discount, was \$86.32 per share. Based on this settlement price, the final number of shares repurchased by Ashland that were to be delivered by Citibank under the 2013 ASR Agreement was 1.7 million shares. Ashland received the additional 0.4 million shares from Citibank in 2013 to settle the difference between the initial share delivery and the total number of shares repurchased.

#### Stockholder dividends

In May 2015, the Board of Directors of Ashland announced a quarterly cash dividend increase to 39 cents per share, \$1.56 per share on an annual basis, to eligible shareholders of record. This amount was paid for quarterly dividends in June and September 2015 and was an increase from the quarterly cash dividend of 34 cents per share paid during the first and second quarters of fiscal 2015.

In May 2013, the Board of Directors of Ashland announced a quarterly cash dividend increase to 34 cents per share, \$1.36 per share on an annual basis, to eligible shareholders of record. This amount was paid for quarterly dividends in fiscal 2014, as well as, June and September 2013 and was an increase from the quarterly cash dividend of 22.5 cents per share paid during the first and second quarters of fiscal 2013.

#### Capital expenditures

Ashland is currently forecasting approximately \$320 million to \$340 million of capital expenditures for 2016, funded primarily from operating cash flows. Capital expenditures were \$265 million for 2015 and averaged \$259 million during the last three years. A summary of capital expenditures by reportable segment during 2015, 2014 and 2013 follow.

(In millions)	2015	2014	2013
Specialty Ingredients	\$171	\$159	\$144
Performance Materials	33	38	43
Valvoline	45	36	41
Unallocated and other	16	15	36
Total capital expenditures	\$265	\$248	\$264

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A summary of the capital employed in Ashland's current operations, which is calculated by adding equity to capital investment, as of the end of the last three years follows.

(In millions)	2015	2014	2013
Capital employed (a)			
Specialty Ingredients	\$5,043	\$5,413	\$5,646
Performance Materials (b)	870	1,121	1,280
Valvoline	653	746	702

Excludes the assets and liabilities classified within unallocated and other which primarily includes debt and other (a) long-term liabilities such as asbestos and pension. The net liability in unallocated and other was \$3,529 million, \$3,697 million and \$3,075 million as of September 30, 2015, 2014 and 2013, respectively.

(b) Decline primarily due to sale of Elastomers during 2015.

#### Contractual obligations and other commitments

The following table aggregates Ashland's obligations and commitments to make future payments under existing contracts at September 30, 2015. Contractual obligations for which the ultimate settlement of quantities or prices are not fixed and determinable have been excluded.

(In millions)	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Contractual obligations					
Raw material and service contract purchase obligations (a)	\$651	\$176	\$244	\$119	\$112
Employee benefit obligations (b)	334	49	67	65	153
Operating lease obligations (c)	190	40	55	34	61
Debt (d)	3,907	381	879	858	1,789
Interest payments (e)	1,551	154	297	238	862
Unrecognized tax benefits (f)	144	—	—	—	144
Total contractual obligations	\$6,777	\$800	\$1,542	\$1,314	\$3,121
Other commitments					
Letters of credit (g)	\$77	\$77	\$—	\$—	\$—

(a) Includes raw material and service contracts where minimal committed quantities and prices are fixed.

Includes estimated funding of Ashland's qualified U.S. and non-U.S. pension plans for 2016, as well as projected benefit payments through 2025 under Ashland's unfunded pension and other postretirement benefit plans. Excludes (b) the benefit payments from the pension plan trust funds. See Note M of Notes to Consolidated Financial Statements for additional information.

(c) Includes leases for office buildings, retail outlets, transportation equipment, warehouses and storage facilities and other equipment. For further information, see Note K of Notes to Consolidated Financial Statements.

(d) Capitalized lease obligations are not significant and are included within this caption. For further information, see Note I of Notes to Consolidated Financial Statements.

(e) Includes interest expense on both variable and fixed rate debt assuming no prepayments. Variable interest rates have been assumed to remain constant through the end of the term at rates that existed as of September 30, 2015.

(f) Due to uncertainties in the timing of the effective settlement of tax positions with respect to taxing authorities, Ashland is unable to determine the timing of payments related to noncurrent unrecognized tax benefits, including

interest and penalties. Therefore, these amounts were included in the “More than 5 years” column.

(g) Ashland issues various types of letters of credit as part of its normal course of business. For further information, see Note I of Notes to Consolidated Financial Statements.

#### OFF-BALANCE SHEET ARRANGEMENTS

As part of its normal course of business, Ashland is a party to various financial guarantees and other commitments. These arrangements involve elements of performance and credit risk that are not included in the Consolidated Balance Sheets. The possibility that Ashland would have to make actual cash expenditures in connection with these obligations is largely dependent on the performance of the guaranteed party, or the occurrence of future events that Ashland is unable to predict. Ashland has reserved the approximate fair value of these guarantees in accordance with U.S. GAAP.

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## NEW ACCOUNTING PRONOUNCEMENTS

For a discussion and analysis of recently issued accounting pronouncements and its impact on Ashland, see Note A of Notes to Consolidated Financial Statements.

## CRITICAL ACCOUNTING POLICIES

The preparation of Ashland's Consolidated Financial Statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, sales and expenses, and the disclosures of contingent assets and liabilities. Significant items that are subject to such estimates and assumptions include, but are not limited to, long-lived assets (including goodwill and other intangible assets), employee benefit obligations, income taxes, liabilities and receivables associated with asbestos litigation and environmental remediation. Although management bases its estimates on historical experience and various other assumptions that are believed to be reasonable under the circumstances, actual results could differ significantly from the estimates under different assumptions or conditions. Management has reviewed the estimates affecting these items with the Audit Committee of Ashland's Board of Directors.

### Long-lived assets

#### Tangible assets

The cost of property, plant and equipment is depreciated by the straight-line method over the estimated useful lives of the assets. Buildings are depreciated principally over 25 to 35 years and machinery and equipment principally over 2 to 25 years. Ashland reviews property, plant and equipment asset groups for impairment whenever events or changes in circumstances indicate the carrying amount of an asset may not be recoverable. Ashland monitors these changes and events on at least a quarterly basis. Examples of events or changes in circumstances could include, but are not limited to, a prolonged economic downturn, current period operating or cash flow losses combined with a history of losses or a forecast of continuing losses associated with the use of an asset group, or a current expectation that an asset group will be sold or disposed of before the end of its previously estimated useful life. Recoverability is based upon projections of anticipated future undiscounted cash flows associated with the use and eventual disposal of the property, plant and equipment asset groups, as well as specific appraisals in certain instances. Reviews occur at the lowest level for which identifiable cash flows are largely independent of cash flows associated with other property, plant and equipment asset groups. If the future undiscounted cash flows result in a value that is less than the carrying value, then the long-lived asset is considered impaired and a loss is recognized based on the amount by which the carrying amount exceeds the estimated fair value. Various factors that Ashland uses in determining the impact of these assessments include the expected useful lives of long-lived assets and the ability to realize any undiscounted cash flows in excess of the carrying amounts of such asset groups, and are affected primarily by changes in the expected use of the assets, changes in technology or development of alternative assets, changes in economic conditions, changes in operating performance and changes in expected future cash flows. Because judgment is involved in determining the fair value of property, plant and equipment asset groups, there is risk that the carrying value of these assets may require adjustment in future periods.

Total depreciation expense on property, plant and equipment for 2015, 2014 and 2013 was \$263 million, \$304 million and \$268 million, respectively. Depreciation expense for 2015, 2014 and 2013 included \$6 million, \$36 million and \$2 million, respectively, in accelerated depreciation and asset impairments. Capitalized interest was \$2 million for 2015 and \$1 million for each of 2014 and 2013.

#### Finite-lived intangible assets

Finite-lived intangible assets principally consist of certain trademarks and trade names, intellectual property, and customer relationships. These intangible assets are amortized on a straight-line basis over their estimated useful lives. The cost of trademarks and trade names is amortized principally over 4 to 25 years, intellectual property over 5 to 20 years and customer relationships over 3 to 24 years. Ashland reviews finite-lived intangible assets for impairment whenever events or changes in circumstances indicate the carrying amount of an asset may not be

recoverable. Ashland monitors these changes and events on at least a quarterly basis.

Amortization expense recognized on finite-lived intangible assets was \$78 million for 2015, \$89 million for 2014 and \$88 million for 2013, and is primarily included in the selling, general and administrative expense caption of the Statements of Consolidated Comprehensive Income.

#### Goodwill

Ashland reviews goodwill and indefinite-lived intangible assets for impairment annually or when events and circumstances indicate an impairment may have occurred. This annual assessment is performed as of July 1 and consists of Ashland determining each reporting unit's current fair value compared to its current carrying value. Subsequent to the business realignment during 2014 and the December 1, 2014 sale of the Elastomers division, which was previously a reporting unit, Ashland determined that

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its reporting units for the allocation of goodwill include the Specialty Ingredients and Valvoline reportable segments, and the Composites and Intermediates/Solvents reporting units within the Performance Materials reportable segment. Prior to the business realignment in 2014, the reporting units consisted of the Specialty Ingredients and Valvoline reportable segments, and the Composites and Adhesives reporting unit and the Elastomers reporting unit within the Performance Materials reportable segment. In accordance with U.S. GAAP, as a result of the business realignment in 2014, goodwill was reallocated using a relative fair value approach and Ashland performed an assessment to determine if an impairment existed. Upon completion of this assessment, Ashland concluded that no impairment existed.

Goodwill associated with the reporting units as of September 30, 2015 was \$2,004 million for Specialty Ingredients, \$169 million for Valvoline, \$142 million for Composites and \$171 million for Intermediates/Solvents.

Ashland makes various estimates and assumptions in determining the estimated fair values of its reporting units through the use of a combination of discounted cash flow models and valuations based on earnings multiples for guideline public companies in each reporting unit's industry peer group. Discounted cash flow models are highly reliant on various assumptions. Significant assumptions Ashland utilized in these models for the current year included: projected business results and future industry direction, long-term growth factors and weighted-average cost of capital. Ashland uses assumptions that it deems to be reasonable estimates of likely future events and compares the total fair values of each reporting unit to Ashland's market capitalization, and implied control premium, to determine if the fair values are reasonable compared to external market indicators. Subsequent changes in these key assumptions could affect the results of future goodwill impairment reviews. The assumptions utilized in the current year models are generally consistent with the prior year models.

In conjunction with the July 1, 2015 annual assessment of goodwill, Ashland's valuation techniques did not indicate any impairment. The base models of future financial performance projections utilized in the goodwill impairment assessment reflect conservative assumptions on future operating performance as approved by Management and the Board of Directors. The results of the impairment analysis for each reporting unit are consistent with the prior year. Each reporting unit's fair value exceeded its carrying values, with the Intermediates/Solvents reporting unit, having the closest calculated fair value to its carrying value of approximately 10%. Based on the sensitivity analysis performed on two key assumptions in the discounted cash flow model of the Intermediates/Solvents reporting unit, a negative 1% change in the long-term growth factor or the weighted-average cost of capital assumption would have resulted in a fair value slightly above the current carrying value. The operating results for the Intermediates/Solvents reporting unit improved from the prior year goodwill impairment test, reflecting increased financial profitability. Despite improved operating results, this reporting unit continues to be at some risk for potential impairment in future periods given the volatility in industry economics. Ashland will continue to monitor all reporting units during fiscal 2016.

Ashland compared and assessed the total fair values of the reporting units to Ashland's market capitalization at the annual assessment date, including the implied control premium, to determine if the fair values are reasonable compared to external market indicators. Ashland's market value as of the annual impairment testing date for 2015 exceeded the calculated fair value for each reporting unit summed together by approximately 15%, which Ashland considers to be indicative of the conservatism built into its fair value models. Because the fair value results for each reporting unit did not indicate a potential impairment existed, Ashland did not recognize any goodwill impairment during 2015, 2014 and 2013. Subsequent to this annual impairment test, no indications of an impairment were identified.

Other indefinite-lived intangible assets

Other indefinite-lived intangible assets include in-process research and development (IPR&D) and certain trademarks and trade names. These assets had a carrying value of \$311 million as of September 30, 2015. Ashland reviews these intangible assets for possible impairment annually or whenever events or changes in circumstances indicate that carrying amounts may not be recoverable. Ashland tests these assets using a "relief-from-royalty" valuation method compared to the carrying value, except for IPR&D assets, which are described within its section. Significant

assumptions inherent in the valuation methodologies for these intangibles include, but are not limited to, such estimates as projected business results, growth rates, weighted-average cost of capital, and royalty rates. The assumptions utilized in the current year models are generally consistent with the prior year models. In conjunction with the July 1 annual assessment of indefinite-lived intangible assets, Ashland's models did not indicate any impairment, as each indefinite-lived intangible asset's fair value exceeded their carrying values.

Ashland's assessment of an impairment charge on any of these assets classified currently as having indefinite lives, including goodwill, could change in future periods if any or all of the following events were to occur with respect to a particular reporting unit: a significant change in projected business results, a divestiture decision, increase in Ashland's weighted-average cost of capital rates, decrease in growth rates or other assumptions, economic deterioration that is more severe or of a longer duration than anticipated, or another significant economic event. For further information, see Note H of Notes to Consolidated Financial Statements.

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#### IPR&D

Ashland identified in-process research and development (IPR&D) projects within the acquired ISP business during 2011 that, as of the date of acquisition, had not been established in the marketplace. These projects consist of various enhancements of existing products or new potential applications for products. Ashland used various valuation models based on discounted probability weighted future cash flows on a project-by-project basis in identifying projects as distinct assets. Identified IPR&D acquired in a business combination is capitalized and tested for impairment annually and when events and circumstances indicate an impairment may have occurred. Subsequent to the acquisition of ISP, several projects were abandoned or impaired as a result of interim and annual impairment tests. The remaining projects were assessed throughout 2015, 2014 and 2013, resulting in decreases of \$11 million in 2015, \$13 million in 2014 and \$41 million in 2013 for projects abandoned or impaired during each year. Ashland has started amortizing remaining IPR&D assets during fiscal 2016 since the technology was commercialized during this period. For further information on IPR&D assets, see Note H of Notes to Consolidated Financial Statements.

#### Employee benefit obligations

##### Pension plans

Ashland and its subsidiaries sponsor contributory and noncontributory qualified defined benefit pension plans that cover certain employees in the United States and in a number of other countries. In addition, Ashland has non-qualified unfunded pension plans which provide supplemental defined benefits to those employees whose benefits under the qualified pension plans are limited by the Employee Retirement Income Security Act of 1974 and the Internal Revenue Code. Ashland funds the costs of the non-qualified plans as the benefits are paid. Pension obligations for applicable employees of non-U.S. consolidated subsidiaries are provided for in accordance with local practices and regulations of the respective countries. For further information, see Note M of Notes to Consolidated Financial Statements.

##### Other postretirement benefit plans

Ashland and its subsidiaries sponsor health care and life insurance plans for eligible employees in the U.S. and Canada who retire or are disabled. Ashland's retiree life insurance plans are noncontributory, while Ashland shares the costs of providing health care coverage with its retired employees through premiums, deductibles and coinsurance provisions. Ashland funds its share of the costs of the postretirement benefit plans as the benefits are paid. For further information, see Note M of Notes to Consolidated Financial Statements.

##### Pension and other postretirement benefits costs methodology

Ashland recognizes the change in the fair value of plan assets and net actuarial gains and losses annually in the fourth quarter of each fiscal year and whenever a plan is determined to qualify for a remeasurement. The remaining components of pension and other postretirement benefits expense are recorded ratably on a quarterly basis. Pension and other postretirement benefits adjustments charged directly to cost of sales that are applicable to inactive participants are excluded from inventoriable costs. The service cost component of pension and other postretirement benefits costs is allocated to each reportable segment on a ratable basis; while the remaining components of pension and other postretirement benefits costs are recorded to Unallocated and other.

The following table discloses the components of the gain or loss on pension and other postretirement plan remeasurements for each of the last three years.

(In millions)	2015	2014	2013
Loss (gain) on pension and other postretirement plan remeasurement:			
Change in discount rate and other actuarial assumptions (a)	\$13	\$369	\$(575)
Change in mortality table (a)	47	149	—
Actual return on plan assets (a)	(15)	(309)	(161)
Expected return on plan assets (a)	216	237	238
Total actuarial loss (gain) on pension and other postretirement plan remeasurement	261	446	(498)
Curtailment, settlement and other loss	(11)	11	—
Total loss (gain) on pension and other postretirement plan remeasurement	250	457	(498)
Less: Actuarial loss (gain) recognized in discontinued operations	2	44	(81)
Less: Curtailment, settlement and other gain in discontinued operations	(7)	(25)	—
Total loss (gain) on pension and other postretirement plan remeasurement from continuing operations	\$255	\$438	\$(417)

(a) For additional information on key assumptions and actual plan asset performance in each year, see the “Actuarial assumptions” discussion within this section.

#### Actuarial assumptions

Ashland’s pension and other postretirement obligations and annual expense calculations are based on a number of key assumptions including the discount rate at which obligations can be effectively settled, the anticipated rate of compensation increase, the expected long-term rate of return on plan assets and certain employee-related factors, such as turnover, retirement age and mortality. Because Ashland’s retiree health care plans contain various caps that limit Ashland’s contributions and because medical inflation is expected to continue at a rate in excess of these caps, the health care cost trend rate has no significant impact on Ashland’s postretirement health care benefit costs.

Ashland developed the discount rate used to determine the present value of its obligations under the U.S. pension and postretirement health and life plans by matching the stream of benefit payments from the plans to spot rates determined from an actuarial-developed yield curve, the above mean yield curve, based on high-quality corporate bonds. Ashland uses this approach to reflect the specific cash flows of these plans when determining the discount rate. Non-U.S. pension plans followed a similar process based on financial markets in those countries where Ashland provides a defined benefit pension plan.

Ashland’s expense, excluding actuarial gains and losses, for both U.S. and non-U.S. pension plans is determined using the weighted-average discount rate as of the beginning of the fiscal year, which were 4.18%, 4.68%, and 3.70% for the years ended September 30, 2015, 2014, and 2013, respectively. The weighted-average discount rates used for the postretirement health and life plans were 3.85%, 4.28%, and 3.23% for the years ended September 30, 2015, 2014, and 2013, respectively. The actuarial gains and losses recognized within the Statements of Consolidated Comprehensive Income are calculated using updated actuarial assumptions (including discount rates) as of the measurement date, which for Ashland is the end of the fiscal year, unless a plan qualifies for a remeasurement during the year. The weighted-average discount rate at the end of fiscal 2015 was 4.21% for the pension plans and 3.93% for the postretirement health and life plans.

The weighted-average rate of compensation increase assumptions were 3.18% for 2015, 3.59% for 2014 and 3.66% for 2013. The compensation increase assumptions for the U.S. plans were 3.20% for 2015, and 3.75% for 2014 and 2013. The rate of the compensation increase assumption for the U.S. plans will decrease to 3.00% in determining Ashland’s pension costs for 2016.

During 2014, Ashland elected to update the mortality table assumption used to develop the U.S. pension and other postretirement health and life plans obligations. The prior and updated mortality table were both actuarially determined assumptions that represented the best available estimate at the end of the fiscal year. During 2015, Ashland updated the mortality assumption based on information issued by the Society of Actuaries in October 2015 for the U.S. pension and other postretirement health and life plans. Ashland believes the updated mortality table assumption provides a more accurate assessment of current mortality trends and is a reasonable estimate of future mortality projections.

The weighted-average long-term expected rate of return on assets was assumed to be 7.27% for 2015, 7.67% for 2014 and 7.26% for 2013. The long-term expected rate of return on assets for the U.S. plans was assumed to be 7.65% for 2015 and 8.00% for 2014 and 2013. For 2015, the pension plan assets generated an actual weighted-average return of 1.52%, compared to 10.62% in 2014 and 5.15% in 2013. For 2015, the U.S. pension plan assets generated an actual return of 0.44%, compared to 10.33% in 2014 and 5.24% in 2013. The long-term expected rate of return on assets for the U.S. plans will be 7.10% for 2016. However, the expected return on plan assets is designed to be a long-term assumption, and actual returns will be subject to considerable year-

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to-year variances. Ashland estimates total fiscal 2016 pension income for U.S. and non-U.S. pension plans to be approximately \$40 million, which excludes the impact of actuarial gains or losses.

The following table discloses the estimated increases in pension and postretirement expense that would have resulted from a one percentage point change in each of the assumptions for each of the last three years.

(In millions)	2015	2014	2013
Increase in pension costs from			
Decrease in the discount rate	\$490	\$591	\$557
Increase in the salary adjustment rate	33	32	44
Decrease in expected return on plan assets	30	31	33
Increase in other postretirement costs from			
Decrease in the discount rate	20	20	20

During 2013, Ashland elected to use the above mean yield curve for its U.S. pension and other postretirement health and life plans, a change from the yield curve used in prior years. The above mean yield curve is constructed in the same manner as the prior yield curve, however, it uses only bonds in the population that had above average yields for their maturity. The discount rates determined as of September 30, 2013 ranged from 4.37% - 4.93% for the U.S. pension plans and 3.89% - 4.75% for the postretirement health and life plans. Under the prior yield curve, the September 30, 2013 discount rates would have ranged from 4.04% - 4.60% for the U.S. pension plans and 3.57% - 4.43% for the postretirement health and life plans. The use of the above mean yield curve resulted in Ashland recognizing an actuarial gain in 2013 that was approximately \$146 million greater than the actuarial gain which would have been recognized using the prior yield curve, or 29% of the 2013 actuarial gain. Of this impact, \$140 million related to U.S. pension plans and \$6 million relates to U.S. postretirement plans.

#### U.S. pension legislation and future funding requirements

Ashland's U.S. qualified pension plans funding requirements through fiscal 2017 are calculated in accordance with the regulations set forth in the Moving Ahead for Progress in the 21st Century Act (MAP-21), which provides temporary relief for employers who sponsor defined benefit pension plans related to funding contributions under the Employee Retirement Income Security Act of 1974. Specifically, MAP-21 allows for the use of a 25-year average interest rate within an upper and lower range for purposes of determining minimum funding obligations instead of an average interest rate for the two most recent years, as was previously required.

During 2015, as a result of the \$500 million discretionary contribution, Ashland's funding requirements to U.S. qualified pension plans have been eliminated for fiscal year 2016. Ashland expects to contribute approximately \$15 million to its non-qualified U.S. pension plans and \$15 million to its non-U.S. pension plans during 2016.

#### Income taxes

Ashland is subject to income taxes in the United States and numerous foreign jurisdictions. Significant judgment in the forecasting of taxable income using historical and projected future operating results is required in determining Ashland's provision for income taxes and the related assets and liabilities. The provision for income taxes includes income taxes paid, currently payable or receivable, and deferred taxes. Under U.S. GAAP, deferred tax assets and liabilities are determined based on differences between financial reporting and tax basis of assets and liabilities, and are measured using enacted tax rates and laws that are expected to be in effect when the differences reverse. Deferred tax assets are also recognized for the estimated future effects of tax loss carryforwards. The effect on deferred taxes of changes in tax rates is recognized in the period in which the enactment date occurs. Valuation allowances are established when necessary on a jurisdictional basis to reduce deferred tax assets to the amounts expected to be realized. Deferred taxes are not provided on the unremitted earnings of subsidiaries outside of the United States when it is expected that these earnings are indefinitely reinvested. In the event that the actual outcome of future tax consequences differs from Ashland's estimates and assumptions due to changes or future events such as tax legislation,

geographic mix of earnings, completion of tax audits or earnings repatriation plans, the resulting change to the provision for income taxes could have a material effect on the Statement of Consolidated Comprehensive Income and Consolidated Balance Sheet.

The recoverability of deferred tax assets and the recognition and measurement of uncertain tax positions are subject to various assumptions and judgment by Ashland. If actual results differ from the estimates made by Ashland in establishing or maintaining valuation allowances against deferred tax assets, the resulting change in the valuation allowance would generally impact earnings or other comprehensive income depending on the nature of the respective deferred tax asset. Additionally, the positions taken with regard to tax contingencies may be subject to audit and review by tax authorities, which may result in future taxes, interest and penalties. Positive and negative evidence is considered in determining the need for a valuation allowance against deferred

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tax assets, which includes such evidence as historical earnings, projected future earnings, tax planning strategies and expected timing of reversal of existing temporary differences.

In determining the recoverability of deferred tax assets Ashland gives consideration to all available positive and negative evidence including reversals of deferred tax liabilities (other than those with an indefinite reversal period), projected future taxable income, tax planning strategies and recent financial operations. Ashland attaches the most weight to historical earnings due to their verifiable nature. In evaluating the objective evidence that historical results provide, we consider three years of cumulative income or loss. In addition, Ashland has reflected increases and decreases in our valuation allowance based on the overall weight of positive versus negative evidence on a jurisdiction by jurisdiction basis. During 2015, Ashland reversed valuation allowances of \$29 million primarily related to state deferred tax assets.

#### Asbestos litigation

Ashland and Hercules, a wholly-owned subsidiary of Ashland that was acquired in 2009, have liabilities from claims alleging personal injury caused by exposure to asbestos. To assist in developing and annually updating independent reserve estimates for future asbestos claims and related costs given various assumptions, Ashland retained Hamilton, Rabinovitz & Associates, Inc. (HR&A). The methodology used by HR&A to project future asbestos costs is based largely on recent experience, including claim-filing and settlement rates, disease mix, enacted legislation, open claims and litigation defense. The claim experience of Ashland and Hercules are separately compared to the results of previously conducted third party epidemiological studies estimating the number of people likely to develop asbestos-related diseases. Those studies were undertaken in connection with national analyses of the population expected to have been exposed to asbestos. Using that information, HR&A estimates a range of the number of future claims that may be filed, as well as the related costs that may be incurred in resolving those claims. Changes in asbestos-related liabilities and receivables are recorded on an after-tax basis within the discontinued operations caption in the Statements of Consolidated Comprehensive Income. See Note N of Notes to Consolidated Financial Statements for additional information.

#### Ashland asbestos-related litigation

The claims alleging personal injury caused by exposure to asbestos asserted against Ashland result primarily from indemnification obligations undertaken in 1990 in connection with the sale of Riley Stoker Corporation (Riley), a former subsidiary. The amount and timing of settlements and number of open claims can fluctuate significantly from period to period.

#### Ashland asbestos-related liability

From the range of estimates, Ashland records the amount it believes to be the best estimate of future payments for litigation defense and claim settlement costs, which generally approximates the mid-point of the estimated range of exposure from model results. Ashland reviews this estimate and related assumptions quarterly and annually updates the results of a non-inflated, non-discounted approximate 50-year model developed with the assistance of HR&A. During the most recent update, completed during 2015, it was determined that the liability for Ashland asbestos claims did not need to be adjusted. Total reserves for asbestos claims were \$409 million at September 30, 2015 compared to \$438 million at September 30, 2014.

#### Ashland asbestos-related receivables

Ashland has insurance coverage for certain litigation defense and claim settlement costs incurred in connection with its asbestos claims, and coverage-in-place agreements exist with the insurance companies that provide substantially all of the coverage that will be accessed.

For the Ashland asbestos-related obligations, Ashland has estimated the value of probable insurance recoveries associated with its asbestos reserve based on management's interpretations and estimates surrounding the available or applicable insurance coverage, including an assumption that all solvent insurance carriers remain solvent. Substantially all of the estimated receivables from insurance companies are expected to be due from domestic insurers. Approximately 45% of the receivable is from insurance companies rated by A.M. Best, all of which

have a credit rating of BBB+ or higher as of September 30, 2015.

In October 2012, Ashland and Hercules initiated various arbitration proceedings against Underwriters at Lloyd's, certain London companies and/or Chartis (AIG) member companies seeking to enforce these insurers' contractual obligations to provide indemnity for asbestos liabilities and defense costs under existing coverage-in-place agreements. In addition, Ashland and Hercules initiated a lawsuit in Kentucky state court against certain Berkshire Hathaway entities (National Indemnity Company and Resolute Management, Inc.) on grounds that these Berkshire Hathaway entities had wrongfully interfered with Underwriters' and Chartis' performance of their respective contractual obligations to provide asbestos coverage by directing the insurers to reduce and delay certain claim payments.

On January 13, 2015, Ashland and Hercules entered into a comprehensive settlement agreement related to certain insurance coverage for asbestos bodily injury claims with Underwriters at Lloyd's, certain London companies and Chartis (AIG) member companies, along with National Indemnity Company and Resolute Management, Inc., under which Ashland and Hercules received

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a total of \$398 million. In exchange, all claims were released against these entities for past, present and future coverage obligations arising out of the asbestos coverage-in-place agreements that were the subject of the pending arbitration proceedings. In addition, as part of this settlement, Ashland and Hercules released all claims against National Indemnity Company and Resolute Management, Inc. in the Kentucky state court action. As a result, the arbitration proceedings and the Kentucky state court action have been terminated.

As a result of this settlement, Ashland recorded an after-tax gain of \$120 million within the discontinued operations caption of the Statements of Consolidated Comprehensive Income during 2015. The Ashland insurance receivable balance was also reduced as a result of this settlement by \$227 million within the Consolidated Balance Sheets.

In addition, Ashland placed \$335 million of the settlement funds received into a renewable annual trust restricted for the purpose of paying for ongoing and future litigation defense and claim settlement costs incurred in conjunction with asbestos claims.

At September 30, 2015, Ashland's receivable for recoveries of litigation defense and claim settlement costs from insurers amounted to \$150 million (excluding the Hercules receivable for asbestos claims), of which \$12 million relates to costs previously paid. Receivables from insurers amounted to \$402 million at September 30, 2014. During 2015, the annual update of the model used for purposes of valuing the asbestos reserve and its impact on valuation of future recoveries from insurers, was completed. This model update resulted in a \$3 million decrease in the receivable for probable insurance recoveries.

#### Hercules asbestos-related litigation

Hercules has liabilities from claims alleging personal injury caused by exposure to asbestos. Such claims typically arise from alleged exposure to asbestos fibers from resin encapsulated pipe and tank products which were sold by one of Hercules' former subsidiaries to a limited industrial market. The amount and timing of settlements and number of open claims can fluctuate significantly from period to period.

#### Hercules asbestos-related liability

From the range of estimates, Ashland records the amount it believes to be the best estimate of future payments for litigation defense and claim settlement costs, which generally approximates the mid-point of the estimated range of exposure from model results. Ashland reviews this estimate and related assumptions quarterly and annually updates the results of a non-inflated, non-discounted approximate 50-year model developed with the assistance of HR&A. As a result of the most recent annual update of this estimate, completed during 2015, it was determined that the liability for Hercules asbestos-related claims should be increased by \$4 million. Total reserves for asbestos claims were \$311 million at September 30, 2015 compared to \$329 million at September 30, 2014.

#### Hercules asbestos-related receivables

For the Hercules asbestos-related obligations, certain reimbursement obligations pursuant to coverage-in-place agreements with insurance carriers exist. As a result, any increases in the asbestos reserve have been partially offset by probable insurance recoveries. Ashland has estimated the value of probable insurance recoveries associated with its asbestos reserve based on management's interpretations and estimates surrounding the available or applicable insurance coverage, including an assumption that all solvent insurance carriers remain solvent. The estimated receivable consists exclusively of domestic insurers. Approximately 40% of the receivable is from insurance companies rated by A.M. Best, all of which have a credit rating of A+ or higher as of September 30, 2015.

As a result of the January 2015 asbestos insurance settlement previously described, Hercules has resolved all disputes with Chartis (AIG) member companies under their existing coverage-in-place agreement for past, present and future Hercules asbestos claims. As a result, during 2015, a \$22 million reduction in the insurance receivable balance within the Consolidated Balance Sheets was recorded.

As of September 30, 2015 and 2014, the receivables from insurers amounted to \$56 million and \$77 million, respectively. During 2015, the annual update of the model used for purposes of valuing the asbestos reserve and its impact on valuation of future recoveries from insurers was completed. This model update resulted in a \$1 million increase in the receivable for probable insurance recoveries.



Asbestos litigation cost projection

Projecting future asbestos costs is subject to numerous variables that are extremely difficult to predict. In addition to the significant uncertainties surrounding the number of claims that might be received, other variables include the type and severity of the disease alleged by each claimant, the long latency period associated with asbestos exposure, dismissal rates, costs of medical treatment, the impact of bankruptcies of other companies that are co-defendants in claims, uncertainties surrounding the litigation process from jurisdiction to jurisdiction and from case to case, and the impact of potential changes in legislative or judicial standards. Furthermore, any predictions with respect to these variables are subject to even greater uncertainty as the projection period lengthens. In light of these inherent uncertainties, Ashland believes that the asbestos reserves for Ashland and Hercules

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represent the best estimate within a range of possible outcomes. As a part of the process to develop these estimates of future asbestos costs, a range of long-term cost models was developed. These models are based on national studies that predict the number of people likely to develop asbestos-related diseases and are heavily influenced by assumptions regarding long-term inflation rates for indemnity payments and legal defense costs, as well as other variables mentioned previously. Ashland has currently estimated in various models ranging from approximately 40 to 50 year periods that it is reasonably possible that total future litigation defense and claim settlement costs on an inflated and undiscounted basis could range as high as approximately \$880 million for the Ashland asbestos-related litigation (current reserve of \$409 million) and approximately \$560 million for the Hercules asbestos-related litigation (current reserve of \$311 million), depending on the combination of assumptions selected in the various models. If actual experience is worse than projected, relative to the number of claims filed, the severity of alleged disease associated with those claims or costs incurred to resolve those claims, Ashland may need to increase further the estimates of the costs associated with asbestos claims and these increases could potentially be material over time.

#### Environmental remediation and asset retirement obligations

Ashland is subject to various federal, state and local environmental laws and regulations that require environmental assessment or remediation efforts (collectively environmental remediation) at multiple locations. At September 30, 2015, such locations included 85 waste treatment or disposal sites where Ashland has been identified as a potentially responsible party under Superfund or similar state laws, 132 current and former operating facilities (including certain operating facilities conveyed as part of the MAP Transaction) and about 1,225 service station properties, of which 63 are being actively remediated.

Ashland's reserves for environmental remediation and related environmental litigation amounted to \$186 million at September 30, 2015 compared to \$197 million at September 30, 2014, of which \$139 million at September 30, 2015 and \$158 million at September 30, 2014 were classified in other noncurrent liabilities on the Consolidated Balance Sheets.

The total reserves for environmental remediation reflect Ashland's estimates of the most likely costs that will be incurred over an extended period to remediate identified conditions for which the costs are reasonably estimable, without regard to any third-party recoveries. Engineering studies, historical experience and other factors are used to identify and evaluate remediation alternatives and their related costs in determining the estimated reserves for environmental remediation. Ashland continues to discount certain environmental sites and regularly adjusts its reserves as environmental remediation continues. Ashland has estimated the value of its probable insurance recoveries associated with its environmental reserve based on management's interpretations and estimates surrounding the available or applicable insurance coverage. At September 30, 2015 and 2014, Ashland's recorded receivable for these probable insurance recoveries were \$23 million and \$24 million, respectively, of which \$16 million and \$24 million, respectively, were classified in other noncurrent assets in the Consolidated Balance Sheets.

Environmental remediation reserves are subject to numerous inherent uncertainties that affect Ashland's ability to estimate its share of the costs. Such uncertainties involve the nature and extent of contamination at each site, the extent of required cleanup efforts under existing environmental regulations, widely varying costs of alternate cleanup methods, changes in environmental regulations, the potential effect of continuing improvements in remediation technology, and the number and financial strength of other potentially responsible parties at multiparty sites. Although it is not possible to predict with certainty the ultimate costs of environmental remediation, Ashland currently estimates that the upper end of the reasonably possible range of future costs for identified sites could be as high as approximately \$370 million. No individual remediation location is significant, as the largest reserve for any site is approximately 14% or less of the remediation reserve.

## OUTLOOK

### Business Results

Ashland expects sales for Specialty Ingredients to decline sequentially in the first quarter of 2016, consistent with normal seasonality, to the \$490 to \$510 million range. EBITDA margins for the quarter are expected to be in the range of 20 to 21 percent. Assuming foreign currency exchange rates remain at current levels, Specialty Ingredients should start to improve its financial comparisons to prior-year periods beginning in the second quarter of fiscal 2016 with comparable comparisons related to the energy market, foreign currency translation and exited product lines expected to begin during the third quarter of 2016.

Ashland expects sales for Performance Materials to decline sequentially in the first quarter of 2016, consistent with normal seasonality, to the \$230 to \$250 million range. EBITDA margins for the quarter are expected to be in the range of 13.5 to 14.5 percent. The overall Composites results should remain consistent while the Intermediates/Solvents division will likely have lower gross profit margins from aggressive pricing within the market.

Ashland expects sales for Valvoline to decline sequentially in the first quarter of 2016, consistent with normal seasonality, to the \$470 to \$480 million range. EBITDA margins for the quarter are expected to remain consistent at approximately 20 percent.

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#### Ashland Separation of Valvoline

On September 22, 2015, Ashland announced a plan to separate into two independent, publicly traded companies - one focused on specialty chemicals and the other focused on high-performance lubricants. The announcement followed a comprehensive strategic planning review by Ashland's global leadership team to better understand Ashland's markets, customers and the opportunities for each business to create the most value for shareholders, customers and employees. Separation planning and key work streams are well under way. Ashland is in the process of designing each company to succeed. The work is being led by a project management team composed of business and resource group leaders from around the world. Ashland is on track to complete the separation consistent with the previously stated timeline.

#### EFFECTS OF INFLATION AND CHANGING PRICES

Ashland's financial statements are prepared on the historical cost method of accounting in accordance with U.S. GAAP and, as a result, do not reflect changes in the purchasing power of the U.S. dollar. Monetary assets (such as cash, cash equivalents and accounts receivable) lose purchasing power as a result of inflation, while monetary liabilities (such as accounts payable and indebtedness) result in a gain, because they can be settled with dollars of diminished purchasing power. As of September 30, 2015, Ashland's monetary assets exceed its monetary liabilities, leaving it currently more exposed to the effects of future inflation. However, given the recent consistent stability of inflation in the United States in the past several years as well as forward economic outlooks, current inflationary pressures seem moderate. Certain of the industries in which Ashland operates are capital-intensive, and replacement costs for its plant and equipment generally would substantially exceed their historical costs. Accordingly, depreciation and amortization expense would be greater if it were based on current replacement costs. However, because replacement facilities would reflect technological improvements and changes in business strategies, such facilities would be expected to be more productive than existing facilities, mitigating at least part of the increased expense.

Ashland uses the LIFO method to value a portion of its inventories to provide a better matching of revenues with current costs. However, LIFO values such inventories below their replacement costs during inflationary periods.

#### FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements including, without limitation, statements made under the caption "Management's Discussion and Analysis of Financial Condition and Results of Operation" (MD&A), within the meaning of Section 27A of the Securities Act of 1933, as amended and Section 21E of the Securities Exchange Act of 1934, as amended. Ashland has identified some of these forward-looking statements with words such as "anticipates," "believes," "expects," "estimates," "is likely," "predicts," "projects," "forecasts," "may," "will," "intends" and the negative of these words or other comparable terminology. In addition, Ashland may from time to time make forward-looking statements in its Annual Report to Shareholders, quarterly reports and other filings with the Securities and Exchange Commission (SEC), news releases and other written and oral communications. These forward-looking statements are based on Ashland's expectations and assumptions, as of the date such statements are made, regarding Ashland's future operating performance and financial condition, including the proposed separation of its specialty chemicals and Valvoline businesses, the expected timetable for completing the separation, the future financial and operating performance of each company, strategic and competitive advantages of each company, the leadership of each company, and future opportunities for each company, as well as the economy and other future events or circumstances. Ashland's expectations and assumptions include, without limitation, those mentioned within the MD&A, internal forecasts and analyses of current and future market conditions and trends, management plans and strategies, operating efficiencies and economic conditions (such as prices, supply and demand, cost of raw materials, and the ability to recover raw material cost increases through price increases), and risks and uncertainties associated with the following: the possibility that the proposed separation will not be consummated within the anticipated time period or at all, including as the result of regulatory market or other factors; the potential for disruption to Ashland's business in connection with the proposed separation; the potential that the new Ashland and Valvoline do not realize

all of the expected benefits of the separation, Ashland's substantial indebtedness (including the possibility that such indebtedness and related restrictive covenants may adversely affect Ashland's future cash flows, results of operations, financial condition and its ability to repay debt), the impact of acquisitions and/or divestitures Ashland has made or may make (including the possibility that Ashland may not realize the anticipated benefits from such transactions), the global restructuring program (including the possibility that Ashland may not realize the anticipated revenue and earnings growth, cost reductions and other expected benefits from the program); Ashland's ability to generate sufficient cash to finance its stock repurchase plans, severe weather, natural disasters, and legal proceedings and claims (including environmental and asbestos matters). Various risks and uncertainties may cause actual results to differ materially from those stated, projected or implied by any forward-looking statements, including, without limitation, risks and uncertainties affecting Ashland that are contained in "Use

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of estimates, risks and uncertainties” in Note A of Notes to Consolidated Financial Statements and in Item 1A of this Annual Report on Form 10-K. Ashland believes its expectations and assumptions are reasonable, but there can be no assurance that the expectations reflected herein will be achieved. Unless legally required, Ashland undertakes no obligation to update any forward-looking statements made in this Annual Report on Form 10-K whether as a result of new information, future events or otherwise.

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

Ashland regularly uses derivative instruments to manage its exposure to fluctuations in foreign currencies. All derivative instruments are recognized as either assets or liabilities on the balance sheet and are measured at fair value. Changes in the fair value of all derivatives are recognized immediately in income unless the derivative qualifies as a hedge of future cash flows or a hedge of a net investment in a foreign operation. Gains and losses related to a hedge are either recognized in income immediately to offset the gain or loss on the hedged item, or deferred and recorded in the stockholders’ equity section of the Consolidated Balance Sheets as a component of accumulated other comprehensive income and subsequently recognized in the Statements of Consolidated Comprehensive Income when the hedged item affects net income. The ineffective portion of the change in fair value of a hedge is recognized in income immediately. As of September 30, 2015 and 2014, Ashland had not identified any significant credit risk on open derivative contracts. The potential loss from a hypothetical 10% adverse change in foreign currency rates on Ashland’s open foreign currency derivative instruments at September 30, 2015 would be a \$25 million impact on Ashland’s consolidated financial position, results of operations, cash flows or liquidity. Ashland did not transact or have open any significant hedging contracts with respect to commodities or any related raw material requirements as of and for the year ended September 30, 2015.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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## MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Management is responsible for the preparation and integrity of the Consolidated Financial Statements and other financial information included in this annual report on Form 10-K. Such financial statements are prepared in accordance with accounting principles generally accepted in the United States. Accounting principles are selected and information is reported which, using management's best judgment and estimates, present fairly Ashland's consolidated financial position, results of operations and cash flows. The other financial information in this annual report on Form 10-K is consistent with the Consolidated Financial Statements.

Ashland's management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). Ashland's internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of Ashland's Consolidated Financial Statements. Ashland's internal control over financial reporting is supported by a code of business conduct which summarizes our guiding values such as obeying the law, adhering to high ethical standards and acting as responsible members of the communities where we operate. Compliance with that Code forms the foundation of our internal control systems, which are designed to provide reasonable assurance that Ashland's assets are safeguarded and its records reflect, in all material respects, transactions in accordance with management's authorization. The concept of reasonable assurance is based on the recognition that the cost of a system of internal control should not exceed the related benefits. Management believes that adequate internal controls are maintained by the selection and training of qualified personnel, by an appropriate division of responsibility in all organizational arrangements, by the establishment and communication of accounting and business policies, and by internal audits.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements and even when determined to be effective, can only provide reasonable assurance with respect to financial statement preparation and presentation. Also, projections of any evaluation of effectiveness to future periods are subject to the risks that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

The Board, subject to stockholder ratification, selects and engages the independent auditors based on the recommendation of the Audit Committee. The Audit Committee, composed of directors who are not members of management, reviews the adequacy of Ashland's policies, procedures, controls and risk management strategies, the scope of auditing and other services performed by the independent auditors, and the scope of the internal audit function. The Committee holds meetings with Ashland's internal auditor and independent auditors, with and without management present, to discuss the findings of their audits, the overall quality of Ashland's financial reporting and their evaluation of Ashland's internal controls. The report of Ashland's Audit Committee can be found in Ashland's 2015 Proxy Statement.

Management assessed the effectiveness of Ashland's internal control over financial reporting as of September 30, 2015. Management conducted its assessment utilizing the framework described in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework). Based on this assessment, management believes that Ashland maintained effective internal control over financial reporting as of September 30, 2015.

Ernst & Young LLP, an independent registered public accounting firm, has audited and reported on the Consolidated Financial Statements of Ashland Inc. and Consolidated Subsidiaries as of and for the year ended September 30, 2015 and the effectiveness of Ashland's internal control over financial reporting as of September 30, 2015. The reports of the independent registered public accounting firm are contained in this Annual Report on Form 10-K.



/s/ William A. Wulfsohn  
William A. Wulfsohn  
Chairman of the Board and Chief Executive Officer

/s/ J. Kevin Willis  
J. Kevin Willis  
Senior Vice President and Chief Financial Officer

November 20, 2015

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of  
Ashland Inc. and Consolidated Subsidiaries

We have audited Ashland Inc. and Consolidated Subsidiaries' internal control over financial reporting as of September 30, 2015, based on criteria established in the Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). Ashland Inc. and Consolidated Subsidiaries' management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the company's internal control over financial reporting based on our audit.

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

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

In our opinion, Ashland Inc. and Consolidated Subsidiaries maintained, in all material respects, effective internal control over financial reporting as of September 30, 2015, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheet of Ashland Inc. and Consolidated Subsidiaries as of September 30, 2015, and the related consolidated statements of comprehensive income, stockholders' equity and cash flows for the year then ended September 30, 2015 of Ashland Inc. and Consolidated Subsidiaries and our report dated November 20, 2015 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Cincinnati, Ohio  
November 20, 2015

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of  
Ashland Inc. and Consolidated Subsidiaries

We have audited the accompanying consolidated balance sheet of Ashland Inc. and Consolidated Subsidiaries as of September 30, 2015, and the related consolidated statements of comprehensive income, stockholders' equity and cash flows for the year then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Ashland Inc. and Consolidated Subsidiaries as of September 30, 2015, and the consolidated results of their operations and their cash flows for the year then ended, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Ashland Inc. and Consolidated Subsidiaries' internal control over financial reporting as of September 30, 2015, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated November 20, 2015 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Cincinnati, Ohio  
November 20, 2015

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders  
of Ashland Inc.

In our opinion, the consolidated balance sheet as of September 30, 2014 and the related consolidated statements of comprehensive income, stockholders' equity and cash flows for each of the two years in the period ended September 30, 2014 present fairly, in all material respects, the financial position of Ashland Inc. and its subsidiaries at September 30, 2014, and the results of their operations and their cash flows for each of the two years in the period ended September 30, 2014, in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP  
Cincinnati, Ohio  
November 24, 2014

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Ashland Inc. and Consolidated Subsidiaries  
 Statements of Consolidated Comprehensive Income  
 Years Ended September 30

(In millions except per share data)	2015	2014	2013	
Sales	\$5,387	\$6,121	\$6,091	
Cost of sales	3,814	4,605	4,304	
Gross profit	1,573	1,516	1,787	
Selling, general and administrative expense	1,028	1,358	670	
Research and development expense	110	114	142	
Equity and other income - Note D	23	2	64	
Operating income	458	46	1,039	
Net interest and other financing expense - Note I	174	166	282	
Net gain (loss) on divestitures - Note B	(115	) 4	(8	)
Income (loss) from continuing operations before income taxes	169	(116	) 749	
Income tax expense (benefit) - Note L	(22	) (188	) 196	
Income from continuing operations	191	72	553	
Income from discontinued operations (net of tax) - Note C	118	161	130	
Net income	\$309	\$233	\$683	
<b>PER SHARE DATA - NOTE A</b>				
Basic earnings per share				
Income from continuing operations	\$2.81	\$0.94	\$7.06	
Income from discontinued operations	1.73	2.10	1.65	
Net income	\$4.54	\$3.04	\$8.71	
Diluted earnings per share				
Income from continuing operations	\$2.78	\$0.93	\$6.95	
Income from discontinued operations	1.70	2.07	1.62	
Net income	\$4.48	\$3.00	\$8.57	
<b>COMPREHENSIVE INCOME (LOSS)</b>				
Net income	\$309	\$233	\$683	
Other comprehensive income (loss), net of tax				
Unrealized translation gain (loss)	(369	) (160	) 37	
Pension and postretirement obligation adjustment	(18	) (21	) (5	)
Unrealized loss on available-for-sale securities	(11	) —	—	
Net change in interest rate hedges	—	—	38	
Other comprehensive income (loss)	(398	) (181	) 70	
Comprehensive income (loss)	\$(89	) \$52	\$753	

See Notes to Consolidated Financial Statements.

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Ashland Inc. and Consolidated Subsidiaries  
Consolidated Balance Sheets  
At September 30

(In millions)	2015	2014
Assets		
Current assets		
Cash and cash equivalents	\$1,257	\$1,393
Accounts receivable (a)	961	1,202
Inventories - Note A	706	765
Deferred income taxes - Note L	155	118
Other assets	169	83
Total current assets	3,248	3,561
Noncurrent assets		
Property, plant and equipment - Note G		
Cost	4,144	4,275
Accumulated depreciation	1,962	1,861
Net property, plant and equipment	2,182	2,414
Goodwill - Note H	2,486	2,643
Intangibles - Note H	1,142	1,309
Restricted investments - Note F	285	—
Asbestos insurance receivable - Note N	180	433
Equity and other unconsolidated investments - Note D	65	81
Other assets - Note J	476	479
Total noncurrent assets	6,816	7,359
Total assets	\$10,064	\$10,920
Liabilities and Stockholders' Equity		
Current liabilities		
Short-term debt - Note I	\$326	\$329
Current portion of long-term debt - Note I	55	9
Trade and other payables	573	674
Accrued expenses and other liabilities	494	675
Total current liabilities	1,448	1,687
Noncurrent liabilities		
Long-term debt - Note I	3,348	2,911
Employee benefit obligations - Note M	1,076	1,468
Asbestos litigation reserve - Note N	661	701
Deferred income taxes - Note L	89	110
Other liabilities - Note J	405	460
Total noncurrent liabilities	5,579	5,650
Commitments and contingencies - Notes K and N		
Stockholders' equity - Notes O and P		
Common stock, par value \$.01 per share, 200 million shares authorized		
Issued 67 million shares in 2015 and 70 million shares in 2014	1	1
Paid-in capital	46	—



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Retained earnings	3,281	3,475
Accumulated other comprehensive income (loss)	(291	) 107
Total stockholders' equity	3,037	3,583
Total liabilities and stockholders' equity	\$10,064	\$10,920

(a) Accounts receivable includes an allowance for doubtful accounts of \$11 million in 2015 and \$13 million in 2014.

See Notes to Consolidated Financial Statements.

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Ashland Inc. and Consolidated Subsidiaries  
Statements of Consolidated Stockholders' Equity

(In millions)	Common stock	Paid-in capital	Retained earnings	Accumulated other comprehensive income (loss)	(a) Total
Balance at September 30, 2012	\$1	\$647	\$3,163	\$218	\$4,029
Total comprehensive income			683	70	753
Dividends, \$1.13 per common share			(88)		(88)
Common shares issued under stock incentive and other plans (b) (c)		9			9
Repurchase of common shares (d)		(150)			(150)
Balance at September 30, 2013	1	506	3,758	288	4,553
Total comprehensive income (loss)			233	(181)	52
Dividends, \$1.36 per common share			(103)		(103)
Common shares issued under stock incentive and other plans (b) (c)		35			35
Repurchase of common shares (d)		(541)	(413)		(954)
Balance at September 30, 2014	1	—	3,475	107	3,583
Total comprehensive income (loss)			309	(398)	(89)
Dividends, \$1.46 per common share			(98)		(98)
Common shares issued under stock incentive and other plans (b) (c)		46	(8)		38
Repurchase of common shares (d)			(397)		(397)
Balance at September 30, 2015	\$1	\$46	\$3,281	\$(291)	\$3,037

At September 30, 2015 and 2014, the accumulated other comprehensive loss of \$291 million and income of \$107 million, respectively, was comprised of unrecognized prior service credits as a result of certain employee benefit (a) plan amendments of \$41 million and \$59 million, respectively, net unrealized translation loss of \$321 million and gain of \$48 million, respectively, and net unrealized loss on available for sale securities of \$11 million and zero, respectively.

(b) Includes income tax benefits resulting from the exercise of stock options of \$8 million in 2015, \$23 million in 2014 and \$1 million in 2013.

(c) Common shares issued were 441,609, 615,049 and 415,351 for 2015, 2014 and 2013, respectively.

(d) Common shares repurchased were 3,944,356, 7,812,342 and 1,737,744 for 2015, 2014 and 2013, respectively.

See Notes to Consolidated Financial Statements.

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## Ashland Inc. and Consolidated Subsidiaries

## Statements of Consolidated Cash Flows

Years Ended September 30

(In millions)

	2015	2014	2013
Cash flows provided (used) by operating activities from continuing operations			
Net income	\$309	\$233	\$683
Income from discontinued operations (net of tax)	(118)	) (161	) (130)
Adjustments to reconcile income from continuing operations to cash flows from operating activities			
Depreciation and amortization	341	393	356
Debt issuance cost amortization	18	14	65
Deferred income taxes	(57)	) (294	) 153
Equity income from affiliates	(15)	) (25	) (26)
Distributions from equity affiliates	22	14	11
Stock based compensation expense - Note P	30	34	30
Loss on early retirement of debt	9	—	—
Gain on available-for-sale securities	(3)	) —	—
Net loss (gain) on divestitures - Note B	115	(4	) 8
Impairments of equity investments and in-process research and development	25	63	41
Pension contributions	(610)	) (38	) (124)
Losses (gains) on pension and other postretirement plan remeasurements	255	438	(417)
Change in operating assets and liabilities (a)	(232)	) (87	) 3
Total cash flows provided by operating activities from continuing operations	89	580	653
Cash flows provided (used) by investing activities from continuing operations			
Additions to property, plant and equipment	(265)	) (248	) (264)
Proceeds from disposal of property, plant and equipment	3	3	5
Purchase of operations - net of cash acquired	(13)	) —	—
Proceeds (uses) from sale of operations or equity investments	161	92	(13)
Proceeds from sale of available-for-sale securities	315	—	—
Purchase of available-for-sale securities	(315)	) —	—
Funds restricted for specific transactions	(320)	) (15	) —
Reimbursement from restricted investments	6	—	—
Proceeds from the settlement of derivative instruments	18	—	—
Payments for the settlement of derivative instruments	(7)	) —	—
Total cash flows used by investing activities from continuing operations	(417)	) (168	) (272)
Cash flows provided (used) by financing activities from continuing operations			
Proceeds from issuance of long-term debt	1,100	—	2,320
Repayment of long-term debt	(623)	) (11	) (2,613)
Premium on long-term debt repayment	(9)	) —	—
Proceeds (repayment) from short-term debt	(3)	) 22	(36)
Repurchase of common stock	(397)	) (954	) (150)

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Debt issuance costs	(9	) —	(38	)
Cash dividends paid	(98	) (103	) (88	)
Excess tax benefits related to share-based payments	9	12	13	
Total cash flows used by financing activities from continuing operations	(30	) (1,034	) (592	)
Cash used by continuing operations	(358	) (622	) (211	)
Cash provided (used) by discontinued operations				
Operating cash flows	245	63	80	
Investing cash flows	24	1,608	(48	)
Total cash provided by discontinued operations	269	1,671	32	
Effect of currency exchange rate changes on cash and cash equivalents	(47	) (2	) 2	
Increase (decrease) in cash and cash equivalents	(136	) 1,047	(177	)
Cash and cash equivalents - beginning of year	1,393	346	523	
Cash and cash equivalents - end of year	\$1,257	\$1,393	\$346	
Changes in assets and liabilities (a)				
Accounts receivable	\$261	\$(16	) \$43	
Inventories	39	(4	) 106	
Trade and other payables	(229	) 64	(7	)
Other assets and liabilities	(303	) (131	) (139	)
Change in operating assets and liabilities	\$(232	) \$(87	) \$3	
Supplemental disclosures				
Interest paid	\$149	\$154	\$182	
Income taxes paid	226	88	69	

(a) Excludes changes resulting from operations acquired or sold.

See Notes to Consolidated Financial Statements.

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Ashland Inc. and Consolidated Subsidiaries  
Notes to Consolidated Financial Statements

**NOTE A – SIGNIFICANT ACCOUNTING POLICIES**

**Principles of consolidation and basis of presentation**

The accompanying Consolidated Financial Statements have been prepared in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP) and U.S. Securities and Exchange Commission regulations. All material intercompany transactions and balances have been eliminated. Additionally, certain prior period data has been reclassified in the Consolidated Financial Statements and accompanying notes to conform to the current period presentation, which includes the adoption of new accounting guidance during the current year related to debt issuance costs presented as a direct deduction from the carrying amount of debt. The Consolidated Financial Statements include the accounts of Ashland and its majority owned subsidiaries. Investments in joint ventures and 20% to 50% owned affiliates where Ashland has the ability to exert significant influence are accounted for under the equity method.

Ashland is composed of three reportable segments: Ashland Specialty Ingredients (Specialty Ingredients), Ashland Performance Materials (Performance Materials) and Valvoline. On July 31, 2014, Ashland completed the sale of the assets and liabilities of Ashland Water Technologies (Water Technologies). As a result of the sale, all prior period operating results and cash flows related to Water Technologies have been reflected as discontinued operations in the Statements of Consolidated Comprehensive Income and Statements of Consolidated Cash Flows. During 2015, Ashland sold certain assets in its portfolio of businesses. See Notes B and Q for additional information on these activities as well as Ashland's current reportable segment results.

**Use of estimates, risks and uncertainties**

The preparation of Ashland's Consolidated Financial Statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses, and the disclosures of contingent assets and liabilities. Significant items that are subject to such estimates and assumptions include, but are not limited to, long-lived assets (including goodwill and other intangible assets), employee benefit obligations, income taxes and liabilities and receivables associated with asbestos litigation and environmental remediation. Although management bases its estimates on historical experience and various other assumptions that are believed to be reasonable under the circumstances, actual results could differ significantly from the estimates under different assumptions or conditions.

Ashland's results are affected by domestic and international economic, political, legislative, regulatory and legal actions. Economic conditions, such as recessionary trends, inflation, interest and monetary exchange rates, government fiscal policies and changes in the prices of certain key raw materials, can have a significant effect on operations. While Ashland maintains reserves for anticipated liabilities and carries various levels of insurance, Ashland could be affected by civil, criminal, regulatory or administrative actions, claims or proceedings relating to asbestos, environmental remediation or other matters.

**Cash and cash equivalents**

Cash and cash equivalents include cash on hand and highly liquid investments maturing within three months after purchase.

**Allowance for doubtful accounts**

Ashland records an allowance for doubtful accounts as a best estimate of the amount of probable credit losses for accounts receivable. Each month, Ashland reviews this allowance and considers factors such as customer credit, past transaction history with the customer and changes in customer payment terms when determining whether the collection of a receivable is reasonably assured. Past due balances over 90 days and over a specified amount are reviewed individually for collectibility. The allowance for doubtful accounts is adjusted when it becomes probable a receivable will not be recovered.

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A progression of activity in the allowance for doubtful accounts is presented in the following table.

(In millions)	2015	2014	2013
Allowance for doubtful accounts - beginning of year	\$13	\$12	\$19
Adjustments to net income	2	5	(4 )
Reserves utilized	(3 )	(4 )	(3 )
Other changes	(1 )	—	—
Allowance for doubtful accounts - end of year	\$11	\$13	\$12

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## NOTE A – SIGNIFICANT ACCOUNTING POLICIES (continued)

## Inventories

Inventories are carried at the lower of cost or market. Inventories are primarily stated at cost using the weighted-average cost method. In addition, certain chemicals, plastics and lubricants with a replacement cost of \$170 million at September 30, 2015 and \$232 million at September 30, 2014 are valued at cost using the last-in, first-out (LIFO) method.

The following summarizes Ashland's inventories as of the Consolidated Balance Sheet dates.

(In millions)	2015	2014
Finished products	\$542	\$557
Raw materials, supplies and work in process	198	239
LIFO reserves	(34)	(31)
	\$706	\$765

A progression of activity in the inventory reserves, which reduce the amounts of finished products and raw materials, supplies and work in process reported, is presented in the following table.

(In millions)	2015	2014	2013
Inventory reserves - beginning of year	\$53	\$59	\$28
Adjustments to net income	9	4	42
Reserves utilized	(6)	(10)	(11)
Dispositions and other changes	(21)	—	—
Inventory reserves - end of year	\$35	\$53	\$59

The cost of property, plant and equipment is depreciated by the straight-line method over the estimated useful lives of the assets. Buildings are depreciated principally over 25 to 35 years and machinery and equipment principally over 2 to 25 years. Such costs are periodically reviewed for recoverability when impairment indicators are present. Such indicators include, among other factors, operating losses, unused capacity, market value declines and technological obsolescence. Recorded values of asset groups of property, plant and equipment that are not expected to be recovered through undiscounted future net cash flows are written down to current fair value, which generally is determined from estimated discounted future net cash flows (assets held for use) or net realizable value (assets held for sale).

## Goodwill and other intangibles

In accordance with U.S. GAAP, Ashland tests goodwill and other indefinite-lived intangible assets for impairment annually as of July 1 and when events and circumstances indicate an impairment may have occurred. Ashland reviews goodwill for impairment based on its identified reporting units, which are defined as operating segments or groupings of businesses one level below the operating segment level. Annually, Ashland tests goodwill for impairment by comparing the carrying value to the estimated fair value of its reporting units, determined using a combination of discounted cash flow models and valuations based on earnings multiples for guideline public companies in each reporting unit's industry peer group, when externally quoted market prices are not readily available. Ashland tests its indefinite-lived intangible assets, principally trademarks and trade names, using a "relief-from-royalty" valuation method compared to the carrying value, while in-process research and development (IPR&D) assets are subject to review through the various stages of the feasibility assessment process. Significant assumptions inherent in the valuation methodologies for goodwill and other intangibles are employed and include, but are not limited to, such estimates as future projected business results, growth rates, the weighted-average cost of capital for a market participant, and royalty and discount rates.

Finite-lived intangible assets principally consist of certain trademarks and trade names, intellectual property, and customer lists. These intangible assets are amortized on a straight-line basis over their estimated useful lives. The cost of trademarks and trade names is amortized principally over 4 to 25 years, intellectual property over 5 to 20 years and customer relationships over 3 to 24 years. Ashland reviews finite-lived intangible assets for impairment whenever



events or changes in circumstances indicate the carrying amount of an asset may not be recoverable. Ashland monitors these changes and events on at least a quarterly basis. For further information on goodwill and other intangible assets, see Note H.

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## NOTE A – SIGNIFICANT ACCOUNTING POLICIES (continued)

## Derivative instruments

Ashland regularly uses derivative instruments to manage its exposure to fluctuations in foreign currencies. All derivative instruments are recognized as either assets or liabilities on the balance sheet and are measured at fair value. Changes in the fair value of all derivatives are recognized immediately in income unless the derivative qualifies as a hedge of future cash flows or a hedge of a net investment in a foreign operation. Gains and losses related to a hedge are either recognized in income immediately to offset the gain or loss on the hedged item, or deferred and recorded in the stockholders' equity section of the Consolidated Balance Sheets as a component of accumulated other comprehensive income and subsequently recognized in the Statements of Consolidated Comprehensive Income when the hedged item affects net income. The ineffective portion of the change in fair value of a hedge is recognized in income immediately. For additional information on derivative instruments, see Note F.

## Restricted investments

On January 13, 2015, Ashland and Hercules, a wholly owned subsidiary of Ashland that was acquired in 2009, entered into a comprehensive settlement agreement related to certain insurance coverage for asbestos bodily injury claims with Underwriters at Lloyd's, certain London companies and Chartis (AIG) member companies, along with National Indemnity Company and Resolute Management, Inc., under which Ashland and Hercules received a total of \$398 million (the January 2015 asbestos insurance settlement). During 2015, Ashland placed \$335 million of the settlement funds into a renewable annual trust restricted for the purpose of paying ongoing and future litigation defense and claim settlement costs incurred in conjunction with asbestos claims. These funds are presented primarily as noncurrent assets, with \$30 million classified within other current assets in the Consolidated Balance Sheets. As of September 30, 2015, the funds within the trust were primarily invested in equity and corporate bond investments with a portion maintained in demand deposits. The funds within the trust are classified as available-for-sale securities. Available-for-sale securities are reported at fair value with unrealized gains and losses, net of related deferred income taxes, included in the stockholders' equity section of the Consolidated Balance Sheets as a component of accumulated other comprehensive income. Interest income and realized gains and losses on the available-for-sale securities are reported in the net interest and other financing expense caption in the Statements of Consolidated Comprehensive Income. See Notes F and N for additional information regarding fair value of these investments within the trust and the January 2015 asbestos insurance settlement.

## Revenue recognition

Sales generally are recognized when persuasive evidence of an arrangement exists, products are received or services are provided to customers, the sales price is fixed or determinable and collectibility is reasonably assured. For consignment inventory, title and risk of loss are transferred when the products have been consumed or used in the customer's production process. The percentage of Ashland's sales recognized from consignment inventory sales was 3% during 2015, 2014 and 2013. Ashland reports all sales net of tax assessed by qualifying governmental authorities. Certain shipping and handling costs paid by the customer are recorded in sales, while those costs paid by Ashland are recorded in cost of sales.

## Expense recognition

Cost of sales include material and production costs, as well as the costs of inbound and outbound freight, purchasing and receiving, inspection, warehousing, internal transfers and all other distribution network costs. Selling, general and administrative expense includes sales and marketing costs, advertising, customer support, environmental remediation, corporate and divisional administrative and other costs. Advertising costs (\$62 million in 2015, \$63 million in 2014 and \$70 million in 2013) and research and development costs (\$110 million in 2015, \$114 million in 2014 and \$142 million in 2013) are expensed as incurred.

## Income taxes

Ashland is subject to income taxes in the United States and numerous foreign jurisdictions. Significant judgment in the forecasting of taxable income using historical and projected future operating results is required in determining Ashland's provision for income taxes and the related assets and liabilities. The provision for income taxes includes income taxes paid, currently payable or receivable, and deferred taxes. Under U.S. GAAP, deferred tax assets and liabilities are determined based on differences between financial reporting and tax basis of assets and liabilities, and

are measured using enacted tax rates and laws that are expected to be in effect when the differences reverse. Deferred tax assets are also recognized for the estimated future effects of tax loss carryforwards. The effect on deferred taxes of changes in tax rates is recognized in the period in which the enactment date occurs. Valuation allowances are established when necessary on a jurisdictional basis to reduce deferred tax assets to the amounts expected to be realized. In the event that the actual outcome of future tax consequences differs from Ashland's estimates and assumptions due to changes or future events such as tax legislation, geographic mix of earnings, completion of tax audits or earnings repatriation plans, the resulting change to the provision for income taxes could have a material effect on the Statements of Consolidated Comprehensive Income and Consolidated Balance Sheets. For additional information on income taxes, see Note L.

A progression of activity in the tax valuation allowances for both continuing and discontinued operations is presented in the following table.

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## NOTE A – SIGNIFICANT ACCOUNTING POLICIES (continued)

(In millions)	2015	2014	2013	
Tax valuation allowances - beginning of year	\$ 148	\$ 166	\$ 175	
Adjustments to net income	(27	) (5	) (6	)
Reserves utilized	(14	) (14	) (2	)
Acquisition and other changes	—	1	(1	)
Tax valuation allowances - end of year	\$ 107	\$ 148	\$ 166	

## Asbestos-related litigation

Ashland is subject to liabilities from claims alleging personal injury caused by exposure to asbestos. Such claims result from indemnification obligations undertaken in 1990 in connection with the sale of Riley Stoker Corporation (Riley) and the acquisition of Hercules Incorporated (Hercules) in November 2008. Although Riley, a former subsidiary, was neither a producer nor a manufacturer of asbestos, its industrial boilers contained some asbestos-containing components provided by other companies. Hercules, a wholly-owned subsidiary of Ashland, has liabilities from claims alleging personal injury caused by exposure to asbestos. Such claims typically arise from alleged exposure to asbestos fibers from resin encapsulated pipe and tank products sold by one of Hercules' former subsidiaries to a limited industrial market.

Ashland retained Hamilton, Rabinovitz & Associates, Inc. (HR&A) to assist in developing and annually updating independent reserve estimates for future asbestos claims and related costs given various assumptions. The methodology used by HR&A to project future asbestos costs is based largely on Ashland's recent experience, including claim-filing and settlement rates, disease mix, enacted legislation, open claims, and litigation defense. Ashland's claim experience is compared to the results of previously conducted epidemiological studies estimating the number of people likely to develop asbestos-related diseases. Those studies were undertaken in connection with national analyses of the population expected to have been exposed to asbestos. Using that information, HR&A estimates a range of the number of future claims that may be filed, as well as the related costs that may be incurred in resolving those claims. From the range of estimates, Ashland records the amount it believes to be the best estimate of future payments for litigation defense and claim settlement costs. For additional information on asbestos-related litigation, see Note N.

## Environmental remediation

Accruals for environmental remediation are recognized when it is probable a liability has been incurred and the amount of that liability can be reasonably estimated. Such costs are charged to expense if they relate to the remediation of conditions caused by past operations or are not expected to mitigate or prevent contamination from future operations. Liabilities are recorded at estimated cost values based on experience, assessments and current technology, without regard to any third-party recoveries and are regularly adjusted as environmental assessments and remediation efforts continue. For additional information on environmental remediation, see Note N.

## Pension and other postretirement benefits

The funded status of Ashland's pension and other postretirement benefit plans is recognized in the Consolidated Balance Sheets. The funded status is measured as the difference between the fair value of plan assets and the benefit obligation at September 30, the measurement date. For defined benefit pension plans, the benefit obligation is the projected benefit obligation (PBO) and for the other postretirement benefit plans, the benefit obligation is the accumulated postretirement benefit obligation (APBO). The PBO represents the actuarial present value of benefits expected to be paid upon retirement based on estimated future compensation levels. The APBO represents the actuarial present value of postretirement benefits attributed to employee services already rendered. The measurement of the benefit obligation is based on Ashland's estimates and actuarial valuations. These valuations reflect the terms of the plans and use participant-specific information such as compensation, age and years of service, as well as certain key assumptions that require significant judgment, including, but not limited to, estimates of discount rates, expected return on plan assets, rate of compensation increases, interest rates and mortality rates. The fair value of plan assets represents the current market value of assets held by an irrevocable trust fund for the sole benefit of participants. For additional information regarding plan assumptions and the current financial position of the pension and other

postretirement plans, see Note M.

Ashland recognizes the change in the fair value of plan assets and net actuarial gains and losses annually in the fourth quarter of each fiscal year and whenever a plan is determined to qualify for a remeasurement. The remaining components of pension and other postretirement benefits expense are recorded ratably on a quarterly basis. Pension and other postretirement benefits adjustments charged directly to cost of sales that are applicable to inactive participants are excluded from inventoriable costs. The service cost component of pension and other postretirement benefits costs is allocated to each reportable segment on a ratable basis; while the remaining components of pension and other postretirement benefits costs are recorded to Unallocated and other.

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## NOTE A – SIGNIFICANT ACCOUNTING POLICIES (continued)

## Foreign currency translation

Operations outside the United States are measured primarily using the local currency as the functional currency. Upon consolidation, the results of operations of the subsidiaries and affiliates whose functional currency is other than the U.S. dollar are translated into U.S. dollars at the average exchange rates for the year while assets and liabilities are translated at year-end exchange rates. Adjustments to translate assets and liabilities into U.S. dollars are recorded in the stockholders' equity section of the Consolidated Balance Sheets as a component of accumulated other comprehensive income and are included in net earnings only upon sale or substantial liquidation of the underlying foreign subsidiary or affiliated company.

## Stock incentive plans

Ashland recognizes compensation expense for stock incentive plans awarded to key employees and directors, primarily in the form of stock appreciation rights (SARs), restricted stock, performance shares and other non-vested stock awards, that are generally based upon the grant-date fair value over the appropriate vesting period. Ashland utilizes several industry accepted valuation models to determine the fair value. For further information concerning stock incentive plans, see Note P.

## Earnings per share

The following is the computation of basic and diluted earnings per share (EPS) from continuing operations. Earnings per share are reported under the treasury stock method. Stock options and SARs for each reported year whose grant price was greater than the market price of Ashland Common Stock at the end of each fiscal year were not included in the computation of income from continuing operations per diluted share because the effect of these instruments would be antidilutive. The total number of these shares outstanding was 0.7 million for 2015 and 0.6 million for 2014 and 2013.

(In millions except per share data)	2015	2014	2013
Numerator			
Numerator for basic and diluted EPS -			
Income from continuing operations	\$191	\$72	\$553
Denominator			
Denominator for basic EPS - Weighted-average			
common shares outstanding	68	77	78
Share based awards convertible to common shares	1	1	2
Denominator for diluted EPS - Adjusted weighted-			
average shares and assumed conversions	69	78	80
EPS from continuing operations			
Basic	\$2.81	\$0.94	\$7.06
Diluted	2.78	0.93	6.95

## New accounting pronouncements

In July 2015, the FASB issued accounting guidance to simplify the subsequent measurement of certain inventories by replacing the current lower of cost or market test with a lower of cost and net realizable value test. The guidance applies only to inventories for which cost is determined by methods other than last-in first-out and the retail inventory method. This guidance will become effective prospectively for Ashland on October 1, 2017, with early adoption permitted. Ashland is currently evaluating the new accounting standard and the impact this new guidance will have on Ashland's Consolidated Financial Statements.

In April 2015 and August 2015, the FASB issued accounting guidance to simplify the presentation of debt issuance costs by requiring that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability, consistent with debt discounts. The recognition and measurement guidance for debt issuance costs were not affected by this amendment. The adoption of the new guidance was on a retrospective basis. Ashland elected to early adopt this guidance for debt issuance costs during

2015. As a result, \$28 million was presented as long-term debt as of September 30, 2015 and Ashland reclassified \$31 million from other noncurrent assets to long-term debt as of September 30, 2014 within the Consolidated Balance Sheets.

In May 2014, the FASB issued accounting guidance outlining a single comprehensive five step model for entities to use in accounting for revenue arising from contracts with customers (ASC 606 Revenue from Contracts with Customers). The new guidance supersedes most current revenue recognition guidance, in an effort to converge the revenue recognition principles within U.S. GAAP. This new guidance also requires entities to disclose certain quantitative and qualitative information regarding the nature, amount, timing and uncertainty of qualifying revenue and cash flows arising from contracts with customers. Entities have

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## NOTE A – SIGNIFICANT ACCOUNTING POLICIES (continued)

the option of using a full retrospective or a modified retrospective approach to adopt the new guidance. During 2015, the FASB delayed the effective date of this standard by one year. As a result, this guidance now becomes effective for Ashland on October 1, 2018. Ashland is currently evaluating the new accounting standard and the available implementation options the standard allows as well as the impact this new guidance will have on Ashland's Consolidated Financial Statements.

In April 2014, the FASB issued accounting guidance amending the requirements for reporting discontinued operations (ASC 205 Presentation of Financial Statements and ASC 360 Property, Plant and Equipment). This guidance limits the requirement for discontinued operations treatment to the disposal of a component of an entity, or a group of components of an entity, that represents a strategic shift that has (or will have) a major effect on an entity's operations and financial results. Additionally, this new guidance no longer precludes discontinued operations presentation based on continuing involvement or cash flows following the disposal. Ashland adopted this guidance on October 1, 2014, which is applicable only to divestitures subsequent to the adoption date, and has evaluated each divestiture during the current year under this new guidance.

In July 2013, the FASB amended accounting provisions that address the financial statement presentation of tax items eligible for netting (ASC 740 Income Taxes). An unrecognized tax benefit, or a portion of an unrecognized tax benefit, should be presented in the financial statements as a reduction to a deferred tax asset for a net operating loss carryforward, a similar tax loss, or a tax credit carryforward. This guidance was effective prospectively for Ashland on October 1, 2014, with retrospective application and early adoption permitted. Ashland elected to early adopt this new guidance and apply it retrospectively during 2014. As a result, approximately \$49 million as of September 30, 2014, was reclassified in the Consolidated Balance Sheets from other long-term liabilities and offset against deferred tax assets.

In March 2013, the FASB issued accounting guidance related to a parent's accounting for the cumulative translation adjustment upon derecognition of certain subsidiaries or groups of assets within a foreign entity or of an investment in a foreign entity (ASC 830 Foreign Currency Matters). This guidance requires that the cumulative translation adjustment associated with a qualifying derecognized subsidiary or group of assets be immediately recognized within the income statement by the parent company. This guidance became effective for Ashland on October 1, 2014. The adoption of this guidance impacts the Consolidated Financial Statements for divestitures of subsidiaries or assets with cumulative translation.

In February 2013, the FASB issued accounting guidance related to the reporting of amounts reclassified out of accumulated other comprehensive income (ASC 220 Comprehensive Income). This guidance sets forth new disclosure requirements for items reclassified from accumulated other comprehensive income by requiring disclosures for both the changes in accumulated other comprehensive income by component and where the significant items reclassified from accumulated other comprehensive income are classified in the Statements of Consolidated Comprehensive Income. This guidance became effective for Ashland on October 1, 2013 and has been disclosed for all applicable periods presented.

## NOTE B – DIVESTITURES

## Ashland Separation of Valvoline

On September 22, 2015, Ashland announced that the Board of Directors approved proceeding with a plan to separate Ashland into two independent, publicly traded companies comprising of the new Ashland and Valvoline. Ashland has begun the process to separate its Valvoline business from its Specialty Ingredients and Performance Materials businesses while it finalizes the transaction structure and obtains customary regulatory and other approvals. Ashland intends for the separation, which is subject to final board approval prior to completion, to be tax free for Ashland shareholders. Immediately following the separation, Ashland shareholders will own shares of both the new Ashland and Valvoline. The separation is expected to be completed as soon as practicable, but not before the end of fiscal 2016.

The new Ashland will be a global leader in providing specialty chemical solutions to customers in a wide range of consumer and industrial markets. These markets are currently served by Specialty Ingredients and Performance



Materials. Key markets and applications include pharmaceutical, personal care, food and beverage, architectural coatings, adhesives, automotive, construction and energy. Together these businesses generated approximately \$3.4 billion in sales for the fiscal year ended September 30, 2015.

Valvoline will focus on building the world's leading engine and automotive maintenance business by providing hands-on expertise to customers in each of its primary market channels: Do-It-Yourself (DIY); Installers; Valvoline Instant Oil Change<sup>SM</sup>; and International. Valvoline generated sales of \$2.0 billion for Ashland during the fiscal year ended September 30, 2015.

#### Industrial Biocides

During May 2015, Ashland entered into a definitive sale agreement to sell the industrial biocides assets within Specialty Ingredients, which closed on July 1, 2015. As a result of the sale, Ashland received net cash proceeds of approximately \$30 million during the fourth quarter of 2015 and recognized a nominal gain before tax and after customary closing costs within the net gain (loss) on divestitures caption within the Statements of Consolidated Comprehensive Income.

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## NOTE B – DIVESTITURES (continued)

The sale of Specialty Ingredients' industrial biocides assets did not qualify for discontinued operations treatment since it did not represent a strategic shift that had or will have a major effect on Ashland's operations and financial results.

**Valvoline Car Care Products**

In April 2015, Ashland entered into a definitive sale agreement to sell Valvoline's car care product assets for \$24 million, which included Car Brite™ and Eagle One™ automotive appearance products. Prior to the sale, Ashland recognized a loss of \$26 million before tax in 2015 to recognize the assets at fair value less cost to sell, using Level 2 nonrecurring fair value measurements. The loss is reported within the net gain (loss) on divestitures caption within the Statements of Consolidated Comprehensive Income. The transaction closed on June 30, 2015 and Ashland received net proceeds of \$19 million after adjusting for certain customary closing costs and final working capital totals.

The sale of Valvoline's car care product assets did not qualify for discontinued operations treatment since it did not represent a strategic shift that had or will have a major effect on Ashland's operations and financial results.

**Valvoline Joint Venture**

During April 2015, Ashland sold a Valvoline joint venture equity investment in Venezuela. Prior to the sale, Ashland recognized a \$14 million impairment in 2015, for which there was no tax effect, using Level 2 nonrecurring fair value measurements within the equity and other income caption of the Statements of Consolidated Comprehensive Income. Ashland's decision to sell the equity investment and the resulting charge recorded during 2015 is reflective of the continued devaluation of the Venezuelan currency (bolivar) based on changes to the Venezuelan currency exchange rate mechanisms during the fiscal year. In addition, the continued lack of exchangeability between the Venezuelan bolivar and U.S. dollar had restricted the joint venture's ability to pay dividends and obligations denominated in U.S. dollars. These exchange regulations and cash flow limitations, combined with other recent Venezuelan regulations and the impact of declining oil prices on the Venezuelan economy, had significantly restricted Ashland's ability to conduct normal business operations through the joint venture arrangement. Ashland determined this divestiture does not represent a strategic shift that had or will have a major effect on Ashland's operations and financial results, and thus it does not qualify for discontinued operations treatment.

**MAP Transaction**

As part of the 2005 transfer of Ashland's 38% interest in the Marathon Ashland Petroleum joint venture and two other small businesses to Marathon Oil Corporation (Marathon) (the MAP Transaction), Marathon is entitled to the tax deductions for Ashland's future payments of certain contingent liabilities, including asbestos liabilities, related to previously owned businesses of Ashland. Marathon agreed to compensate Ashland for these tax deductions and Ashland established a discounted receivable, which represented the estimated present value of probable recoveries from Marathon for the portion of their future tax deductions. As a result of the January 2015 asbestos insurance settlement, Ashland recorded a \$7 million charge during 2015 within the net gain (loss) on divestitures caption of the Statements of Consolidated Comprehensive Income and accordingly reduced the discounted receivable by the same amount. The total MAP receivable remaining as of September 30, 2015 was \$9 million. See Note N for more information related to the January 2015 asbestos insurance settlement.

Also, as part of the MAP Transaction, Ashland agreed to sublease certain gas stations to Marathon for a nominal annual amount. During 2013, the third-party investor group that owned these gas stations initiated a sale process that required Ashland to submit an offer, which the investor group accepted. Ashland acquired the gas stations for a total cost of \$14 million. In accordance with the MAP Transaction, these gas stations were required to be transferred to Marathon. The \$14 million payment to the investor group was recognized by Ashland and recorded within the net gain (loss) on divestitures caption of the Statement of Consolidated Comprehensive Income.

**Elastomers**

On October 9, 2014, Ashland entered into a definitive agreement to sell the Elastomers division within the Performance Materials reportable segment, which operated a 250-person manufacturing facility in Port Neches, Texas, to Lion Copolymer Holdings, LLC. The Elastomers division, which primarily served the North American replacement tire market, accounted for approximately 5% of Ashland's 2014 sales of \$6.1 billion and 18% of Ashland Performance Materials' \$1.6 billion in sales in 2014. The sale was completed on December 1, 2014 in a transaction valued at

approximately \$120 million which was subject to working capital adjustments. The total post-closing adjusted cash proceeds received before taxes by Ashland during 2015 was \$105 million, which includes working capital adjustments and transaction costs, as defined in the definitive agreement.

Elastomers' net assets as of November 30, 2014 were \$191 million which primarily included accounts receivable, inventory, property, plant and equipment, non-deductible goodwill and other intangibles and payables. Since the net proceeds received were less than book value, Ashland recorded a loss of \$86 million pre-tax, using Level 2 nonrecurring fair value measurements, within the net gain (loss) on divestiture caption of the Statements of Consolidated Comprehensive Income during 2015. The related tax

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## NOTE B – DIVESTITURES (continued)

effect was a benefit of \$28 million included in the income tax expense (benefit) caption within the Statements of Consolidated Comprehensive Income.

Ashland determined that the sale of Elastomers did not represent a strategic shift that had or will have a major effect on Ashland's operations and financial results. As such, Elastomers' results were included in the Performance Materials reportable segment results of operations and financial position within the Statements of Consolidated Comprehensive Income and Consolidated Balance Sheets, respectively, until its December 1, 2014 sale. Certain indirect corporate costs of \$11 million for 2015 were included within the selling, general and administrative expense caption of the Statements of Consolidated Comprehensive Income that were previously allocated to the Elastomers division and are now reported as selling, general and administrative expense within continuing operations on a consolidated basis within the Unallocated and other segment.

#### Water Technologies

On July 31, 2014, Ashland sold the Water Technologies business to a fund managed by Clayton, Dubilier & Rice (CD&R) in a transaction valued at approximately \$1.8 billion. The total post-closing adjusted cash proceeds received by Ashland during 2014, before taxes, was \$1.6 billion, which includes estimates for certain working capital and other post-closing adjustments, as defined in the definitive agreement. Ashland recognized a gain of \$92 million after tax, which is included within the discontinued operations caption in the Statement of Consolidated Comprehensive Income for 2014. During 2015, Ashland received \$48 million of delayed purchase price funds related to a foreign entity which completed certain regulatory closing requirements. Final settlement of working capital and other post-closing adjustments occurred during 2015 resulting in a payment of approximately \$20 million to CD&R.

Since this transaction signified Ashland's exit from the Water Technologies business, Ashland has classified Water Technologies' results of operations and cash flows within the Statements of Consolidated Comprehensive Income and Statements of Consolidated Cash Flows as discontinued operations for prior periods presented. Certain indirect corporate costs included within the selling, general and administrative expense caption of the Statements of Consolidated Comprehensive Income that were previously allocated to the Water Technologies reportable segment did not qualify for classification within discontinued operations and are reported as selling, general and administrative expense within continuing operations on a consolidated basis and within the Unallocated and other segment. These costs were \$31 million and \$34 million for 2014 and 2013, respectively.

Ashland retained and agreed to indemnify CD&R for certain liabilities of the Water Technologies business arising prior to the closing of the sale, including certain pension and postretirement liabilities, environmental remediation liabilities and certain legacy liabilities relating to businesses disposed or discontinued by the Water Technologies business. Costs directly related to these retained liabilities have been included within the discontinued operations caption of the Statements of Consolidated Comprehensive Income in 2014 and 2013. The ongoing effects of the pension and other postretirement plans for former Water Technologies employees are reported within the Unallocated and other segment.

Ashland provided certain transition services to CD&R for a fee. During 2015 and 2014, Ashland recognized transition service fees of \$28 million and \$7 million, respectively, within the selling, general and administrative expense caption of the Statements of Consolidated Comprehensive Income. While the transition services vary in duration depending upon the type of service provided, Ashland continued to reduce costs as the transition services were completed. See Note C for further information on the results of operations of Water Technologies for all periods presented.

#### Casting Solutions joint venture

During 2014, Ashland, in conjunction with its partner, initiated a process to sell the ASK Chemicals GmbH (ASK) joint venture, in which Ashland had 50% ownership. As part of the sale process, Ashland determined during 2014 that the fair value of its investment in the ASK joint venture was less than the carrying value and that an other than temporary impairment had occurred. As a result, Ashland recognized an impairment charge of \$50 million related to its investment in the ASK joint venture. The charge was recognized within the equity and other income caption of the Statements of Consolidated Comprehensive Income.

On June 30, 2014, Ashland, in conjunction with its partner, sold the ASK joint venture to investment funds affiliated with Rhône Capital, LLC (Rhône), a London and New York-based private equity investment firm. From the sale, total pre-tax proceeds to the sellers, which were split evenly between Ashland and its partner, under the terms of the 50/50 joint venture, were \$205 million, which included \$176 million in cash and a \$29 million note from Rhône due in calendar year 2022.

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## NOTE C – DISCONTINUED OPERATIONS

In previous periods, Ashland has divested certain businesses that have qualified as discontinued operations. The operating results from these divested businesses and subsequent adjustments related to ongoing assessments of certain retained liabilities and tax items have been recorded within the discontinued operations caption in the Statements of Consolidated Comprehensive Income for all periods presented and are discussed further within this note.

Ashland is subject to liabilities from claims alleging personal injury caused by exposure to asbestos. Such claims result primarily from indemnification obligations undertaken in 1990 in connection with the sale of Riley, a former subsidiary, which qualified as a discontinued operation and from the acquisition during 2009 of Hercules, a wholly-owned subsidiary of Ashland. Adjustments to the recorded litigation reserves and related insurance receivables are recorded within the discontinued operations caption and continue periodically. During 2015, Ashland recorded an after-tax gain of \$120 million within discontinued operations due to the January 2015 asbestos insurance settlement. See Note N for further discussion of Ashland's asbestos-related activity.

As previously described in Note B, on July 31, 2014, Ashland completed the sale of the Water Technologies business to CD&R. Sales recognized for the ten month period Water Technologies was still owned by Ashland in 2014 were \$1.5 billion and \$1.7 billion in 2013. The previous results of operation related to Water Technologies have been reflected as discontinued operations in the Statements of Consolidated Comprehensive Income.

On March 31, 2011, Ashland completed the sale to Nexeo Solutions, LLC of substantially all of the assets and certain liabilities of its global distribution business, which previously comprised the Ashland Distribution (Distribution) reportable segment. Ashland determined that this sale qualified as a discontinued operation, in accordance with U.S. GAAP, since Ashland does not have significant continuing involvement in the Distribution business. Ashland made subsequent adjustments to the discontinued operations caption for Distribution during 2015 and 2013.

On August 28, 2006, Ashland completed the sale of the stock of Ashland Paving And Construction, Inc. (APAC) for \$1.3 billion. The sale qualified as a discontinued operation, and as a result, the previous operating results related to APAC have been reflected as discontinued operations in the Statements of Consolidated Comprehensive Income. Ashland has made subsequent adjustments to the gain on the sale of APAC, primarily relating to the tax effects of the sale, during 2015, 2014 and 2013.

Due to the ongoing assessment of certain matters associated with previous divestitures, subsequent adjustments to these divestitures may continue in future periods in the discontinued operations caption in the Statements of Consolidated Comprehensive Income. Components of amounts reflected in the Statements of Consolidated Comprehensive Income related to discontinued operations are presented in the following table for each of the years ended September 30.

(In millions)	2015	2014	2013
Income (loss) from discontinued operations			
Asbestos-related litigation matters	\$ 132	\$ 5	\$(3 )
Water Technologies	(3 )	84	202
Distribution	(3 )	—	(9 )
Gain on disposal of discontinued operations			
Water Technologies	4	148	—
Income before taxes	130	237	190
Income tax benefit (expense)			
Benefit (expense) related to income (loss) from discontinued operations			
Asbestos-related litigation reserves and expenses	(22 )	1	5
Water Technologies	2	(25 )	(78 )
Distribution	1	—	3
Benefit (expense) related to gain (loss) on disposal of discontinued operations			
Water Technologies	3	(56 )	—

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Distribution	3	—	—
APAC	1	4	10
Income from discontinued operations (net of taxes)	\$118	\$161	\$130

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## NOTE D – UNCONSOLIDATED AFFILIATES

Summarized financial information for companies accounted for on the equity method is presented in the following table, along with a summary of the amounts recorded in Ashland's Consolidated Financial Statements. These amounts exclude any applicable affiliates from the Water Technologies business for prior periods presented since it was divested during 2014 and in accordance with provisions within U.S. GAAP the results of this business have been reclassified to discontinued operations in the Statements of Consolidated Comprehensive Income. The results of operations and amounts recorded by Ashland as of and for the years ended September 30, 2015 and 2014 only include results for the Valvoline joint venture within Venezuela and the ASK joint venture prior to their divestitures. See Note B for further information on these divestitures in 2015 and 2014.

At September 30, 2015 and 2014, Ashland's retained earnings included \$54 million and \$73 million, respectively, of undistributed earnings from unconsolidated affiliates accounted for on the equity method. The summarized financial information for all companies accounted for on the equity method by Ashland is as of and for the years ended September 30, 2015, 2014 and 2013, respectively.

(In millions)	2015	2014	2013
Financial position			
Current assets	\$211	\$292	
Current liabilities	(54)	(98)	)
Working capital	157	194	
Noncurrent assets	40	45	
Noncurrent liabilities	(1)	(1)	)
Stockholders' equity	\$196	\$238	
Results of operations			
Sales	\$398	\$966	\$1,181
Income from operations	57	74	79
Net income	31	63	53
Amounts recorded by Ashland			
Investments and advances	\$65	\$81	\$213
Equity income (loss) (a)	1	(25)	) 26
Distributions received	22	14	11

(a) The results in 2015 and 2014 include a \$14 million and \$50 million impairment on the Valvoline joint venture in Venezuela and the ASK joint venture, respectively.

## NOTE E – RESTRUCTURING ACTIVITIES

Ashland periodically implements company-wide restructuring programs related to acquisitions, divestitures and other cost reduction programs in order to enhance profitability through streamlined operations and an improved overall cost structure for each business.

## Severance costs

During 2014, Ashland announced a global restructuring program to streamline the resources used across the organization. As part of this global restructuring program, Ashland announced a voluntary severance offer (VSO) to certain U.S. employees. Approximately 400 employees were formally approved for the VSO. Additionally, during 2014, an involuntary program for employees was also initiated as part of the global restructuring program. Substantially all payments related to the VSO and involuntary programs were paid by the end of fiscal year 2015. The VSO and involuntary programs resulted in expense of \$95 million being recognized during 2014, with \$13 million being recorded within the cost of sales caption and \$82 million being recorded within the selling, general and administrative expense caption of the Statements of Consolidated Comprehensive Income. In addition, the employee reductions resulted in a pension curtailment being recorded during 2014. See Note M for further information. As of September 30, 2015 and 2014, the remaining restructuring reserve for the global restructuring program was \$7 million and \$53 million, respectively.



As of September 30, 2015 and 2014, the remaining \$1 million and \$3 million, respectively, in restructuring reserves for other previously announced programs principally consisted of expected future severance payments for programs implemented during 2011. Substantially all of these payments will be paid by the end of fiscal year 2016.

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## NOTE E – RESTRUCTURING ACTIVITIES (continued)

## Facility costs

The costs related to this reserve primarily relate to lease abandonment charges incurred due to the exit from office facilities obtained as part of the Hercules acquisition. During 2014, Ashland incurred an additional \$4 million lease abandonment charge related to its exit from a Hercules related office facility. The costs related to the reserve will be paid over the remaining lease term through May 2016. As of September 30, 2015 and 2014, the remaining restructuring reserve for all qualifying facility costs totaled \$3 million and \$9 million, respectively.

The following table details at September 30, 2015, 2014 and 2013, the amount of restructuring reserves related to the programs discussed above, and the related activity in these reserves during 2015, 2014 and 2013. The severance reserves are included in accrued expenses and other liabilities in the Consolidated Balance Sheet for all periods presented. As of September 30, 2015, facility cost reserves are included in accrued expenses and other liabilities in the Consolidated Balance Sheet, while these reserves were primarily within other noncurrent liabilities as of September 30, 2014.

(In millions)	Severance	Facility costs	Total
Balance as of September 30, 2012	\$29	\$15	\$44
Reserve adjustments	9	—	9
Utilization (cash paid)	(21	) (7	) (28
Balance as of September 30, 2013	17	8	25
Restructuring reserves	95	4	99
Reserve adjustments	(4	) —	(4
Utilization (cash paid)	(52	) (3	) (55
Balance as of September 30, 2014	56	9	65
Reserve adjustments	(3	) (2	) (5
Utilization (cash paid)	(45	) (4	) (49
Balance as of September 30, 2015	\$8	\$3	\$11

## Specialty Ingredients Restructuring

During 2015, Specialty Ingredients committed to a restructuring plan within an existing manufacturing facility. As a result, restructuring charges of \$23 million were recorded within the cost of sales caption of the Statements of Consolidated Comprehensive Income. As of September 30, 2015, the remaining restructuring reserve related to severance for the Specialty Ingredients manufacturing facility totaled \$13 million. The restructuring plan is expected to be completed during fiscal 2016.

## NOTE F – FAIR VALUE MEASUREMENTS

As required by U.S. GAAP, Ashland uses applicable guidance for defining fair value, the initial recording and periodic remeasurement of certain assets and liabilities measured at fair value and related disclosures for instruments measured at fair value. Fair value accounting guidance establishes a fair value hierarchy, which prioritizes the inputs to valuation techniques used to measure fair value into three broad levels. The fair value hierarchy gives the highest priority to quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). An instrument's categorization within the fair value hierarchy is based upon the lowest level of input that is significant to the instrument's fair value measurement. The three levels within the fair value hierarchy are described as follows.

Level 1 – Observable inputs such as unadjusted quoted prices in active markets for identical assets or liabilities.

Level 2 – Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. These include quoted prices for similar assets or liabilities in active markets and quoted prices for identical or similar assets or liabilities in markets that are not active.

Level 3 – Unobservable inputs for the asset or liability for which there is little, if any, market activity at the measurement date. Unobservable inputs reflect Ashland's own assumptions about what market participants would use to price the asset or liability. The inputs are developed based on the best information available in the circumstances,

which might include Ashland's own financial data such as internally developed pricing models, discounted cash flow methodologies, as well as instruments for which the fair value determination requires significant management judgment.

For assets that are measured using quoted prices in active markets (Level 1), the total fair value is the published market price per unit multiplied by the number of units held without consideration of transaction costs. Assets and liabilities that are measured

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## NOTE F – FAIR VALUE MEASUREMENTS (continued)

using significant other observable inputs (Level 2) are primarily valued by reference to quoted prices of similar assets or liabilities in active markets, adjusted for any terms specific to that asset or liability. For all other assets and liabilities for which unobservable inputs are used (Level 3), fair value is derived through the use of fair value models, such as a discounted cash flow model or other standard pricing models that Ashland deems reasonable.

The following table summarizes financial asset instruments subject to recurring fair value measurements as of September 30, 2015. For additional information on fair value hierarchy measurements of pension plan asset holdings, see Note M.

(In millions)	Carrying value	Total fair value	Quoted prices		
			in active markets for identical assets Level 1	Significant other observable inputs Level 2	Significant unobservable inputs Level 3
<b>Assets</b>					
Cash and cash equivalents	\$1,257	\$1,257	\$1,257	\$—	\$—
Restricted investments (a)	315	315	315	—	—
Deferred compensation investments (b)	180	180	40	140	—
Investments of captive insurance company (b)	4	4	4	—	—
Foreign currency derivatives	13	13	—	13	—
Total assets at fair value	\$1,769	\$1,769	\$1,616	\$153	\$—
<b>Liabilities</b>					
Foreign currency derivatives	\$16	\$16	\$—	\$16	\$—
Total liabilities at fair value	\$16	\$16	\$—	\$16	\$—

(a)Included in restricted investments and \$30 million within other current assets in the Consolidated Balance Sheets.

(b)Included in other noncurrent assets in the Consolidated Balance Sheets.

The following table summarizes financial asset instruments subject to recurring fair value measurements as of September 30, 2014.

(In millions)	Carrying value	Total fair value	Quoted prices		
			in active markets for identical assets Level 1	Significant other observable inputs Level 2	Significant unobservable inputs Level 3
<b>Assets</b>					
Cash and cash equivalents	\$1,393	\$1,393	\$1,393	\$—	\$—
Deferred compensation investments (a)	184	184	45	139	—
Investments of captive insurance company (a)	3	3	3	—	—
Foreign currency derivatives	11	11	—	11	—
Total assets at fair value	\$1,591	\$1,591	\$1,441	\$150	\$—
<b>Liabilities</b>					
Foreign currency derivatives	\$9	\$9	\$—	\$9	\$—
Total liabilities at fair value	\$9	\$9	\$—	\$9	\$—

(a)Included in other noncurrent assets in the Consolidated Balance Sheets.

Restricted investments

As discussed in Note A, Ashland maintains certain investments in a restrictive renewable annual trust for the purpose of paying future asbestos indemnity and defense costs. The investments are designated as available-for-sale securities, classified as Level

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## NOTE F – FAIR VALUE MEASUREMENTS (continued)

1 measurements within the fair value hierarchy. These securities were classified primarily as noncurrent restricted investment assets, with \$30 million classified within other current assets, in the Consolidated Balance Sheets. The following table provides a summary of the available-for-sale securities portfolio for the fiscal year ended September 30, 2015:

(In millions)	Original	Investment	Unrealized	Unrealized		Fair
As of September 30, 2015	Cost	Income (a)	gain	loss	Disbursements	Value
Demand deposit	\$20	3	\$—	\$—	(6	) \$17
Equity mutual fund	195	—	—	(14	) —	181
Corporate bond mutual fund	120	—	—	(3	) —	117
Total	\$335	3	\$—	\$(17	) (6	) \$315

(a) Investment income for the demand deposit includes interest income as well as dividend income transferred from the equity and corporate bond mutual funds.

Investment income of \$3 million was recognized during 2015 within net interest and other financing expense in the Statements of Consolidated Comprehensive Income. The unrealized losses, less than twelve months in duration, were recognized within accumulated other comprehensive income (AOCI). At September 30, 2015, Ashland considered the decline in market value of its restricted investment portfolio to be temporary in nature and does not consider any of its investments other-than-temporarily impaired. Ashland invests in highly-rated mutual funds comprised principally of investment grade securities. No realized gain or loss was reclassified out of AOCI and no other-than-temporary impairment was recognized in AOCI during 2015.

## Deferred compensation investments

Deferred compensation investments consist of Level 1 and Level 2 measurements within the fair value hierarchy. Level 1 investments consist primarily of fixed income U.S. government bonds while Level 2 investments are comprised primarily of a guaranteed interest fund, a common stock index fund and an intermediate government bond fund.

## Derivative and hedging activities

## Currency hedges

Ashland conducts business in a variety of foreign currencies. Accordingly, Ashland regularly uses foreign currency derivative instruments to manage exposure on certain transactions denominated in foreign currencies to curtail potential earnings volatility effects of certain assets and liabilities, including short-term inter-company loans, denominated in currencies other than Ashland's functional currency of an entity. These derivative contracts generally require exchange of one foreign currency for another at a fixed rate at a future date and generally have maturities of less than twelve months. All contracts are marked-to-market with net changes in fair value recorded within the selling, general and administrative expense caption. The impacts of these contracts were largely offset by gains and losses resulting from the impact of changes in exchange rates on transactions denominated in non-functional currencies. The following table summarizes the currency hedge gains and losses recognized during 2015, 2014 and 2013 within the Statements of Consolidated Comprehensive Income.

(In millions)	2015	2014	2013
Foreign currency derivative gains (losses)	\$(17	) \$(7	) \$1

The following table summarizes the fair values of the outstanding foreign currency derivatives as of September 30, 2015 and 2014 included in accounts receivable and accrued expenses and other liabilities of the Consolidated Balance Sheets.

(In millions)	2015	2014
---------------	------	------

Foreign currency derivative assets	\$5	\$2
Notional contract values	192	88
Foreign currency derivative liabilities	\$16	\$4
Notional contract values	673	281

Net investment hedges

During 2015 and 2014, Ashland entered into foreign currency contracts in order to manage the foreign currency exposure of the net investment in certain foreign operations. These foreign currency contracts were primarily the result of certain proceeds

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## NOTE F – FAIR VALUE MEASUREMENTS (continued)

from the sale of Water Technologies being received in non-U.S. denominated currencies during 2014 and ongoing management of the volatility in foreign currency exchange rates. Ashland designated the foreign currency contracts as hedges of net investment in its foreign subsidiaries. As a result, Ashland records these hedges at fair value using forward rates, with the effective portion of the gain or loss reported as a component of the cumulative translation adjustment within AOCI and subsequently recognized in the Statements of Consolidated Income when the hedged item affects net income. During 2015, certain foreign currency contracts were settled. These settlements resulted in net gains recorded within the cumulative translation adjustment within AOCI of \$11 million for 2015.

As of September 30, 2015 and 2014, the total notional value of foreign currency contracts equaled \$175 million and \$206 million, respectively. The fair value of Ashland's net investment hedge assets and liabilities are calculated using forward rates. Accordingly, these instruments are deemed to be Level 2 measurements within the fair value hierarchy. Counterparties to these net investment hedges are highly rated financial institutions which Ashland believes carry only a nominal risk of nonperformance. The following table summarizes the fair value of the outstanding net investment hedge instruments as of September 30, 2015 and 2014.

(In millions)	Consolidated balance sheet caption	2015	2014
Net investment hedge assets	Accounts receivable	\$8	\$9
Net investment hedge liabilities (a)	Accrued expenses and other liabilities	—	5

(a) Fair values of \$0 denote a value less than \$1 million.

The following table summarizes the change in the unrealized gain on the net investment hedge instruments recognized within the cumulative translation adjustment within AOCI during 2015 and 2014. No portion of the gain was reclassified to income during 2015 and 2014. There was no hedge ineffectiveness with these instruments during 2015 and 2014.

(In millions)	2015	2014
Change in unrealized gain in AOCI	\$8	\$4
Tax impact of change in unrealized gain in AOCI	(2	) (3

## Interest rate hedges

During 2011, Ashland entered into interest rate swap agreements in order to manage the variable interest rate risk associated with term loans A and B that were borrowed in conjunction with the August 2011 acquisition of International Specialty Products Inc. (ISP). These instruments were designated as cash flow hedges whereby Ashland recorded these hedges at fair value, with the effective portion of the gain or loss reported as a component of AOCI and subsequently recognized in the Statements of Consolidated Comprehensive Income when the hedged item affected net income. Ashland terminated the interest rate swap agreements in conjunction with the repayment of term loans A and B during 2013, resulting in a charge of \$52 million included in the net interest and other financing expense caption of the Statements of Consolidated Comprehensive Income during 2013.

During 2013, Ashland reclassified a loss of \$65 million from AOCI to the Statements of Consolidated Comprehensive Income. The losses reclassified to the Statements of Consolidated Comprehensive Income were recorded in the net interest and other financing expense caption. Additionally, an unrealized loss of \$3 million on interest rate hedges was recognized in AOCI during 2013.

## Other financial instruments

At September 30, 2015 and 2014, Ashland's long-term debt (including current portion and excluding debt issuance cost discounts) had a carrying value of \$3,431 million and \$2,951 million, respectively, compared to a fair value of \$3,484 million and \$3,102 million, respectively. The fair values of long-term debt are based on quoted market prices or, if market prices are not available, the present values of the underlying cash flows discounted at Ashland's



incremental borrowing rates, and are deemed to be Level 2 measurements within the fair value hierarchy.

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## NOTE G – PROPERTY, PLANT AND EQUIPMENT

The following table describes the various components of property, plant and equipment within the Consolidated Balance Sheets.

(In millions)	2015	2014
Land	\$202	\$228
Buildings	710	730
Machinery and equipment	2,957	3,049
Construction in progress	275	268
Total property, plant and equipment (gross)	4,144	4,275
Accumulated depreciation	(1,962 )	(1,861 )
Total property, plant and equipment (net)	\$2,182	\$2,414

The following table summarizes various property, plant and equipment charges included within the Statements of Consolidated Comprehensive Income.

(In millions)	2015	2014	2013
Depreciation	\$263	\$304	\$268
Capitalized interest	2	1	1

Depreciation during 2015 includes \$6 million of accelerated depreciation related to the restructuring plan of an existing manufacturing facility within the Specialty Ingredients reportable segment. These charges were recorded within the cost of sales caption of the Statements of Consolidated Comprehensive Income. During 2014, depreciation included \$36 million of accelerated depreciation and asset impairment, including a \$19 million impairment related to the impairment of a product line within the Specialty Ingredients reportable segment. This charge was recorded within the cost of sales caption of the Statements of Consolidated Comprehensive Income. The remaining \$17 million relates to accelerated depreciation associated with plant closures within the Performance Materials reportable segment. During 2013, there was \$2 million of accelerated depreciation.

## NOTE H – GOODWILL AND OTHER INTANGIBLES

## Goodwill

Ashland reviews goodwill and indefinite-lived intangible assets for impairment annually or when events and circumstances indicate an impairment may have occurred. This annual assessment is performed as of July 1 and consists of Ashland determining each reporting unit's current fair value compared to its current carrying value. Subsequent to the business realignment during 2014 and the December 1, 2014 sale of the Elastomers division, which was previously a reporting unit, Ashland determined that its reporting units for the allocation of goodwill include the Specialty Ingredients and Valvoline reportable segments, and the Composites and Intermediates/Solvents reporting units within the Performance Materials reportable segment.

Prior to this business realignment in 2014, the reporting units consisted of the Specialty Ingredients and Valvoline reportable segments, and the Composites and Adhesives reporting unit and the Elastomers reporting unit within the Performance Materials reportable segment. As a result of the business realignment in 2014, goodwill was reallocated using a relative fair value approach and Ashland performed an assessment to determine if an impairment existed. Upon completion of this assessment, Ashland concluded that no impairment existed.

Ashland makes various estimates and assumptions in determining the estimated fair values of those units through the use of a combination of discounted cash flow models and valuations based on earnings multiples for guideline public companies in each reporting unit's industry peer group. Discounted cash flow models are highly reliant on various assumptions. Significant assumptions Ashland utilized in these models for the current year included: projected business results and future industry direction, long-term growth factors and weighted-average cost of capital. Ashland uses assumptions that it deems to be reasonable estimates of likely future events and compares the total fair values of each reporting unit to Ashland's market capitalization, and implied control premium, to determine if the fair values are reasonable compared to external market indicators. Subsequent changes in these key assumptions could affect the results of future goodwill impairment reviews. In conjunction with the July 1, 2015 annual assessment of goodwill,

Ashland's valuation techniques did not indicate any impairment.

Ashland's assessment of an impairment charge on any of these assets currently classified as having indefinite lives, including goodwill, could change in future periods if any or all of the following events were to occur with respect to a particular reporting

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## NOTE H – GOODWILL AND OTHER INTANGIBLES (continued)

unit: a significant change in projected business results, a divestiture decision, increase in Ashland's weighted-average cost of capital rates, decrease in growth rates or other assumptions, economic deterioration that is more severe or of a longer duration than anticipated, or another significant economic event.

The following is a progression of goodwill by reportable segment for the years ended September 30, 2015 and 2014.

(In millions)	Specialty	Performance	(a) Valvoline	Total
	Ingredients	Materials		
Balance at September 30, 2013	\$2,231	\$311	\$167	\$2,709
Business realignment adjustment (b)	(39 )	39	—	—
Currency translation	(63 )	(4 )	1	(66 )
Balance at September 30, 2014	2,129	346	168	2,643
Acquisitions (c)	—	—	3	3
Divestitures (d)	(10 )	(10 )	(1 )	(21 )
Currency translation	(115 )	(23 )	(1 )	(139 )
Balance at September 30, 2015	\$2,004	\$313	\$169	\$2,486

(a) As of September 30, 2015, goodwill consisted of \$142 million for the Composites reporting unit and \$171 million for the Intermediates/Solvents reporting unit.

Business realignment adjustment represents the reallocation of goodwill during 2014 as a result of the transfer of Adhesives and Intermediates/Solvents between the Specialty Ingredients and Performance Materials reportable segments. In the fourth quarter of 2014, an error of \$32 million was identified in the amount of goodwill associated with Intermediates/Solvents that was originally reallocated in the third quarter of 2014. The amount of goodwill transferred from Specialty Ingredients to Performance Materials was revised from \$71 million to \$39 million to correct the error. Ashland does not believe that this revision was material to the previously filed financial information.

(c) Relates to Valvoline Instant Oil Change<sup>SM</sup> acquisitions during 2015.

(d) Divestiture caption represents the amounts of goodwill for the sale of Elastomers, Valvoline car care products and industrial biocides. See Note B for additional information.

## Other intangible assets

Intangible assets principally consist of trademarks and trade names, intellectual property, customer relationships and IPR&D. Intangible assets classified as finite are amortized on a straight-line basis over their estimated useful lives. The cost of trademarks and trade names is amortized principally over 4 to 25 years, intellectual property over 5 to 20 years and customer relationships over 3 to 24 years.

IPR&D and certain intangible assets within trademarks and trade names have been classified as indefinite-lived and had a balance of \$311 million and \$322 million as of September 30, 2015 and 2014, respectively. During 2015, 2014 and 2013 there was a decrease in indefinite-lived intangible assets of \$11 million, \$13 million and \$41 million, respectively, which represent impairments incurred related to certain IPR&D assets associated with the acquisition of ISP, classified within the research and development expense caption of the Statements of Consolidated Comprehensive Income. These impairments represent Level 2 nonrecurring fair value measurements. Ashland has started amortizing remaining IPR&D assets during fiscal 2016 since the technology was commercialized during this period.

In accordance with U.S. GAAP, Ashland annually reviews indefinite-lived intangible assets for possible impairment or whenever events or changes in circumstances indicate that carrying amounts may not be recoverable. In conjunction with the July 1, 2015 annual assessment of indefinite-lived intangible assets, Ashland's models did not indicate any additional impairment for indefinite-lived intangible assets. Intangible assets were comprised of the following as of September 30, 2015 and 2014.



## NOTE H – GOODWILL AND OTHER INTANGIBLES (continued)

(In millions)	2015			2014		
	Gross carrying amount	Accumulated amortization	Net carrying amount	Gross carrying amount	Accumulated amortization	Net carrying amount
Definite-lived intangible assets						
Trademarks and trade names (a)	\$48	\$(41)	) \$7	\$72	\$(49)	) \$23
Intellectual property (b)	813	(266)	) 547	827	(226)	) 601
Customer relationships (c)	424	(147)	) 277	481	(118)	) 363
Total definite-lived intangible assets	1,285	(454)	) 831	1,380	(393)	) 987
Indefinite-lived intangible assets						
IPR&D	8	—	) 8	19	—	) 19
Trademarks and trade names	303	—	) 303	303	—	) 303
Total intangible assets	\$1,596	\$(454)	) \$1,142	\$1,702	\$(393)	) \$1,309

Divested trademarks and trade names during 2015 had gross carrying amounts of \$6 million, \$7 million and \$11 million for Elastomers, Valvoline car care products and industrial biocides, respectively, and accumulated amortization of \$5 million, \$3 million and \$3 million, respectively.

(b) Divested intellectual property during 2015 had a gross carrying amount of \$18 million with \$5 million of accumulated amortization for Elastomers.

(c) Divested customer relationships during 2015 had a gross carrying amount and accumulated amortization of \$1 million each for Valvoline car care products.

Amortization expense recognized on intangible assets was \$78 million for 2015, \$89 million for 2014 and \$88 million for 2013, and is primarily included in the selling, general and administrative expense caption of the Statements of Consolidated Comprehensive Income. As of September 30, 2015, all of Ashland's intangible assets that had a carrying value were being amortized except for IPR&D and certain trademarks and trade names that have been determined to have indefinite lives. Estimated amortization expense for future periods is \$78 million in 2016, \$78 million in 2017, \$78 million in 2018, \$74 million in 2019 and \$73 million in 2020. The amortization expense for future periods is an estimate. Actual amounts may change from such estimated amounts due to fluctuations in foreign currency exchange rates, additional intangible asset acquisitions and divestitures, potential impairment, accelerated amortization, or other events.

## NOTE I – DEBT

The following table summarizes Ashland's current and long-term debt at September 30, 2015 and 2014.

(In millions)	2015	2014
4.750% notes, due 2022	\$1,120	\$1,120
Term Loan, due 2020	1,086	—
3.875% notes, due 2018	700	700
6.875% notes, due 2043	376	376
Accounts receivable securitization (a)	190	255
6.50% junior subordinated notes, due 2029	136	134
Revolving credit facility	110	45
Other international loans, interest at a weighted-average rate of 6.2% at September 30, 2015 (5.3% to 9.5%)	25	29
Medium-term notes, due 2019, interest of 9.4% at September 30, 2015	5	14

3.000% notes, due 2016	—	600	
Other (b)	(19	) (24	)
Total debt	3,729	3,249	
Short-term debt	(326	) (329	)
Current portion of long-term debt	(55	) (9	)
Long-term debt (less current portion and debt issuance cost discounts)	\$3,348	\$2,911	

(a) During 2015, the potential funding for qualified receivables was reduced from \$275 million to \$250 million.

(b) Other includes \$28 million and \$31 million of debt issuance cost discounts as of September 30, 2015 and 2014, respectively.

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## NOTE I – DEBT (continued)

At September 30, 2015, Ashland's total debt had an outstanding principal balance of \$3,907 million, discounts of \$150 million and debt issuance costs of \$28 million. The scheduled aggregate maturities of debt for the next five fiscal years are as follows: \$381 million in 2016, \$69 million in 2017, \$810 million in 2018, \$143 million in 2019 and \$715 million in 2020.

## Senior notes and senior credit facilities

## Senior notes refinancing and 2015 Senior Credit Agreement

During June of 2015, Ashland completed certain refinancing transactions related to the \$600 million 3.000% senior notes due in 2016 (2016 senior notes). Ashland commenced and completed a cash tender offer to purchase for cash any and all of its outstanding 2016 senior notes. At the close of the tender offer, \$550 million aggregate principal amount of the 2016 senior notes was tendered by note holders, representing approximately 92% of the outstanding 2016 senior notes, which have been purchased by Ashland. Subsequently, Ashland redeemed the remaining balance of the 2016 senior notes of \$50 million on July 23, 2015.

In connection with the tender offer and redemption, in June 2015, Ashland entered into a new Credit Agreement (the 2015 Senior Credit Agreement). The 2015 Senior Credit Agreement replaced the \$1.2 billion senior unsecured revolving credit facility (the 2013 Senior Credit Facility), and was comprised of a new five-year senior unsecured revolving credit facility in an aggregate amount of \$1.2 billion (the 2015 revolving credit facility), which includes a \$250 million letter of credit sublimit and a \$100 million swing line loan sublimit, and a five-year senior unsecured term loan facility in an aggregate principal amount of \$1.1 billion (the term loan facility). The 2015 Senior Credit Agreement is not guaranteed, is unsecured and can be prepaid at any time without premium or penalty.

At Ashland's option, borrowings under the 2015 revolving credit facility will bear interest at either LIBOR or an alternate base rate, in each case plus the applicable interest rate margin. The loans' interest rate will fluctuate between LIBOR plus 1.375% per annum and LIBOR plus 2.50% per annum (or between the alternate base rate plus 0.375% per annum and the alternate base rate plus 1.50% per annum), based upon Ashland's corporate credit ratings or the consolidated gross leverage ratio (as defined in the 2015 Senior Credit Agreement) (whichever yields a lower applicable interest rate margin) at such time. In addition, Ashland was required to pay fees of 0.25% per annum on the daily unused amount of the 2015 revolving credit facility through and including June 30, 2015, and thereafter the fee rate will fluctuate between 0.175% and 0.40% per annum, based upon Ashland's corporate credit ratings or the consolidated gross leverage ratio (whichever yields a lower fee rate).

Total borrowing capacity remaining under the 2015 revolving credit facility was \$1,013 million, due to an outstanding balance of \$110 million, as well as a reduction of \$77 million for letters of credit outstanding at September 30, 2015. During 2015, Ashland used the proceeds from borrowings under the \$1.1 billion term loan facility along with cash on hand (i) to fund the tender offer of the 2016 senior notes, (ii) to pay in full the outstanding loans under the 2013 Senior Credit Facility, (iii) to pay accrued interest, fees and expenses under the 2013 Senior Credit Facility and the 2016 senior notes, (iv) to contribute funds to the U.S. pension plans impacted by the pension plan settlement program discussed in Note M, and (v) to pay fees and expenses incurred in connection with the entry into the 2015 Senior Credit Agreement. As a result of the tender offer and redemption, Ashland recognized a \$9 million charge related to early redemption premium payments, which is included in the net interest and other financing expense caption of the Statements of Consolidated Comprehensive Income in 2015.

Ashland incurred \$10 million of new debt issuance costs in connection with the 2015 Senior Credit Agreement, of which \$2 million was recognized immediately within the net interest and other financing expense caption of the Statements of Consolidated Comprehensive Income. The remaining \$8 million will be amortized over the term of the 2015 Senior Credit Agreement using the effective interest method. Additionally, as a result of the termination of the 2013 Senior Credit Facility and the repayment of the 2016 senior notes, Ashland recognized a \$2 million charge for the accelerated amortization of previously capitalized debt issuance costs, which is included in the net interest and other financing expense caption of the Statements of Consolidated Comprehensive Income.

3.000% senior notes, 3.875% senior notes, 4.750% senior notes and 6.875% senior notes



During 2013, Ashland completed its issuance of senior unsecured notes (senior notes) with an aggregate principal amount of \$2.3 billion. These senior notes were comprised of 3.000% senior notes due 2016 (\$600 million), 3.875% senior notes due 2018 (\$700 million), 4.750% senior notes due 2022 (\$625 million) and 6.875% senior notes due 2043 (\$375 million). As discussed above, the 2016 senior notes were tendered and redeemed during 2015. The 2022 notes were issued as additional notes under the existing 2022 notes indenture entered into in August 2012, and have the same terms as the originally issued 2022 notes. The 2043 notes were issued at a \$1 million premium, while the new 2022 notes were issued at a \$6 million discount. In accordance with U.S. GAAP, the premium and discount are being accreted into the net interest and other financing expense caption of the Statements of Consolidated Comprehensive Income over the terms of the respective notes. Ashland paid \$32 million in fees and expenses with respect to the issuance of the senior notes during 2013, which is being amortized proportionately for each tranche of the senior notes.

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## NOTE I – DEBT (continued)

## 2013 Senior Credit Facility

During 2013, Ashland also entered the 2013 Senior Credit Facility, a five-year senior unsecured revolving credit facility in an aggregate amount of \$1.2 billion, which included a \$250 million letter of credit sublimit and a \$100 million swing line loan sublimit. The 2013 Senior Credit Facility replaced the \$1 billion senior secured revolving credit facility under the 2011 Senior Credit Facility. The 2013 Senior Credit Facility was not guaranteed, was unsecured and could be prepaid at any time without premium. Ashland paid \$6 million in fees and expenses with respect to the entry into the 2013 Senior Credit Facility, which was being amortized over the five-year period. At Ashland's option, loans issued under the 2013 Senior Credit Facility bore interest at either LIBOR or an alternate base rate, in each case plus the applicable interest rate margin. The loans' interest rates fluctuated between LIBOR plus 1.50% per annum and LIBOR plus 2.50% per annum (or between the alternate base rate plus 0.50% per annum and the alternate base rate plus 1.50% per annum), based upon Ashland's corporate credit ratings or the consolidated gross leverage ratio (as defined in the 2013 Senior Credit Facility) (whichever yielded a lower applicable interest rate margin) at such time. In addition, Ashland was initially required to pay fees of 0.30% per annum on the daily unused amount of the 2013 Senior Credit Facility through and including March 31, 2013, and thereafter the fee rate fluctuates between 0.25% and 0.50% per annum, based upon Ashland's corporate credit ratings or the consolidated gross leverage ratio.

During 2013, Ashland used the net proceeds from its issuance of the senior notes, along with the initial \$85 million borrowing on the 2013 Senior Credit Facility and cash on hand, (i) to pay in full the 2011 Senior Credit Facility, including the \$1.41 billion outstanding principal of the term loan A facility and the \$1.03 billion outstanding principal of the term loan B facility, (ii) to pay \$52 million to terminate the interest rate swaps associated with the term loan A and term loan B facilities, (iii) to pay accrued interest, fees and expenses under the 2011 Senior Credit Facility and (iv) to pay \$38 million in fees and expenses with respect to the issuance of the senior notes and entry into the 2013 Senior Credit Facility. The \$52 million charge to terminate the interest rate swaps is included in the net interest and other financing expense caption of the Statements of Consolidated Comprehensive Income for 2013.

As a result of the repayment and the termination of the 2011 Senior Credit Facility during 2013, Ashland recognized a \$47 million charge for the accelerated amortization of previous debt issuance and other costs, which is included in the net interest and other financing expense caption of the Statements of Consolidated Comprehensive Income.

## 9.125% senior notes

During 2012, \$572 million of the total principal amount of the \$650 million, 9.125% senior notes were redeemed. During 2013, Ashland redeemed the remaining \$78 million outstanding principal of the senior notes. Ashland recognized a \$3 million charge for debt issuance costs and the original issue discount related to the 9.125% senior notes, as well as a \$4 million charge related to an early redemption premium payment, both of which are included in the net interest and other financing expense caption in the Statements of Consolidated Comprehensive Income for 2013.

## Accounts receivable securitization

On August 31, 2012, Ashland entered into a \$350 million accounts receivable securitization facility pursuant to (i) a Sale Agreement, among Ashland and certain of its direct and indirect subsidiaries (each an Originator and collectively, the Originators) and CVG Capital III LLC, a wholly-owned "bankruptcy remote" special purpose subsidiary of the Originators (CVG) and (ii) a Transfer and Administration Agreement, among CVG, each Originator, Ashland, as Master Servicer, certain Conduit Investors, Uncommitted Investors, Letter of Credit Issuers, Managing Agents, Administrators and Committed Investors, and The Bank of Nova Scotia, as agent for various secured parties (the Agent). The Transfer and Administration Agreement had a term of three years, but was extendable at the discretion of Ashland and the Investors. During 2015, the termination of the commitments under the Transfer and Administration Agreement was extended from August 28, 2015 to December 31, 2015.

Under the Sale Agreement, each Originator will transfer, on an ongoing basis, certain of its accounts receivable, certain related assets and the right to the collections on those accounts receivable to CVG. Under the terms of the Transfer and Administration Agreement, CVG could, from time to time, obtain up to \$350 million (in the form of cash

or letters of credit for the benefit of Ashland and its subsidiaries) from the Conduit Investors, the Uncommitted Investors and/or the Committed Investors through the sale of an undivided interest in such accounts receivable, related assets and collections. Subsequently during 2014 and 2015, the available funding for qualifying receivables under the accounts receivable securitization facility was reduced from \$350 million to \$275 million during 2014 and from \$275 million to \$250 million during 2015 due to the divestitures that occurred during the fiscal years. Ashland accounts for the securitization facility as secured borrowings, and the receivables sold pursuant to the facility are included in the Consolidated Balance Sheets as accounts receivable. Fundings under the Transfer and Administration Agreement will be repaid as accounts receivable are collected, with new fundings being advanced (through daily reinvestments) as new accounts receivable are originated by the Originators and transferred to CVG, with settlement generally occurring monthly. Ashland continues to classify any borrowings under this facility as a short-term debt instrument within the Consolidated Balance Sheets.

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## NOTE I – DEBT (continued)

Once sold to CVG, the accounts receivable, related assets and rights to collection described above are separate and distinct from each Originator's own assets and are not available to its creditors should such Originator become insolvent. Substantially all of CVG's assets have been pledged to the Agent in support of its obligations under the Transfer and Administration Agreement.

At September 30, 2015 and 2014, the outstanding amount of accounts receivable transferred by Ashland to CVG was \$381 million and \$493 million, respectively. Ashland had drawn \$190 million and \$255 million under the facility as of September 30, 2015 and 2014, respectively, in available funding from qualifying receivables. The weighted-average interest rate for this instrument was 1.8% for 2015 and 1.1% for 2014.

## Other debt

At September 30, 2015 and 2014, Ashland held other debt totaling \$175 million and \$184 million, respectively, comprised primarily of the 6.60% and 6.50% notes due 2027 and 2029, respectively, assumed in the Hercules acquisition, other short-term international loans, and a medium-term note.

## Net interest and other financing expense (income)

(In millions)	2015	2014	2013
Interest expense (a)	\$ 166	\$ 163	\$ 273
Interest income	(6	) (6	) (4
Available-for-sale securities income (b)	(3	) —	—
Other financing costs (c)	17	9	13
	\$ 174	\$ 166	\$ 282

Includes \$4 million and \$50 million of accelerated amortization for debt issuance costs during 2015 and 2013, (a) respectively, and the \$52 million charge to terminate the interest rate swaps associated with the term loan A and term loan B facilities during 2013.

(b) Represents investment income related to the restricted investments discussed in Note F.

Includes \$9 million related to the early redemption premium payments for the tender and redemption of the 2016 (c) senior notes during 2015 and a \$4 million redemption premium payment related to the \$78 million principal 9.125% senior notes redeemed during 2013.

The following table details the debt issuance cost and original issue discount amortization included in interest expense during 2015, 2014 and 2013.

(In millions)	2015	(a) 2014	2013	(b)
Normal amortization	\$ 14	\$ 14	\$ 15	
Accelerated amortization	4	—	50	
Total	\$ 18	\$ 14	\$ 65	

(a) Accelerated amortization of \$4 million for debt issuance costs resulting from early redemption of the 2016 senior notes and the entrance into the 2015 Senior Credit Agreement.

(b) Accelerated amortization of \$47 million and \$3 million resulted from the repayment of the 2011 Senior Credit Facility and the early paydown of Ashland's remaining 9.125% senior notes, respectively.

## Covenants related to current debt agreements

The 2015 Senior Credit Agreement contains usual and customary representations, warranties and affirmative and negative covenants, including financial covenants for leverage and interest coverage ratios, limitations on liens, additional subsidiary indebtedness, restrictions on subsidiary distributions, investments, mergers, sale of assets and restricted payments and other customary limitations. As of September 30, 2015, Ashland is in compliance with all

debt agreement covenant restrictions.

Financial covenants

The maximum consolidated leverage ratios permitted under the 2015 Senior Credit Agreement are as follows: 3.75 through December 31, 2016 and 3.5 from March 31, 2017 and each fiscal quarter thereafter. The 2015 Senior Credit Agreement defines the consolidated leverage ratio as the ratio of consolidated indebtedness minus unrestricted cash and cash equivalents to consolidated EBITDA (Covenant Adjusted EBITDA) for any measurement period. In general, the 2015 Senior Credit Agreement defines Covenant Adjusted EBITDA as net income plus consolidated interest charges, taxes, depreciation and amortization expense, fees and expenses related to capital market transactions, restructuring and integration charges, noncash stock and equity compensation expense, and any other nonrecurring expenses or losses that do not represent a cash item in such period or any future period; less any noncash gains or other items increasing net income. The computation of Covenant Adjusted EBITDA differs from the

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## NOTE I – DEBT (continued)

calculation of EBITDA and Adjusted EBITDA, which have been reconciled on page M-7. In general, consolidated indebtedness includes debt plus all purchase money indebtedness, banker's acceptances and bank guaranties, deferred purchase price of property or services, attributable indebtedness and guaranties.

The minimum required consolidated interest coverage ratio under the 2015 Senior Credit Agreement during its entire duration is 3.0. The 2015 Senior Credit Agreement defines the consolidated interest coverage ratio as the ratio of Covenant Adjusted EBITDA to consolidated interest charges for any measurement period.

At September 30, 2015, Ashland's calculation of the consolidated leverage ratio was 2.6, which is below the maximum consolidated leverage ratio permitted under the 2015 Senior Credit Agreement of 3.75. At September 30, 2015, Ashland's calculation of the interest coverage ratio was 6.4, which exceeds the minimum required consolidated ratio of 3.0.

## NOTE J – OTHER NONCURRENT ASSETS AND LIABILITIES

The following table provides the components of other noncurrent assets in the Consolidated Balance Sheets as of September 30.

(In millions)	2015	2014
Deferred compensation investments	\$180	\$184
Debt issuance costs	16	18
Note receivables	36	44
Manufacturing catalyst supplies	37	24
Environmental insurance receivables	16	24
Land use rights	22	23
Defined benefit plan assets	29	22
Life insurance policies	18	18
Tax receivables	7	17
Customer incentive	16	16
Debt defeasance assets	6	15
Other	93	74
	\$476	\$479

The following table provides the components of other noncurrent liabilities in the Consolidated Balance Sheets as of September 30.

(In millions)	2015	2014
Environmental remediation reserves	\$139	\$158
Accrued tax liabilities (including sales and franchise)	103	74
Deferred compensation	66	72
Reserves related to workers compensation and general liability	24	50
Other	73	106
	\$405	\$460

## NOTE K – LEASE COMMITMENTS

Ashland and its subsidiaries are lessees of office buildings, retail outlets, transportation equipment, warehouses and storage facilities, other equipment, facilities and properties under leasing agreements that expire at various dates. Capitalized lease obligations are not significant and are included in long-term debt while capital lease assets are included in property, plant and equipment. Future minimum rental payments at September 30, 2015 were \$40 million in 2016, \$31 million in 2017, \$24 million in 2018, \$19 million in 2019, \$15 million in 2020 and \$61 million in 2021

and later years. Rental expense under operating leases for continuing operations was as follows:

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## NOTE K – LEASE COMMITMENTS (continued)

(In millions)	2015	2014	2013	(a)
Minimum rentals (including rentals under short-term leases)	\$57	\$69	\$57	
Contingent rentals	4	7	6	
Sublease rental income	(2	) (2	) (2	)
	\$59	\$74	\$61	

(a) The table above excludes \$13 million of lease commitments during 2013 that were related to the Water Technologies business that have been reclassified to discontinued operations due to its sale in July 2014.

## NOTE L – INCOME TAXES

A summary of the provision for income taxes related to continuing operations follows.

(In millions)	2015	2014	2013	
Current				
Federal	\$(32	) \$34	\$7	
State	1	10	(6	)
Foreign	66	62	42	
	35	106	43	
Deferred	(57	) (294	) 153	
Income tax expense (benefit)	\$(22	) \$(188	) \$196	

Deferred income taxes are provided for income and expense items recognized in different years for tax and financial reporting purposes. As of September 30, 2015, management intends to indefinitely reinvest approximately \$1.6 billion of foreign earnings. Because these earnings are considered indefinitely reinvested, no U.S. tax provision has been accrued related to the repatriation of these earnings, and it is not practicable to estimate the amount of U.S. tax that might be payable if these earnings were ever to be remitted.

Foreign net operating loss carryforwards primarily relate to certain European and Asian Pacific operations and generally may be carried forward. U.S. state net operating loss carryforwards relate to operational losses within certain states and generally may be carried forward. Temporary differences that give rise to significant deferred tax assets and liabilities as of September 30 are presented in the following table.



## NOTE L – INCOME TAXES (continued)

(In millions)	2015	2014
Deferred tax assets		
Foreign net operating loss carryforwards (a)	\$81	\$84
Employee benefit obligations	392	544
Environmental, self-insurance and litigation reserves (net of receivables)	218	172
State net operating loss carryforwards (b)	73	58
Compensation accruals	88	91
Credit carryforwards (c)	89	25
Other items	26	65
Valuation allowances (d)	(107	) (148
Total deferred tax assets	860	891
Deferred tax liabilities		
Goodwill and other intangibles (e)	371	409
Property, plant and equipment	351	416
Unremitted earnings	11	19
Total deferred tax liabilities	733	844
Net deferred tax asset (liability)	\$127	\$47

- (a) Gross net operating loss carryforwards will expire in future years as follows: \$2 million in 2016, \$13 million in 2017 and the remaining balance in other future years.
- (b) Gross net operating loss carryforwards include offset for uncertain tax positions of and will expire in future years as follows: \$20 million in 2016, \$38 million in 2017 and the remaining balance in other future years.
- (c) Credit carryforwards include offset for uncertain tax positions and consist primarily of foreign tax credits of \$67 million expiring in future years beyond 2017 and alternative minimum tax credits of \$12 million with no expiration date.
- (d) Valuation allowances primarily relate to certain state and foreign net operating loss carryforwards.
- (e) The total gross amount of goodwill as of September 30, 2015 expected to be deductible for tax purposes is \$38 million.

The U.S. and foreign components of income from continuing operations before income taxes and a reconciliation of the statutory federal income tax with the provision for income taxes follow. The foreign components of income from continuing operations disclosed in the following table exclude any allocations of certain corporate expenses incurred in the U.S.

## NOTE L – INCOME TAXES (continued)

(In millions)	2015	2014	2013
Income (loss) from continuing operations before income taxes			
United States (a), (b)	\$(158	) \$(364	) \$466
Foreign (b)	327	248	283
Total income (loss) from continuing operations before income taxes	\$169	\$(116	) \$749
Income taxes computed at U.S. statutory rate (35%)	\$59	\$(40	) \$262
Increase (decrease) in amount computed resulting from			
Net gain on divestitures (c)	11	37	—
Uncertain tax positions	23	33	11
Valuation allowance charges (d)	(29	) 14	(12
Claim for research and development credits (e)	(7	) (2	) (14
State taxes (f)	(8	) (16	) 23
Net impact of foreign results (g)	(73	) (214	) (74
Other items	2	—	—
Income tax expense (benefit)	\$(22	) \$(188	) \$196

(a) A significant component of the fluctuations within this caption relates to the annual remeasurements of the U.S. pension and other postretirement plans.

Prior year amounts for income (loss) from continuing operations before income taxes for the United States and Foreign line items have been revised to reflect a change in the classification of the elimination of foreign intercompany dividends. There was no impact on the total of income (loss) from continuing operations before income taxes or on the computation of income tax expense (benefit) for the years ended September 30, 2014 and 2013 and therefore Ashland does not believe that this revision is material to the previously filed financial information.

2015 includes adjustments related to the sale of Valvoline Venezuela JV, Elastomers and the Biocides divestitures (c) of \$5 million, \$4 million and \$2 million respectively. 2014 tax adjustments associated with the Water Technologies business and ASK divestitures are a \$39 million charge and \$2 million gain respectively.

(d) Related to foreign and state deferred tax asset valuation allowances/(releases).

(e) 2015 and 2013 include a benefit related to credits signed into law on a retroactive basis.

(f) 2014 and 2013 include expense of \$5 million and \$7 million, respectively, recorded for deferred tax adjustments, primarily attributable to state rate changes.

2014 includes a \$168 million tax benefit related to the reversal of deferred tax liabilities for outside basis (g) differences and other related matters and a \$14 million expense recorded for a rate change in a foreign jurisdiction.

2013 includes a \$17 million benefit recorded for a rate change in a foreign jurisdiction.

The fiscal 2015 effective tax rate was impacted by net favorable items predominantly due to certain valuation allowance releases related to state deferred tax assets. These favorable adjustments were partially offset by an accrual for an unrecognized tax benefit and tax related to certain global restructuring steps.

Income tax benefit for 2014 included a \$168 million tax benefit related to the reversal of deferred tax liabilities for outside basis differences and other related matters, a charge of \$39 million for taxes associated with the sale of shares of subsidiaries included in the sale of the Water Technologies business, net charges of \$32 million for uncertain tax positions and related matters, a charge of \$14 million for a foreign income tax rate change and other net discrete item charges of \$7 million primarily related to changes in valuation allowances.

Income tax expense for 2013 included a zero benefit recorded on the MAP Transaction charge of \$14 million and a net benefit of \$16 million primarily attributable to a foreign income tax rate change.

Unrecognized tax benefits

U.S. GAAP prescribes a recognition threshold and measurement attribute for the accounting and financial statement disclosure of tax positions taken or expected to be taken in a tax return. The evaluation of a tax position is a two-step process. The first step requires Ashland to determine whether it is more likely than not that a tax position will be sustained upon examination based on the technical merits of the position. The second step requires Ashland to recognize in the financial statements each tax position that meets the more likely than not criteria, measured at the amount of benefit that has a greater than 50% likelihood of being realized. Ashland had \$144 million and \$155 million of unrecognized tax benefits, of which \$16 million and \$32 million relate to discontinued operations at September 30, 2015 and 2014, respectively. As of September 30, 2015, the total amount of unrecognized tax benefits that, if recognized, would affect the tax rate for continuing and discontinued operations was \$127 million. The remaining unrecognized tax benefits relate to tax positions for which ultimate deductibility is highly certain but for which there is uncertainty as to the timing of such deductibility. Recognition of these tax benefits would not have an impact on the effective tax rate.

Ashland recognizes interest and penalties related to uncertain tax positions as a component of income tax expense (benefit) in the Statements of Consolidated Comprehensive Income. Such interest and penalties totaled a \$1 million expense in 2015, \$2

## NOTE L – INCOME TAXES (continued)

million benefit in 2014 and \$5 million benefit in 2013. Ashland had \$18 million and \$19 million in interest and penalties related to unrecognized tax benefits accrued as of September 30, 2015 and 2014, respectively. During the year ended September 30, 2015 and 2014, respectively, changes in unrecognized tax benefits were as follows:

(In millions)

Balance at September 30, 2013	\$ 133	
Increases related to positions taken on items from prior years	29	
Decreases related to positions taken on items from prior years	(13	)
Increases related to positions taken in the current year	31	
Lapse of statute of limitations	(13	)
Disposition of Water Technologies	(12	)
Balance at September 30, 2014	155	
Increases related to positions taken on items from prior years	10	
Decreases related to positions taken on items from prior years	(15	)
Increases related to positions taken in the current year	24	
Lapse of statute of limitations	(6	)
Settlement of uncertain tax positions with tax authorities	(24	)
Balance at September 30, 2015	\$ 144	

From a combination of statute expirations and audit settlements in the next twelve months, Ashland expects a decrease in the amount of accrual for uncertain tax positions of up to \$3 million for continuing operations and zero for discontinued operations. For the remaining balance as of September 30, 2015, it is reasonably possible that there could be material changes to the amount of uncertain tax positions due to activities of the taxing authorities, settlement of audit issues, reassessment of existing uncertain tax positions, or the expiration of applicable statute of limitations; however, Ashland is not able to estimate the impact of these items at this time.

Ashland or one of its subsidiaries files income tax returns in the U.S. federal jurisdiction and various state and foreign jurisdictions. Foreign taxing jurisdictions significant to Ashland include Australia, Canada, Spain, Switzerland, Brazil, Mexico, China, Germany and the Netherlands. Ashland is subject to U.S. federal income tax examinations by tax authorities for periods after September 30, 2009 and U.S. state income tax examinations by tax authorities for periods after September 30, 2005. With respect to countries outside of the United States, with certain exceptions, Ashland's foreign subsidiaries are subject to income tax audits for years after 2004.

## NOTE M – EMPLOYEE BENEFIT PLANS

## Pension plans

Ashland and its subsidiaries sponsor contributory and noncontributory qualified defined benefit pension plans that cover certain employees in the United States and in a number of other countries. In addition, Ashland has non-qualified unfunded pension plans which provide supplemental defined benefits to those employees whose benefits under the qualified pension plans are limited by the Employee Retirement Income Security Act of 1974 and the Internal Revenue Code. Ashland funds the costs of the non-qualified plans as the benefits are paid. Pension obligations for applicable employees of non-U.S. consolidated subsidiaries are provided for in accordance with local practices and regulations of the respective countries. Benefits for those eligible for Ashland's U.S. pension plans generally are based on employees' years of service and compensation during the years immediately preceding their retirement.

The majority of Ashland's U.S. pension plans have been closed to new participants since January 1, 2011. In addition, most foreign pension plans are closed to new participants while those that remain open relate to areas where jurisdictions require plans to operate within the applicable country.

Pension plan settlement program

During 2015, Ashland informed approximately 20,000 former employees, who were included in the approximately 53,000 participants within the primary U.S. pension plans, that Ashland was offering these participants the option of receiving a lump sum payment on their vested retirement benefit or a reduced annuity now, in lieu of receiving monthly annuity payments deferred until retirement eligibility or when the participant may choose to initiate payment. During August 2015, approximately 12,000 participants elected to participate in the settlement program which resulted in approximately \$475 million in settlement payments

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## NOTE M – EMPLOYEE BENEFIT PLANS (continued)

made from the affected pension plans during September 2015. Settlement payments were funded with pension plan assets, which included the \$500 million contribution made during the third quarter of fiscal 2015. Additionally, as a result of this settlement program, Ashland recognized a \$3 million settlement gain during 2015, of which \$1 million and \$2 million was recognized in the cost of sales and selling, general and administrative expense captions, respectively, within the Statements of Consolidated Comprehensive Income.

**Pension plans divested**

As a result of the sale of the Water Technologies business on July 31, 2014, certain non-U.S. pension plans, with a net benefit obligation of \$70 million were fully transferred.

**Other postretirement benefit plans**

Ashland and its subsidiaries sponsor health care and life insurance plans for eligible employees in the U.S. and Canada who retire or are disabled. Ashland's retiree life insurance plans are noncontributory, while Ashland shares the costs of providing health care coverage with its retired employees through premiums, deductibles and coinsurance provisions. Ashland funds its share of the costs of the postretirement benefit plans as the benefits are paid. Employees hired after June 30, 2003, and participating in the Ashland plans, will have access to any retiree health care coverage that may be provided, but will have no Ashland company funds available to help pay for such coverage.

Since January 1, 2004, Ashland's legacy plans have limited their annual per capita costs to an amount equivalent to base year per capita costs, plus annual increases of up to 1.5% per year for costs incurred. As a result, health care cost trend rates have no significant effect on the amounts reported for the health care plans. Premiums for retiree health care coverage are equivalent to the excess of the estimated per capita costs over the amounts borne by Ashland.

For certain other plans that have been acquired, the assumed postretirement health care plans include a limit on Ashland's share of costs for recent and future retirees. The assumed pre-65 health care cost trend rate as of September 30, 2015 was 8.3% and continues to be reduced to 4.50% in 2037 and thereafter. The assumptions used to project the liability anticipate future cost-sharing changes to the written plans that are consistent with the increase in health care cost. Employees hired after December 31, 2002 will have access to any retiree health care coverage that may be provided, but will have no Ashland company funds available to help pay for such coverage.

In May 2010, Ashland implemented changes for all plans, effective January 1, 2011, eliminating post-65 benefit coverage for those eligible participants retiring on or after January 1, 2016. In September 2011, Ashland adopted a plan amendment for the legacy Ashland plans to change the current post-65 Ashland Medical plan to Medicare Advantage plan. This change was effective January 1, 2012, at which time Ashland no longer applied for the Medicare Part D subsidy. In September 2012, Ashland further reduced the employer subsidy for the post-65 Ashland legacy Medicare Advantage Plan to account for the impact of certain changes to the prescription drug program adopted as part of the September 2011 plan amendment.

**Components of net periodic benefit costs (income)**

During the year ended September 30, 2015, Ashland was required to remeasure a non-U.S. pension plan due to the exit of Water Technologies' employees from the plan. As a result of the remeasurement, Ashland recognized a curtailment gain of \$7 million and actuarial loss of \$11 million during 2015. Of these amounts, all of the curtailment gain and \$2 million of the actuarial loss were attributable to the Water Technologies business and therefore included in the discontinued operations caption of the Statements of Consolidated Comprehensive Income during 2015.

During the year ended September 30, 2014, Ashland settled two non-U.S. pension plans, which required the plans to be remeasured. These remeasurements resulted in Ashland recognizing a settlement loss of \$38 million and actuarial loss of \$17 million. Of these amounts, \$6 million of the settlement loss and \$3 million of the actuarial loss were attributable to the Water Technologies business and therefore included in the discontinued operations caption of the Statements of Consolidated Comprehensive Income during 2014.

Due to the global restructuring plan initiated in January 2014, Ashland was required to remeasure certain pension and other postretirement plan obligations, which included updating assumptions related to these plans such as the discount rate, asset values and demographic data that were last updated at Ashland's fiscal year end. As a result of the remeasurements, Ashland recognized a curtailment loss of \$6 million and actuarial loss of \$83 million during the year

ended September 30, 2014. Of these amounts, \$14 million of the actuarial loss was attributable to the Water Technologies business and included in the discontinued operations caption of the Statements of Consolidated Comprehensive Income during 2014.

As a result of the completion of the sale of Water Technologies on July 31, 2014, Ashland was required to remeasure certain pension and other postretirement plan obligations. As a result of the remeasurements, Ashland recognized a curtailment gain of \$31 million and actuarial loss of \$140 million during the year ended September 30, 2014. Of these amounts, all of the curtailment gain and \$27 million of the actuarial loss were attributable to the Water Technologies business and included in the discontinued

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## NOTE M – EMPLOYEE BENEFIT PLANS (continued)

operations caption of the Statements of Consolidated Comprehensive Income during 2014. In addition, during 2013, \$81 million of the actuarial gain was attributable to the Water Technologies business and included within the discontinued operations caption of the Statements of Consolidated Comprehensive Income.

For segment reporting purposes, service cost for continuing operations is proportionately allocated to each reportable segment, excluding the Unallocated and other segment, while all other costs for continuing operations are recorded within the Unallocated and other segment. A portion of the other components of pension and other postretirement benefit costs (i.e., interest cost, expected return on assets, and amortization of prior service credit) related to Water Technologies has been reclassified to discontinued operations in the Statements of Consolidated Comprehensive Income. For the years ended September 30, 2014 and 2013, income of \$7 million and \$11 million, respectively, was classified within discontinued operations.

The following table summarizes the components of pension and other postretirement benefit costs for both continued and discontinued operations and the assumptions used to determine net periodic benefit costs (income) for the plans.

(In millions)	Pension benefits			Other postretirement benefits		
	2015	2014	2013	2015	2014	2013
Net periodic benefit costs (income)						
Service cost	\$26	\$38	\$43	\$1	\$2	\$2
Interest cost	175	190	175	8	9	7
Curtailment, settlement and other	(11 )	31	—	—	(20 )	—
Expected return on plan assets	(216 )	(237 )	(238 )	—	—	—
Amortization of prior service credit (a)	(4 )	(2 )	(2 )	(17 )	(21 )	(21 )
Actuarial loss (gain)	260	431	(472 )	1	15	(26 )
	\$230	\$451	\$(494 )	\$(7 )	\$(15 )	\$(38 )
Weighted-average plan assumptions (b)						
Discount rate	4.18	% 4.68	% 3.70	% 3.85	% 4.28	% 3.23
Rate of compensation increase	3.18	% 3.59	% 3.66	% —	—	—
Expected long-term rate of return on plan assets	7.27	% 7.67	% 7.26	% —	—	—

(a) Changes to the post-65 Ashland Medical plan resulted in negative plan amendments that are being amortized within the other postretirement benefits caption.

The plan assumptions discussed are a blended weighted-average rate for Ashland's U.S. and non-U.S. plans. The U.S. pension plan represented approximately 90% of the projected benefit obligation at September 30, 2015. Other (b) postretirement benefit plans consist of U.S. and Canada, with the U.S. plan representing approximately 93% of the accumulated postretirement benefit obligation at September 30, 2015. Non-U.S. plans use assumptions generally consistent with those of U.S. plans.

The following table shows other changes in prior service credit recognized in accumulated other comprehensive income.

(In millions)	Pension		Postretirement	
	2015	2014	2015	2014
Prior service cost (credit)	\$2	\$(6 )	\$—	\$—
Curtailment, settlement and other	3	3	—	10
Amortization of prior service credit	4	2	17	21
Total	\$9	\$(1 )	\$17	\$31

Total recognized in net periodic benefit cost (income)



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and accumulated other comprehensive income                      \$239                      \$450                      \$10                      \$16

The following table shows the amount of prior service credit in accumulated other comprehensive income at September 30, 2015 that is expected to be recognized as a component of net periodic benefit cost (income) during the next fiscal year.

(In millions)	Pension benefits	Other postretirement benefits
Prior service credit	\$(2            )	\$(16           )

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## NOTE M – EMPLOYEE BENEFIT PLANS (continued)

At September 30, 2015 and 2014, the amounts recognized in accumulated other comprehensive income are shown in the following table.

(In millions)	Pension		Postretirement	
	2015	2014	2015	2014
Prior service credit	\$(12	) \$(21	) \$(45	) \$(62
Obligations and funded status				

Actuarial valuations are performed for the pension and other postretirement benefit plans to determine Ashland's obligation for each plan. In accordance with U.S. GAAP, Ashland recognizes the unfunded status of the plans as a liability in the Consolidated Balance Sheets. Summaries of the change in benefit obligations, plan assets, funded status of the plans, amounts recognized in the balance sheet, and assumptions used to determine the benefit obligations for 2015 and 2014 follow.

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## NOTE M – EMPLOYEE BENEFIT PLANS (continued)

(In millions)	Pension plans		Other postretirement benefit plans		
	2015	2014	2015	2014	
Change in benefit obligations					
Benefit obligations at October 1	\$4,326	\$4,307	\$210	\$217	
Service cost	26	38	1	2	
Interest cost	175	190	8	9	
Participant contributions	1	2	15	12	
Benefits paid	(217 )	(245 )	(33 )	(34 )	)
Actuarial loss	59	503	1	15	
Plan amendment	2	(6 )	—	—	
Foreign currency exchange rate changes	(40 )	(15 )	(3 )	(1 )	)
Other	14	4	—	—	
Divestiture	—	(127 )	—	—	
Curtailed and settlement	(527 )	(325 )	—	(10 )	)
Benefit obligations at September 30	\$3,819	\$4,326	\$199	\$210	
Change in plan assets					
Value of plan assets at October 1	\$3,075	\$3,381	\$—	\$—	
Actual return on plan assets	15	309	—	—	
Employer contributions	610	43	18	22	
Participant contributions	1	2	15	12	
Benefits paid	(217 )	(245 )	(33 )	(34 )	)
Foreign currency exchange rate changes	(28 )	(5 )	—	—	
Settlement	(519 )	(359 )	—	—	
Divestiture	—	(57 )	—	—	
Other	14	6	—	—	
Value of plan assets at September 30	\$2,951	\$3,075	\$—	\$—	
Unfunded status of the plans	\$(868 )	\$(1,251 )	\$(199 )	\$(210 )	)
Amounts recognized in the balance sheet					
Noncurrent benefit assets	\$29	\$22	\$—	\$—	
Current benefit liabilities	(19 )	(15 )	(17 )	(19 )	)
Noncurrent benefit liabilities	(878 )	(1,258 )	(182 )	(191 )	)
Net amount recognized	\$(868 )	\$(1,251 )	\$(199 )	\$(210 )	)
Weighted-average plan assumptions					
Discount rate	4.21	% 4.18	% 3.93	% 3.85	%
Rate of compensation increase	3.01	% 3.18	% —	—	%

The accumulated benefit obligation for all pension plans was \$3,750 million at September 30, 2015 and \$4,261 million at September 30, 2014. Information for pension plans with an accumulated benefit obligation in excess of plan assets follows:

## NOTE M – EMPLOYEE BENEFIT PLANS (continued)

(In millions)	2015			2014		
	Qualified plans (a)	Non-qualified plans	Total	Qualified plans (a)	Non-qualified plans	Total
Projected benefit obligation	\$3,446	\$162	\$3,608	\$3,930	\$172	\$4,102
Accumulated benefit obligation	3,390	156	3,546	3,880	165	4,045
Fair value of plan assets	2,712	—	2,712	2,832	—	2,832

(a) Includes qualified U.S. and non-U.S. pension plans.

## Plan assets

The expected long-term rate of return on U.S. pension plan assets was 7.65% and 8% for 2015 and 2014, respectively. The basis for determining the expected long-term rate of return is a combination of future return assumptions for various asset classes in Ashland's investment portfolio, historical analysis of previous returns, market indices and a projection of inflation.

The following table summarizes the various investment categories that the pension plan assets are invested in and the applicable fair value hierarchy that the financial instruments are classified within these investment categories as of September 30, 2015. For additional information and a detailed description of each level within the fair value hierarchy, see Note F.

(In millions)	Total fair value	Quoted prices		
		in active markets for identical assets Level 1	Significant other observable inputs Level 2	Significant unobservable inputs Level 3
Cash and cash equivalents	\$91	\$91	\$—	\$—
U.S. government securities	130	4	126	—
Other government securities	163	1	162	—
Corporate debt instruments	1,398	1,036	362	—
Corporate stocks	289	146	143	—
Insurance contracts	10	—	10	—
Private equity and hedge funds	842	—	—	842
Other investments	28	—	—	28
Total assets at fair value	\$2,951	\$1,278	\$803	\$870

The following table summarizes the various investment categories that the pension plan assets are invested in and the applicable fair value hierarchy that the financial instruments are classified within these investment categories as of September 30, 2014.

(In millions)	Total fair value	Quoted prices		
		in active markets for identical assets Level 1	Significant other observable inputs Level 2	Significant unobservable inputs Level 3
Cash and cash equivalents	\$102	\$102	\$—	\$—
U.S. government securities	180	7	173	—
Other government securities	165	—	165	—
Corporate debt instruments	1,172	788	384	—

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Corporate stocks	326	158	168	—
Insurance contracts	12	—	12	—
Private equity and hedge funds	1,085	—	—	1,085
Other investments	33	—	—	33
Total assets at fair value	\$3,075	\$1,055	\$902	\$1,118

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## NOTE M – EMPLOYEE BENEFIT PLANS (continued)

Ashland's pension plan holds a variety of investments designed to diversify risk. Investments classified as a Level 1 fair value measure principally represent marketable securities priced in active markets. Cash and cash equivalents and public equity and debt securities are well diversified and invested in U.S. and international small-to-large companies across various asset managers and styles. Investments classified as a Level 2 fair value measure principally represents fixed-income securities in U.S. treasuries and agencies and other investment grade corporate bonds and debt obligations.

Ashland's pension plans also hold Level 3 investments primarily within hedge funds and private equity funds with hedge funds accounting for nearly all of the Level 3 investments. Ashland's investments in these funds are primarily valued using the net asset value per share of underlying investments as determined by the respective individual fund administrators on a daily, weekly or monthly basis, depending on the fund. Such valuations are reviewed by the portfolio managers who determine the estimated value of the collective funds based on these inputs. The following table provides a reconciliation of the beginning and ending balances for these Level 3 assets.

(In millions)	Total Level 3 assets	Private equity and hedge funds	Other investments	
Balance as of September 30, 2013	\$ 1,228	\$ 1,190	\$ 38	
Purchases	71	71	—	
Sales	(258	) (258	) —	
Actual return on plan assets				
Relating to assets held at September 30, 2014	67	72	(5	)
Relating to assets sold during 2014	10	10	—	
Balance as of September 30, 2014	1,118	1,085	33	
Purchases	1	1	—	
Sales	(252	) (252	) —	
Actual return on plan assets				
Relating to assets held at September 30, 2015	3	8	(5	)
Relating to assets sold during 2015	—	—	—	
Balance as of September 30, 2015	\$ 870	\$ 842	\$ 28	

## Investments and Strategy

In developing an investment strategy for its defined benefit plans, Ashland has considered the following factors: the nature of the plans' liabilities, the allocation of liabilities between active, deferred and retired members, the funded status of the plans, the applicable investment horizon, the respective size of the plans and historical and expected capital market returns. Ashland's U.S. pension plan assets are managed by outside investment managers, which are monitored against investment return benchmarks and Ashland's established investment strategy. Investment managers are selected based on an analysis of, among other things, their investment process, historical investment results, frequency of management turnover, cost structure and assets under management. Assets are periodically reallocated between investment managers to maintain an appropriate asset mix and diversification of investments and to optimize returns.

The current target asset allocation for the U.S. plan is 51% fixed securities and 49% equity securities. Fixed income securities primarily include long duration high grade corporate debt obligations. Risk assets include both traditional equity as well as a mix of non-traditional assets such as hedge funds and private equity. Investment managers may employ a limited use of derivatives to gain efficient exposure to markets.

Ashland's investment strategy and management practices relative to plan assets of non-U.S. plans generally are consistent with those for U.S. plans, except in those countries where investment of plan assets is dictated by applicable regulations. The weighted-average asset allocations for Ashland's U.S. and non-U.S. plans at September 30, 2015 and 2014 by asset category follow.



## NOTE M – EMPLOYEE BENEFIT PLANS (continued)

(In millions)	Target	Actual at September 30		
		2015	2014	
Plan assets allocation				
Equity securities	15 - 60%	42	% 51	%
Debt securities	40 - 85%	56	% 47	%
Other	0 - 20%	2	% 2	%
		100	% 100	%

## Cash flows

## U.S. pension legislation and future funding requirements

Ashland's U.S. qualified pension plans funding requirements through fiscal 2017 are calculated in accordance with the regulations set forth in the Moving Ahead for Progress in the 21<sup>st</sup> Century Act (MAP-21), which provides temporary relief for employers who sponsor defined benefit pension plans related to funding contributions under the Employee Retirement Income Security Act of 1974. Specifically, MAP-21 allows for the use of a 25-year average interest rate within an upper and lower range for purposes of determining minimum funding obligations instead of an average interest rate for the two most recent years, as was previously required.

During fiscal 2015 and 2014, Ashland contributed \$596 million and \$22 million, respectively, to its U.S. pension plans and \$14 million and \$21 million, respectively, to its non-U.S. pension plans. The 2015 contributions included \$500 million to the U.S. pension plans impacted by the pension plan settlement program discussed previously. As a result of the \$500 million discretionary contribution, Ashland's funding requirements to U.S. qualified pension plans have been eliminated for fiscal year 2016. Ashland expects to contribute approximately \$15 million to its non-qualified U.S. pension plans and \$15 million to its non-U.S. pension plans during 2016.

The following benefit payments, which reflect future service expectations, are projected to be paid in each of the next five years and in aggregate for five years thereafter.

(In millions)	Pension benefits	Other postretirement benefits
2016	\$240	\$18
2017	235	17
2018	235	17
2019	236	17
2020	237	16
2021 - 2025	1,189	71

## Other plans

Ashland sponsors savings plans to assist eligible employees in providing for retirement or other future needs. Under such plans, company contributions amounted to \$38 million in 2015, \$31 million in 2014 and \$43 million in 2013. Ashland also sponsors various other benefit plans, some of which are required by different countries. The total noncurrent liabilities associated with these plans were \$16 million and \$19 million as of September 30, 2015 and 2014, respectively.

## NOTE N – LITIGATION, CLAIMS AND CONTINGENCIES

## Asbestos litigation

Ashland and Hercules have liabilities from claims alleging personal injury caused by exposure to asbestos. To assist in developing and annually updating independent reserve estimates for future asbestos claims and related costs given various assumptions, Ashland retained Hamilton, Rabinovitz & Associates, Inc. (HR&A). The methodology used by HR&A to project future asbestos costs is based largely on recent experience, including claim-filing and settlement



rates, disease mix, enacted legislation, open claims and litigation defense. The claim experience of Ashland and Hercules are separately compared to the results of previously conducted third party epidemiological studies estimating the number of people likely to develop asbestos-related diseases. Those studies were undertaken in connection with national analyses of the population expected to have been

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## NOTE N – LITIGATION, CLAIMS AND CONTINGENCIES (continued)

exposed to asbestos. Using that information, HR&A estimates a range of the number of future claims that may be filed, as well as the related costs that may be incurred in resolving those claims. Changes in asbestos-related liabilities and receivables are recorded on an after-tax basis within the discontinued operations caption in the Statements of Consolidated Comprehensive Income.

## Ashland asbestos-related litigation

The claims alleging personal injury caused by exposure to asbestos asserted against Ashland result primarily from indemnification obligations undertaken in 1990 in connection with the sale of Riley, a former subsidiary. The amount and timing of settlements and number of open claims can fluctuate from period to period. A summary of Ashland asbestos claims activity, excluding Hercules claims, follows.

(In thousands)	2015	2014	2013
Open claims - beginning of year	65	65	66
New claims filed	2	2	2
Claims settled	—	(1	) (1
Claims dismissed	(7	) (1	) (2
Open claims - end of year	60	65	65

## Ashland asbestos-related liability

From the range of estimates, Ashland records the amount it believes to be the best estimate of future payments for litigation defense and claim settlement costs, which generally approximates the mid-point of the estimated range of exposure from model results. Ashland reviews this estimate and related assumptions quarterly and annually updates the results of a non-inflated, non-discounted approximate 50-year model developed with the assistance of HR&A. During the most recent update, completed during 2015, it was determined that the liability for Ashland asbestos claims did not need to be adjusted. Total reserves for asbestos claims were \$409 million at September 30, 2015 compared to \$438 million at September 30, 2014.

A progression of activity in the asbestos reserve is presented in the following table.

(In millions)	2015	2014	2013
Asbestos reserve - beginning of year	\$438	\$463	\$522
Reserve adjustment	—	4	(28
Amounts paid	(29	) (29	) (31
Asbestos reserve - end of year	\$409	\$438	\$463

## Ashland asbestos-related receivables

Ashland has insurance coverage for certain litigation defense and claim settlement costs incurred in connection with its asbestos claims, and coverage-in-place agreements exist with the insurance companies that provide substantially all of the coverage that will be accessed.

For the Ashland asbestos-related obligations, Ashland has estimated the value of probable insurance recoveries associated with its asbestos reserve based on management's interpretations and estimates surrounding the available or applicable insurance coverage, including an assumption that all solvent insurance carriers remain solvent. Substantially all of the estimated receivables from insurance companies are expected to be due from domestic insurers. Approximately 45% of the receivable is from insurance companies rated by A.M. Best, all of which have a credit rating of A- or higher as of September 30, 2015.

In October 2012, Ashland and Hercules initiated various arbitration proceedings against Underwriters at Lloyd's, certain London companies and/or Chartis (AIG) member companies seeking to enforce these insurers' contractual obligations to provide indemnity for asbestos liabilities and defense costs under existing coverage-in-place agreements. In addition, Ashland and Hercules initiated a lawsuit in Kentucky state court against certain Berkshire Hathaway entities (National Indemnity Company and Resolute Management, Inc.) on grounds that these Berkshire

Hathaway entities had wrongfully interfered with Underwriters' and Chartis' performance of their respective contractual obligations to provide asbestos coverage by directing the insurers to reduce and delay certain claim payments.

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## NOTE N – LITIGATION, CLAIMS AND CONTINGENCIES (continued)

On January 13, 2015, Ashland and Hercules entered into a comprehensive settlement agreement related to certain insurance coverage for asbestos bodily injury claims with Underwriters at Lloyd's, certain London companies and Chartis (AIG) member companies, along with National Indemnity Company and Resolute Management, Inc., under which Ashland and Hercules received a total of \$398 million. In exchange, all claims were released against these entities for past, present and future coverage obligations arising out of the asbestos coverage-in-place agreements that were the subject of the pending arbitration proceedings. In addition, as part of this settlement, Ashland and Hercules released all claims against National Indemnity Company and Resolute Management, Inc. in the Kentucky state court action. As a result, the arbitration proceedings and the Kentucky state court action have been terminated.

As a result of this settlement, Ashland recorded an after-tax gain of \$120 million within the discontinued operations caption of the Statements of Consolidated Comprehensive Income during 2015. The Ashland insurance receivable balance was also reduced as a result of this settlement by \$227 million within the Consolidated Balance Sheets. In addition, Ashland placed \$335 million of the settlement funds received into a renewable annual trust restricted for the purpose of paying for ongoing and future litigation defense and claim settlement costs incurred in conjunction with asbestos claims.

At September 30, 2015, Ashland's receivable for recoveries of litigation defense and claim settlement costs from insurers amounted to \$150 million (excluding the Hercules receivable for asbestos claims), of which \$12 million relates to costs previously paid. Receivables from insurers amounted to \$402 million at September 30, 2014. During 2015, the annual update of the model used for purposes of valuing the asbestos reserve and its impact on valuation of future recoveries from insurers, was completed. This model update resulted in a \$3 million decrease in the receivable for probable insurance recoveries.

A progression of activity in the Ashland insurance receivable is presented in the following table.

(In millions)	2015	2014	2013	
Insurance receivable - beginning of year	\$402	\$408	\$423	
Receivable adjustment	(3	) 22	(3	)
Insurance settlement	(227	) —	—	
Amounts collected	(22	) (28	) (12	)
Insurance receivable - end of year	\$150	\$402	\$408	

## Hercules asbestos-related litigation

Hercules has liabilities from claims alleging personal injury caused by exposure to asbestos. Such claims typically arise from alleged exposure to asbestos fibers from resin encapsulated pipe and tank products which were sold by one of Hercules' former subsidiaries to a limited industrial market. The amount and timing of settlements and number of open claims can fluctuate from period to period. A summary of Hercules' asbestos claims activity follows.

(In thousands)	2015	2014	2013	
Open claims - beginning of year	21	21	21	
New claims filed	1	1	1	
Claims dismissed	(2	) (1	) (1	)
Open claims - end of year	20	21	21	

## Hercules asbestos-related liability

From the range of estimates, Ashland records the amount it believes to be the best estimate of future payments for litigation defense and claim settlement costs, which generally approximates the mid-point of the estimated range of exposure from model results. Ashland reviews this estimate and related assumptions quarterly and annually updates the results of a non-inflated, non-discounted approximate 50-year model developed with the assistance of HR&A. As a result of the most recent annual update of this estimate, completed during 2015, it was determined that the liability for Hercules asbestos-related claims should be increased by \$4 million. Total reserves for asbestos claims were \$311

million at September 30, 2015 compared to \$329 million at September 30, 2014.

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## NOTE N – LITIGATION, CLAIMS AND CONTINGENCIES (continued)

A progression of activity in the asbestos reserve is presented in the following table.

(In millions)	2015	2014	2013
Asbestos reserve - beginning of year	\$329	\$342	\$320
Reserve adjustments	4	10	46
Amounts paid	(22	) (23	) (24
Asbestos reserve - end of year	\$311	\$329	\$342

## Hercules asbestos-related receivables

For the Hercules asbestos-related obligations, certain reimbursement obligations pursuant to coverage-in-place agreements with insurance carriers exist. As a result, any increases in the asbestos reserve have been partially offset by probable insurance recoveries. Ashland has estimated the value of probable insurance recoveries associated with its asbestos reserve based on management's interpretations and estimates surrounding the available or applicable insurance coverage, including an assumption that all solvent insurance carriers remain solvent. The estimated receivable consists exclusively of domestic insurers. Approximately 40% of the receivable is from insurance companies rated by A.M. Best, all of which have a credit rating of A+ or higher as of September 30, 2015.

As of September 30, 2015 and 2014, the receivables from insurers amounted to \$56 million and \$77 million, respectively. During 2015, the annual update of the model used for purposes of valuing the asbestos reserve and its impact on valuation of future recoveries from insurers was completed. This model update resulted in a \$1 million increase in the receivable for probable insurance recoveries.

As a result of the January 2015 asbestos insurance settlement previously described, Hercules has resolved all disputes with Chartis (AIG) member companies under their existing coverage-in-place agreement for past, present and future Hercules asbestos claims. As a result, during 2015, a \$22 million reduction in the insurance receivable balance within the Consolidated Balance Sheets was recorded.

A progression of activity in the Hercules insurance receivable is presented in the following table.

(In millions)	2015	2014	2013
Insurance receivable - beginning of year	\$77	\$75	\$56
Receivable adjustment	1	3	19
Insurance settlement	(22	) —	—
Amounts collected	—	(1	) —
Insurance receivable - end of year	\$56	\$77	\$75

## Asbestos litigation cost projection

Projecting future asbestos costs is subject to numerous variables that are extremely difficult to predict. In addition to the significant uncertainties surrounding the number of claims that might be received, other variables include the type and severity of the disease alleged by each claimant, the long latency period associated with asbestos exposure, dismissal rates, costs of medical treatment, the impact of bankruptcies of other companies that are co-defendants in claims, uncertainties surrounding the litigation process from jurisdiction to jurisdiction and from case to case, and the impact of potential changes in legislative or judicial standards. Furthermore, any predictions with respect to these variables are subject to even greater uncertainty as the projection period lengthens. In light of these inherent uncertainties, Ashland believes that the asbestos reserves for Ashland and Hercules represent the best estimate within a range of possible outcomes. As a part of the process to develop these estimates of future asbestos costs, a range of long-term cost models was developed. These models are based on national studies that predict the number of people likely to develop asbestos-related diseases and are heavily influenced by assumptions regarding long-term inflation rates for indemnity payments and legal defense costs, as well as other variables mentioned previously. Ashland has currently estimated in various models ranging from approximately 40 to 50 year periods that it is reasonably possible that total future litigation defense and claim settlement costs on an inflated and undiscounted basis could range as high

as approximately \$880 million for the Ashland asbestos-related litigation (current reserve of \$409 million) and approximately \$560 million for the Hercules asbestos-related litigation (current reserve of \$311 million), depending on the combination of assumptions selected in the various models. If actual experience is worse than projected, relative to the number of claims filed, the severity of alleged disease associated with those

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## NOTE N – LITIGATION, CLAIMS AND CONTINGENCIES (continued)

claims or costs incurred to resolve those claims, Ashland may need to increase further the estimates of the costs associated with asbestos claims and these increases could potentially be material over time.

## Environmental remediation and asset retirement obligations

Ashland is subject to various federal, state and local environmental laws and regulations that require environmental assessment or remediation efforts (collectively environmental remediation) at multiple locations. At September 30, 2015, such locations included 85 waste treatment or disposal sites where Ashland has been identified as a potentially responsible party under Superfund or similar state laws, 132 current and former operating facilities (including certain operating facilities conveyed as part of the MAP Transaction) and about 1,225 service station properties, of which 63 are being actively remediated.

Ashland's reserves for environmental remediation and related environmental litigation amounted to \$186 million at September 30, 2015 compared to \$197 million at September 30, 2014, of which \$139 million at September 30, 2015 and \$158 million at September 30, 2014 were classified in other noncurrent liabilities on the Consolidated Balance Sheets.

The following table provides a reconciliation of the changes in the environmental remediation reserves during 2015 and 2014.

(In millions)	2015	2014
Environmental remediation reserve - beginning of year	\$197	\$211
Disbursements	(47	) (46
Revised obligation estimates and accretion	36	32
Environmental remediation reserve - end of year	\$186	\$197

The total reserves for environmental remediation reflect Ashland's estimates of the most likely costs that will be incurred over an extended period to remediate identified conditions for which the costs are reasonably estimable, without regard to any third-party recoveries. Engineering studies, historical experience and other factors are used to identify and evaluate remediation alternatives and their related costs in determining the estimated reserves for environmental remediation. Ashland continues to discount certain environmental sites and regularly adjusts its reserves as environmental remediation continues. Ashland has estimated the value of its probable insurance recoveries associated with its environmental reserve based on management's interpretations and estimates surrounding the available or applicable insurance coverage. At September 30, 2015 and 2014, Ashland's recorded receivable for these probable insurance recoveries were \$23 million and \$24 million, respectively, of which \$16 million and \$24 million, respectively, were classified in other noncurrent assets in the Consolidated Balance Sheets.

Components of environmental remediation expense included within the selling, general and administrative expense caption of the Statements of Consolidated Comprehensive Income are presented in the following table for the years ended September 30, 2015, 2014 and 2013.

(In millions)	2015	2014	2013
Environmental expense	\$32	\$29	\$28
Accretion	4	3	3
Legal expense	6	5	2
Total expense	42	37	33
Insurance receivable	(2	) (4	) (4
Total expense, net of receivable activity (a)	\$40	\$33	\$29

(a) Net expense of \$5 million, \$4 million and \$6 million for the fiscal years ended September 30, 2015, 2014 and 2013, respectively, relates to divested businesses which qualified for treatment as discontinued operations and for which certain environmental liabilities were retained by Ashland. These amounts are classified within the income



from discontinued operations caption of the Statements of Consolidated Comprehensive Income.

Environmental remediation reserves are subject to numerous inherent uncertainties that affect Ashland's ability to estimate its share of the costs. Such uncertainties involve the nature and extent of contamination at each site, the extent of required cleanup efforts under existing environmental regulations, widely varying costs of alternate cleanup methods, changes in environmental regulations, the potential effect of continuing improvements in remediation technology, and the number and financial strength of other potentially responsible parties at multiparty sites. Although it is not possible to predict with certainty the ultimate costs of environmental remediation, Ashland currently estimates that the upper end of the reasonably possible range of future costs for

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NOTE N – LITIGATION, CLAIMS AND CONTINGENCIES (continued)

identified sites could be as high as approximately \$370 million. No individual remediation location is significant, as the largest reserve for any site is approximately 14% or less of the remediation reserve.

Insurance settlement

In March 2011, prior to the acquisition of ISP in August 2011, a disruption in the supply of a key raw material for this business occurred at a supplier. For a period of time while the raw material was not available from this supplier, an alternative source was used, but at a higher cost. During 2013, Ashland finalized its settlement with the insurers and received full payment in the amount of \$31 million. The insurance settlement resulted in a net gain of \$22 million being recognized within the cost of sales caption of the Statement of Consolidated Comprehensive Income during 2013.

Settled claim

During 2013, Ashland settled and collected a claim related to sales commissions and receivables within the Specialty Ingredients reportable segment. To recognize the settlement, Ashland recorded \$13 million of income within the equity and other income caption of the Statements of Consolidated Comprehensive Income during 2013.

Other legal proceedings and claims

In addition to the matters described above, there are other various claims, lawsuits and administrative proceedings pending or threatened against Ashland and its current and former subsidiaries. Such actions are with respect to commercial matters, product liability, toxic tort liability, and other environmental matters, which seek remedies or damages, some of which are for substantial amounts. While Ashland cannot predict with certainty the outcome of such actions, it believes that adequate reserves have been recorded and losses already recognized with respect to such actions were immaterial as of September 30, 2015 and 2014. There is a reasonable possibility that a loss exceeding amounts already recognized may be incurred related to these actions; however, Ashland believes that such potential losses were immaterial as of September 30, 2015 and 2014. For additional information on legal proceedings and claims, see the Legal Proceedings section of Form 10-K (Part I, Item 3).

NOTE O – STOCKHOLDERS' EQUITY ITEMS

Stock repurchase programs

During the past three fiscal years, Ashland's Board of Directors has authorized multiple share repurchase programs which are summarized below.

During 2015, Ashland's Board of Directors approved a new \$1 billion share repurchase authorization that will expire on December 31, 2017. This authorization allows for common shares to be repurchased in open market transactions, privately negotiated transactions or pursuant to one or more accelerated stock repurchase programs or Rule 10b5-1 plans. During the first quarter of 2016, under this new share repurchase authorization, Ashland announced that it entered into an accelerated share repurchase agreement (November 2015 ASR Agreement) with Goldman, Sachs & Co. Under the November 2015 ASR Agreement, Ashland paid an initial purchase price of \$500 million and received an initial delivery of approximately 3.9 million shares of common stock during November 2015. The November 2015 ASR Agreement is scheduled to terminate no later than May 2016 but may be terminated early in certain circumstances, in whole or in part.

During 2014, the Board of Directors of Ashland authorized a \$1.35 billion common stock repurchase program (the 2014 stock repurchase program). Under the program, Ashland's common shares were repurchased pursuant to accelerated stock repurchase agreements, a Rule 10b5-1 plan, and a prepaid variable share repurchase agreement. This repurchase program was completed during 2015.

The 2014 stock repurchase program authorization replaced Ashland's previous \$600 million share repurchase authorization (the 2013 stock repurchase program), approved in May 2013, which had \$450 million remaining when it was terminated.

2014 stock repurchase program agreements

The following stock repurchase agreements were entered into as part of the \$1.35 billion common stock repurchase program.

Accelerated stock repurchase agreements

During 2014, Ashland announced that it had entered into accelerated share repurchase agreements (2014 ASR Agreements) with Deutsche Bank AG, London Branch (Deutsche Bank), and JPMorgan Chase Bank, N.A. (JPMorgan) to repurchase an aggregate of \$750 million of Ashland's common stock. Under the 2014 ASR Agreements, Ashland paid an initial purchase price of \$750 million, split evenly between the financial institutions. As of September 30, 2014, Ashland received an initial delivery of approximately 5.9 million shares of common stock under the 2014 ASR Agreements. The 2014 ASR Agreements had a variable maturity, at the financial institutions option, with a maximum pricing period termination date of June 30, 2015. During 2015, the

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## NOTE O - STOCKHOLDERS' EQUITY ITEMS (continued)

2014 ASR Agreements terminated pursuant to their terms and the pricing period was closed. The settlement price, which represents the weighted average price of Ashland's common stock over the pricing period less a discount, was \$116.33 per share. Based on this settlement price, the final number of shares repurchased by Ashland that were delivered by the financial institutions under the 2014 ASR Agreements was 6.4 million shares. Ashland received the additional 0.5 million shares from the financial institutions during 2015 to settle the difference between the initial share delivery and the total number of shares repurchased.

During 2015, Ashland announced and completed accelerated share repurchase agreements (2015 ASR Agreements) with Deutsche Bank and JPMorgan to repurchase an aggregate of \$270 million of Ashland's common stock. Under the 2015 ASR Agreements, Ashland paid an initial purchase price of \$270 million, split evenly between the financial institutions and received an initial delivery of approximately 1.9 million shares of common stock. The 2015 ASR Agreements had a variable maturity, at the financial institutions option, with a maximum pricing period termination date of July 31, 2015. During 2015, Deutsche Bank and JPMorgan exercised their early termination option under the 2015 ASR Agreements and the pricing period was closed. The settlement price, which represents the weighted average price of Ashland's common stock over the pricing period less a discount, was \$125.22 per share. Based on this settlement price, the final number of shares repurchased by Ashland that were delivered by the financial institutions under the 2015 ASR Agreements was 2.2 million shares. Ashland received the additional 0.3 million shares from the financial institutions during 2015 to settle the difference between the initial share delivery and the total number of shares repurchased.

#### Additional stock repurchase agreements

Ashland entered into and completed a \$125 million prepaid variable share repurchase agreement during 2014. The settlement price, which represents the weighted average price of Ashland's common stock over the pricing period less a discount, was \$105.22 per share. Ashland received 0.8 million shares and \$45 million in cash for the unused portion of the \$125 million prepayment, for a net cash outlay of \$80 million.

During 2014, Ashland announced that it had entered into an agreement with each of Deutsche Bank Securities Inc. and JPMorgan to repurchase an aggregate of \$250 million of Ashland's common stock. Under the terms of the agreement, the financial institutions purchased a pre-determined number of shares on various trading days dependent upon Ashland's prevailing stock price on that date. During 2014, Ashland received 1.2 million shares of common stock for a total cost of \$124 million. During 2015, Ashland completed these agreements, receiving an additional 1.2 million shares of common stock for a total cost of \$127 million. The settlement price, which represents the average amount spent after commissions over the common shares repurchased throughout the program, was \$104.51 per share. In total, Ashland paid \$250 million and received 2.4 million shares of common stock under the agreements.

#### 2013 stock repurchase program agreement

As part of the \$600 million common stock repurchase program, Ashland announced and completed an accelerated share repurchase agreement (2013 ASR Agreement) with Citibank, N.A. (Citibank) during 2013. Under the 2013 ASR Agreement, Ashland paid an initial purchase price of \$150 million to Citibank and received an initial delivery of approximately 1.3 million shares of its common stock. The 2013 ASR Agreement had a variable maturity, at Citibank's option, with a maximum pricing period termination date of August 21, 2013. In June 2013, Citibank exercised its early termination option under the 2013 ASR Agreement and the pricing period was closed. The settlement price, which represents the weighted average price of Ashland's common stock over the pricing period less a discount, was \$86.32 per share. Based on this settlement price, the final number of shares repurchased by Ashland that were to be delivered by Citibank under the 2013 ASR Agreement was 1.7 million shares. Ashland received the additional 0.4 million shares from Citibank in 2013 to settle the difference between the initial share delivery and the total number of shares repurchased.

#### Stockholder dividends

In May 2015, the Board of Directors of Ashland announced a quarterly cash dividend increase to 39 cents per share, \$1.56 per share on an annual basis, to eligible shareholders of record. This amount was paid for quarterly dividends in June and September 2015 and was an increase from the quarterly cash dividend of 34 cents per share paid during the first and second quarters of fiscal 2015.

In May 2013, the Board of Directors of Ashland announced a quarterly cash dividend increase to 34 cents per share, \$1.36 per share on an annual basis, to eligible shareholders of record. This amount was paid for quarterly dividends in fiscal 2014, as well as, June and September 2013 and was an increase from the quarterly cash dividend of 22.5 cents per share paid during the first and second quarters of fiscal 2013.

Shares reserved for issuance

At September 30, 2015, 8.7 million common shares are reserved for issuance under stock incentive and deferred compensation plans.

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## NOTE O - STOCKHOLDERS' EQUITY ITEMS (continued)

Accumulated other comprehensive income (loss)

Components of other comprehensive income (loss) recorded in the Statements of Consolidated Comprehensive Income are presented in the following table, before tax and net of tax effects.

(In millions)	Before tax	Tax (expense) benefit	Net of tax
Year ended September 30, 2015			
Other comprehensive income (loss)			
Unrealized translation loss	\$(368	) \$(1	) \$(369
Pension and postretirement obligation adjustment:			
Adjustment of unrecognized prior service cost	(2	) 1	(1
Amortization of unrecognized prior service credits included in net income (a)	(24	) 7	(17
Unrealized loss on available-for-sale securities	(17	) 6	(11
Total other comprehensive income (loss)	\$(411	) \$13	\$(398
Year ended September 30, 2014			
Other comprehensive income (loss)			
Net change in translation gain (loss):			
Unrealized translation loss	\$(163	) \$(3	) \$(166
Reclassification adjustment for losses included in net income (b)	6	—	6
Pension and postretirement obligation adjustment:			
Adjustment of unrecognized prior service credit	6	(2	) 4
Amortization of unrecognized prior service credits included in net income (a)	(36	) 11	(25
Total other comprehensive income (loss)	\$(187	) \$6	\$(181
Year ended September 30, 2013			
Other comprehensive income (loss)			
Unrealized translation gain (loss)	\$45	\$(8	) \$37
Pension and postretirement obligation adjustment:			
Adjustment of unrecognized prior service credit	13	(3	) 10
Amortization of unrecognized prior service credits included in net income (a)	(23	) 8	(15
Net change in interest rate hedges:			
Unrealized loss during period	(3	) —	(3
Reclassification adjustment for losses included in net income (c)	65	(24	) 41
Total other comprehensive income (loss)	\$97	\$(27	) \$70

Amortization of unrecognized prior service credits are included in the calculation of net periodic benefit costs (a)(income) for pension and other postretirement plans. For specific financial statement captions impacted by the amortization see the table below.

Losses from the translation adjustment included in net income are attributable to foreign Water Technologies (b)subsidiaries sold with the divestiture. These adjustments are recorded in the discontinued operations caption of the Statements of Consolidated Comprehensive Income.

(c)

Losses from interest rate hedges are recorded in the net interest and other financing expense caption of the Statements of Consolidated Comprehensive Income. See Note F for further information.

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## NOTE O - STOCKHOLDERS' EQUITY ITEMS (continued)

In accordance with U.S. GAAP, as disclosed in the table above, certain pension and other postretirement costs (income) are amortized from accumulated other comprehensive income and recognized in net income. The captions on the Statements of Consolidated Comprehensive Income impacted by the amortization of unrecognized prior service credits for pension and other postretirement plans are disclosed below. See Note M for more information.

(In millions)	2015	2014	2013
Cost of sales	\$ (8 )	\$ (6 )	\$ (6 )
Selling, general and administrative expense	(13 )	(14 )	(14 )
Discontinued operations	(3 )	(16 )	(3 )
Total amortization of unrecognized prior service credits	\$ (24 )	\$ (36 )	\$ (23 )

## NOTE P – STOCK INCENTIVE PLANS

Ashland has stock incentive plans under which key employees or directors are granted stock appreciation rights (SARs), performance share awards or nonvested stock awards. Each program is typically a long-term incentive plan designed to link employee compensation with increased shareholder value or reward superior performance and encourage continued employment with Ashland. Ashland recognizes compensation expense for the grant date fair value of stock-based awards over the applicable vesting period. The components of Ashland's pretax stock-based awards (net of forfeitures), which is included in the selling, general and administrative expense caption of the Statements of Consolidated Comprehensive Income, and associated income tax benefits are as follows:

(In millions)	2015	(a) 2014	2013
SARs	\$ 10	\$ 16	\$ 17
Nonvested stock awards	15	10	4
Performance share awards	13	8	9
	\$ 38	\$ 34	\$ 30
Income tax benefit	\$ 13	\$ 13	\$ 11

The year ended September 30, 2015 included a \$7 million award modification within performance shares that was (a) designated as a cash item (see table on F-52 for further information) and \$1 million of expense related primarily to cash-settled nonvested restricted stock awards.

## Stock Appreciation Rights (SARs)

SARs are granted to employees or directors at a price equal to the fair market value of the stock on the date of grant and typically become exercisable over periods of one to three years. Unexercised SARs lapse ten years and one month after the date of grant. Ashland estimates the fair value of SARs granted using the Black-Scholes option-pricing model. This model requires several assumptions, which Ashland has developed and updates based on historical trends and current market observations. The accuracy of these assumptions is critical to the estimate of fair value for these equity instruments. The following table illustrates the weighted-average of key assumptions used within the Black-Scholes option-pricing model. The risk-free interest rate assumption was based on the U.S. Treasury yield curve in effect at the time of the grant for the expected term of the instrument. The dividend yield reflects the assumption that the current dividend payout will continue with no anticipated increases. The volatility assumption was calculated by utilizing an unbiased standard deviation of Ashland's Common Stock closing price for the past five years. The expected life is based on historical data and is not necessarily indicative of exercise patterns that may occur.

(In millions except per share data)	2015	2014	2013
Weighted-average fair value per share of SARs granted	\$ 30.70	\$ 34.96	\$ 29.93
Assumptions (weighted-average)			



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Risk-free interest rate	1.7	% 1.4	% 0.7	%
Expected dividend yield	1.2	% 1.5	% 1.3	%
Expected volatility	31.8	% 49.7	% 55.0	%
Expected life (in years)	5	5	5	

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## NOTE P – STOCK INCENTIVE PLANS (continued)

A progression of activity and various other information relative to SARs and previously issued and vested stock options is presented in the following table.

	2015		2014		2013	
	Number of common shares	Weighted-average exercise price per share	Number of common shares	Weighted-average exercise price per share	Number of common shares	Weighted-average exercise price per share
(In thousands except per share data)						
Outstanding - beginning of year	1,798	\$62.85	2,658	\$55.84	2,908	\$45.94
Granted	277	113.65	391	89.69	888	70.41
Exercised	(584 )	58.80	(1,123 )	54.14	(1,037 )	39.95
Forfeitures and expirations	(108 )	83.00	(128 )	75.82	(101 )	61.96
Outstanding - end of year (a)	1,383	73.18	1,798	62.85	2,658	55.84
Exercisable - end of year	906	59.92	1,066	53.80	1,390	47.46

(a) Exercise prices per share for SARs outstanding at September 30, 2015 ranged from \$9.49 to \$49.79 for 139 shares, from \$51.86 to \$55.73 for 329 shares, from \$64.92 to \$89.69 for 652 shares, and from \$112.91 to \$117.38 for 263 shares. The weighted-average remaining contractual life of outstanding SARs and stock options was 6.8 years and exercisable SARs and stock options was 5.9 years.

The total intrinsic value of SARs exercised was \$35 million in 2015, \$50 million in 2014 and \$45 million in 2013. The actual tax benefit realized from the exercised SARs was \$6 million in 2015, \$18 million in 2014 and \$1 million in 2013. The total grant date fair value of SARs that vested during 2015, 2014 and 2013 was \$13 million, \$21 million and \$13 million, respectively. As of September 30, 2015, there was \$8 million of total unrecognized compensation costs related to SARs. That cost is expected to be recognized over a weighted-average period of 1.6 years. As of September 30, 2015, the aggregate intrinsic value of outstanding SARs was \$41 million and exercisable SARs was \$37 million.

## Nonvested stock awards

Nonvested stock awards are granted to employees or directors at a price equal to the fair market value of the stock on the date of grant and generally vest over a one-to-five-year period. However, such shares are subject to forfeiture upon termination of service before the vesting period ends. Nonvested stock awards entitle employees or directors to vote the shares. Dividends on nonvested stock awards granted are in the form of additional shares of nonvested stock awards, which are subject to vesting and forfeiture provisions.

A progression of activity and various other information relative to nonvested stock awards is presented in the following table.

	2015		2014		2013	
	Number of common shares	Weighted-average grant date fair value	Number of common shares	Weighted-average grant date fair value	Number of common shares	Weighted-average grant date fair value
(In thousands except per share data)						
Nonvested - beginning of year	221	\$88.81	140	\$56.97	333	\$33.80
Granted	187	114.97	192	94.17	22	84.12
Vested	(69 )	77.51	(78 )	47.07	(205 )	22.50
Forfeitures	(41 )	99.20	(33 )	83.84	(10 )	51.01
Nonvested - end of year	298	106.41	221	88.81	140	56.97

The total fair value of nonvested stock awards that vested during 2015, 2014 and 2013 was \$5 million, \$4 million and \$5 million, respectively. As of September 30, 2015, there was \$15 million of total unrecognized compensation costs

related to nonvested stock awards. That cost is expected to be recognized over a weighted-average period of 1.7 years.

Performance shares

Ashland sponsors a long-term incentive plan that awards performance shares/units to certain key employees that are tied to Ashland's overall financial performance relative to the financial performance of selected industry peer groups and/or internal targets. Awards are granted annually, with each award covering a three-year performance cycle. Each performance share/unit is convertible to one share of Ashland Common Stock. These plans are recorded as a component of stockholders' equity in the Consolidated Balance Sheets. Performance measures used to determine the actual number of performance shares issuable upon

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## NOTE P – STOCK INCENTIVE PLANS (continued)

vesting include an equal weighting of Ashland's total shareholder return (TSR) performance and Ashland's return on investment (ROI) performance as compared to the internal targets over the three-year performance cycle. TSR relative to peers is considered a market condition while ROI is considered a performance condition under applicable U.S. GAAP. Nonvested performance shares/units do not entitle employees to vote the shares or to receive any dividends thereon.

The following table shows the performance shares/units granted for all plans that award Ashland Common Stock.

(In thousands)	Performance period	Target shares granted	(a)	Weighted-average fair value per share
Fiscal Year 2015	October 1, 2014 - September 30, 2017	77		\$121.87
Fiscal Year 2014	October 1, 2013 - September 30, 2016	110		\$85.84
Fiscal Year 2013	October 1, 2012 - September 30, 2015	134		\$73.50

(a) At the end of the performance period, the actual number of shares issued can range from zero to 200% of the target shares granted, which is assumed to be 100%.

The fair value of the ROI portion of the performance share awards is equal to the fair market value of Ashland's Common Stock on the date of the grant discounted for the dividends forgone during the vesting period of the three-year performance cycle. Compensation cost is recognized over the requisite service period if it is probable that the performance condition will be satisfied. The fair value of the TSR portion of the performance share awards is calculated using a Monte Carlo simulation valuation model using key assumptions included in the following table. Compensation cost is recognized over the requisite service period regardless of whether the market condition is satisfied.

	2015	2014	2013
Risk-free interest rate	0.1% - 1.0%	0.1% - 0.6%	0.2% - 0.3%
Expected dividend yield	1.4%	1.4%	1.3%
Expected life (in years)	3	3	3
Expected volatility	24.2%	32.1%	37.6%

The following table shows changes in nonvested performance shares/units for all plans that award Ashland Common Stock.

	2015		2014		2013	
(In thousands except per share data)	Shares	Weighted-average grant date fair value	Shares	Weighted-average grant date fair value	Shares	Weighted-average grant date fair value
Nonvested - beginning of year	368	\$72.20	433	\$65.05	480	\$54.39
Granted (a)	103	115.19	155	81.09	152	69.74
Vested (a)	(133)	) 68.18	(183)	) 62.05	(175)	) 39.55
Forfeitures (b)	(134)	) 74.79	(37)	) 75.02	(24)	) 67.06
Nonvested - end of year	204	93.79	368	72.20	433	65.05

The current year includes 26 additional shares from the fiscal 2012 through 2014 plan, 2014 includes 45 additional (a) shares from the fiscal 2011 through 2013 plan and 2013 includes 18 additional shares from the fiscal 2010 through 2012 plan since a portion of each plans payout was in excess of the initial 100% target.

During the December 2014 quarter, Ashland modified certain awards of its performance shares. The awards were (b) modified to provide that the instruments be paid in cash instead of stock. This change in payment designation caused Ashland to recognize \$7 million in incremental stock-based compensation expense related to 84 shares modified during 2015.

As of September 30, 2015, there was \$8 million of total unrecognized compensation costs related to nonvested performance share awards. That cost is expected to be recognized over a weighted-average period of approximately 1.8 years.

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## NOTE Q – REPORTABLE SEGMENT INFORMATION

Ashland determines its reportable segments based on how operations are managed internally for the products and services sold to customers, including how the results are reviewed by the chief operating decision maker, which includes determining resource allocation methodologies used for reportable segments. Operating income is the primary measure reviewed by the chief operating decision maker in assessing each reportable segment's financial performance. Ashland does not aggregate operating segments to arrive at these reportable segments. Subsequent to the sale of Water Technologies and a business realignment during 2014, Ashland's businesses are managed within three reportable segments: Specialty Ingredients, Performance Materials and Valvoline.

The 2014 business realignment resulted in the re-organization of Specialty Ingredients into two divisions: Consumer Specialties and Industrial Specialties, with the adhesives category joining the Industrial Specialties division, moving over from Performance Materials. While, Performance Materials became comprised of three divisions: 1) Intermediates/Solvents, which moved over from Specialty Ingredients and serves both Ashland's internal butanediol needs as well as the merchant market; 2) Composites, which serves construction, transportation, marine and other markets; and 3) Elastomers, which primarily served the North American replacement tire market prior to its December 1, 2014 sale. The business realignment during 2014 did not affect the Valvoline business, as it remained unchanged compared to prior year periods.

Ashland performed an internal structural review and comprehensive assessment of its operations and reportable segments and concluded that its operating and reportable segments were Specialty Ingredients, Performance Materials, and Valvoline.

## Reportable segment business descriptions

Specialty Ingredients is a global leader in cellulose ethers, vinyl pyrrolidones and biofunctionals. It offers industry-leading products, technologies and resources for solving formulation and product-performance challenges. Specialty Ingredients uses natural, synthetic and semisynthetic polymers derived from plant and seed extract, cellulose ethers, vinyl pyrrolidones, acrylic polymers as well as polyester and polyurethane-based adhesives. Specialty Ingredients includes two divisions, Consumer Specialties and Industrial Specialties, that offer comprehensive and innovative solutions for today's demanding consumer and industrial applications. Key customers include: pharmaceutical companies; makers of personal care products, food and beverages; manufacturers of paint, coatings and construction materials; packaging and converting; and oilfield service companies. During 2015, Ashland sold the industrial biocides assets within Specialty Ingredients. See Note B for information on the divestiture of these assets. Performance Materials is composed of two divisions: Composites and Intermediates/Solvents. Performance Materials is a global leader in unsaturated polyester resins and vinyl ester resins. The business unit has leading positions in gelcoats, maleic anhydride, butanediol, tetrahydrofuran, N-Methylpyrrolidone and other intermediates and solvents. Key customers include: manufacturers of residential and commercial building products; industrial product specifiers and manufacturers; wind blade and pipe manufacturers; automotive and truck OEM suppliers; boatbuilders; engineered plastics and electronic producers; and specialty chemical manufacturers. Results from the former Elastomers division were included in Performance Materials' results of operations within the Statements of Consolidated Comprehensive Income until its December 1, 2014 sale. See Note B for information on the divestiture of the Elastomers division.

Valvoline is a leading, worldwide producer and distributor of premium-branded automotive, commercial and industrial lubricants and automotive chemicals. It ranks as the #2 quick-lube chain and #3 passenger car motor oil brand in the United States. The brand operates and franchises approximately 940 Valvoline Instant Oil Change<sup>SM</sup> centers in the United States. It also markets Valvoline<sup>TM</sup> lubricants and automotive chemicals; MaxLife<sup>TM</sup> lubricants created for higher-mileage engines; SynPower<sup>TM</sup> synthetic motor oil; and Zerex<sup>TM</sup> antifreeze. Key customers include: retail auto parts stores and mass merchandisers who sell to consumers; installers, such as car dealers, repair shops and quick lubes; commercial fleets; and distributors. During 2015, Ashland sold its Valvoline car care product assets, including Car Brite<sup>TM</sup> and Eagle One<sup>TM</sup> automotive appearance products, and sold its joint venture equity investment in Venezuela. See Note B for information on the divestiture of this investment and the car care product assets.

Unallocated and Other generally includes items such as components of pension and other postretirement benefit plan expenses (excluding service costs, which are allocated to the reportable segments), certain significant company-wide restructuring activities and legacy costs or adjustments that relate to divested businesses that are no longer operated by Ashland, including the Water Technologies business.

International data

Information about Ashland's domestic and international operations follows. Ashland has no material operations in any individual international country and no single customer represented more than 10% of sales in 2015, 2014 or 2013.

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## NOTE Q – REPORTABLE SEGMENT INFORMATION (continued)

(In millions)	Sales from external customers			Net assets (liabilities)		Property, plant and equipment - net	
	2015	2014	2013	2015	2014	2015	2014
United States	\$2,715	\$3,076	\$3,130	\$(575)	\$(160)	\$1,569	\$1,721
International	2,672	3,045	2,961	3,612	3,743	613	693
	\$5,387	\$6,121	\$6,091	\$3,037	\$3,583	\$2,182	\$2,414

## Reportable segment results

The following tables present various financial information for each reportable segment for the years ended September 30, 2015, 2014 and 2013 and as of September 30, 2015, 2014 and 2013. Results of Ashland's reportable segments are presented based on its management structure and internal accounting practices. The structure and practices are specific to Ashland; therefore, the financial results of Ashland's reportable segments are not necessarily comparable with similar information for other comparable companies. Ashland allocates all costs to its reportable segments except for certain significant company-wide restructuring activities, such as the restructuring plans described in Note E, and other costs or adjustments that relate to former businesses that Ashland no longer operates. The service cost component of pension and other postretirement benefits costs is allocated to each reportable segment on a ratable basis; while the remaining components of pension and other postretirement benefits costs are recorded to Unallocated and other. Ashland refines its expense allocation methodologies to the reportable segments from time to time as internal accounting practices are improved, more refined information becomes available and the industry or market changes. Revisions to Ashland's methodologies that are deemed insignificant are applied on a prospective basis.

Ashland determined that disclosing sales by specific product was impracticable due to the highly customized and extensive portfolio of products offered to customers and since no one product or a small group of products could be aggregated together to represent a majority of revenue within a reportable segment. As such, the following table provides a summary of 2015 sales by product category for each reportable segment:

## Sales by product category for 2015

Specialty Ingredients			Performance Materials			Valvoline		
Cellulosics	37	%	Composites	68	%	Lubricants	86	%
Poly vinyl pyrrolidones	18	%	Intermediates/Solvents	28	%	Chemicals (c)	7	%
Adhesives	13	%	Elastomers (b)	4	%	Antifreeze	5	%
Vinyl ethers	7	%		100	%	Filters	2	%
Actives	6	%					100	%
Guar	2	%						
Other (a)	17	%						
	100	%						

(a)Includes sales for biocides through July 1, 2015 sale.

(b)Includes sales only through December 1, 2014 sale.

(c)Includes sales for car care products through June 30, 2015 sale.

The following table presents various financial information for each reportable segment. The operating results of divested divisions and assets during 2015, 2014 and 2013 that did not qualify for discontinued operations accounting treatment are included in the financial information until the date of sale.



## NOTE Q – REPORTABLE SEGMENT INFORMATION (continued)

Ashland Inc. and Consolidated Subsidiaries  
Reportable Segment Information  
Years Ended September 30

(In millions)	2015	2014	2013	
Sales				
Specialty Ingredients	\$2,263	\$2,498	\$2,478	
Performance Materials	1,157	1,582	1,617	
Valvoline	1,967	2,041	1,996	
	\$5,387	\$6,121	\$6,091	
Equity income (expense)				
Specialty Ingredients	\$1	\$2	\$4	
Performance Materials	2	(38	) 10	
Valvoline	(2	) 10	13	
Unallocated and other	—	1	(1	)
	1	(25	) 26	
Other income (expense)				
Specialty Ingredients	(1	) (2	) 14	
Performance Materials	5	5	6	
Valvoline	10	20	11	
Unallocated and other	8	4	7	
	22	27	38	
	\$23	\$2	\$64	
Operating income (loss)				
Specialty Ingredients	\$239	\$253	\$243	
Performance Materials	87	7	106	
Valvoline	359	323	295	
Unallocated and other	(227	) (537	) 395	
	\$458	\$46	\$1,039	
Assets				
Specialty Ingredients	\$5,365	\$5,756	\$5,994	
Performance Materials	1,079	1,395	1,518	
Valvoline	976	1,073	1,051	
Unallocated and other	2,644	2,696	3,488	
	\$10,064	\$10,920	\$12,051	

## NOTE Q – REPORTABLE SEGMENT INFORMATION (continued)

Ashland Inc. and Consolidated Subsidiaries  
Reportable Segment Information (continued)  
Years Ended September 30

(In millions)	2015	2014	2013
Equity and other unconsolidated investments			
Specialty Ingredients	\$9	\$10	\$12
Performance Materials (a)	24	23	157
Valvoline (b)	29	44	40
Unallocated and other	3	4	4
	\$65	\$81	\$213
Depreciation and amortization			
Specialty Ingredients	\$244	\$262	\$242
Performance Materials	59	91	75
Valvoline	38	37	35
Unallocated and other	—	3	4
	\$341	\$393	\$356
Property, plant and equipment - net			
Specialty Ingredients	\$1,383	\$1,433	\$1,445
Performance Materials	358	508	551
Valvoline	253	272	270
Unallocated and other	188	201	241
	\$2,182	\$2,414	\$2,507
Additions to property, plant and equipment			
Specialty Ingredients	\$171	\$159	\$144
Performance Materials	33	38	43
Valvoline	45	36	41
Unallocated and other	16	15	36
	\$265	\$248	\$264

(a) ASK joint venture sold during 2014.

(b) Venezuela joint venture sold during 2015.

## QUARTERLY FINANCIAL INFORMATION (UNAUDITED)

The following table presents quarterly financial information and per share data relative to Ashland's Common Stock.

Quarters ended	December 31		March 31		June 30		September 30	
(In millions except per share data)	2014	2013	2015	2014	2015	2014	2015 (a)	2014 (b)
Sales	\$1,391	\$1,432	\$1,350	\$1,545	\$1,367	\$1,605	\$1,280	\$1,538
Cost of sales	982	1,048	925	1,168	939	1,161	970	1,227
Gross profit as a percentage of sales	29.4	% 26.8	% 31.5	% 24.4	% 31.3	% 27.7	% 24.2	% 20.2
Operating income (loss)	169	143	193	(64 )	196	143	(101 )	(175 )
Income (loss) from continuing operations	40	88	95	(61 )	115	71	(59 )	(26 )
Net income (loss)	32	110	224	(44 )	107	99	(55 )	68
Basic earnings per share								
Continuing operations	\$0.58	\$1.14	\$1.40	\$(0.78 )	\$1.70	\$0.91	\$(0.88 )	\$(0.35 )
Net income (loss)	0.47	1.42	3.30	(0.57 )	1.58	1.27	(0.82 )	0.93
Diluted earnings per share								
Continuing operations	\$0.57	\$1.12	\$1.39	\$(0.78 )	\$1.68	\$0.90	\$(0.88 )	\$(0.35 )
Net income (loss)	0.46	1.40	3.26	(0.57 )	1.56	1.25	(0.82 )	0.93
Regular cash dividends per share	\$0.34	\$0.34	\$0.34	\$0.34	\$0.39	\$0.34	\$0.39	\$0.34
Market price per common share								
High	\$121.35	\$97.68	\$130.66	\$100.87	\$132.38	\$108.93	\$123.60	\$110.02
Low	95.21	84.43	115.66	88.76	121.83	93.62	97.58	98.55

(a) Fourth quarter results for 2015 include a decrease in operating income of \$246 million related to the loss on pension and postretirement benefit plan remeasurement (\$97 million in cost of sales and \$149 million in selling, general and administrative expenses), a decrease of \$13 million for a customer claim, a decrease of \$11 million related to the impairment on IPR&D assets associated with the ISP acquisition, a decrease of \$6 million related to restructuring and a decrease of \$3 million for an environmental reserve adjustment. Income tax benefit for the fourth quarter included \$6 million of discrete tax income items.

(b) Fourth quarter results for 2014 include a decrease in operating income of \$317 million related to the loss on pension and postretirement benefit plan remeasurement (\$97 million in cost of sales and \$220 million in selling, general and administrative expenses), a decrease of \$29 million related to restructuring and plant closure costs, a decrease of \$5 million for foreign legal reserves and a decrease of \$4 million related to the impairment on IPR&D assets associated with the ISP acquisition. Income tax benefit for the fourth quarter included \$100 million of discrete tax income items including a \$168 million reversal of a deferred tax liability related to an assertion change of the nature of unremitted earnings of foreign subsidiaries.



## Ashland Inc. and Consolidated Subsidiaries

## Five-Year Selected Financial Information

Years Ended September 30

(In millions except per share data)

	2015	2014	2013	2012	2011	
Summary of operations						
Sales	\$5,387	\$6,121	\$6,091	\$6,472	\$4,600	
Cost of sales	3,814	4,605	4,304	4,813	3,563	
Gross profit	1,573	1,516	1,787	1,659	1,037	
Selling, general and administrative expense	1,028	1,358	670	1,327	980	
Research and development expense	110	114	142	104	49	
Equity and other income	23	2	64	53	45	
Operating income	458	46	1,039	281	53	
Net interest and other financing expense	174	166	282	317	121	
Net gain (loss) on divestitures	(115)	) 4	(8	) (7	) 2	
Other expense (income)	—	—	—	—	1	
Income (loss) from continuing operations before income taxes	169	(116	) 749	(43	) (67	)
Income tax expense (benefit)	(22	) (188	) 196	(57	) (70	)
Income from continuing operations	191	72	553	14	3	
Income from discontinued operations	118	161	130	12	411	
Net income	\$309	\$233	\$683	\$26	\$414	
Balance sheet information (as of September 30)						
Current assets	\$3,248	\$3,561	\$2,873	\$3,209	\$3,387	
Current liabilities	1,448	1,687	1,727	1,913	1,739	
Working capital	\$1,800	\$1,874	\$1,146	\$1,296	\$1,648	
Total assets	\$10,064	\$10,920	\$12,051	\$12,471	\$12,893	
Short-term debt	\$326	\$329	\$308	\$344	\$83	
Long-term debt (including current portion and debt issuance cost discounts)	3,403	2,920	2,922	3,193	3,676	
Stockholders' equity	3,037	3,583	4,553	4,029	4,135	
Cash flow information						
Cash flows from operating activities from continuing operations	\$89	\$580	\$653	\$189	\$50	
Additions to property, plant and equipment	265	248	264	242	152	
Cash dividends	98	103	88	63	51	
Common stock information						
Basic earnings per share						
Income from continuing operations	\$2.81	\$0.94	\$7.06	\$0.18	\$0.05	

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Net income	4.54	3.04	8.71	0.33	5.28
Diluted earnings per share					
Income from continuing operations	2.78	0.93	6.95	0.17	0.05
Net income	4.48	3.00	8.57	0.33	5.17
Dividends	1.46	1.36	1.13	0.80	0.65

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