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

FORM 10-Q

(Mark One)

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

For the quarterly period ended December 31, 2016

OR

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

For the transition period from _________ to ___________

Commission file number 1-32532

ASHLAND GLOBAL HOLDINGS INC.

(a Delaware corporation)
I.R.S. No. 81-2587835

50 E. RiverCenter Boulevard
Covington, Kentucky 41011
Telephone Number (859) 815-3333

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 o

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

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 o
Non-Accelerated Filer o (Do not check if a smaller reporting company.)	Smaller Reporting Company o

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

At December 31, 2016, there were 62,216,863 shares of Registrant's Common Stock outstanding.

PART I - FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

ASHLAND GLOBAL HOLDINGS INC. AND CONSOLIDATED SUBSIDIARIES
STATEMENTS OF CONSOLIDATED COMPREHENSIVE INCOME

	Three months ended December 31	
(In millions except per share data - unaudited)	2016	2015
Sales	$ 1,193	$ 1,163
Cost of sales	807	771
Gross profit	386	392
Selling, general and administrative expense	239	224
Research and development expense	23	25
Equity and other income	13	8
Operating income	137	151
Net interest and other financing expense	132	42
Net gain (loss) on divestitures	(1)	2
Income from continuing operations before income taxes	4	111
Income tax expense (benefit) - Note I	(6)	20
Income from continuing operations	10	91
Loss from discontinued operations (net of tax) - Note D	—	(2)
Net income	10	89
Net income attributable to noncontrolling interest	11	—
Net income (loss) attributable to Ashland	$ (1)	$ 89
PER SHARE DATA		
Basic earnings per share - Note L		
Income (loss) from continuing operations attributable to Ashland	$ (0.01)	$ 1.39
Loss from discontinued operations	—	(0.02)
Net income (loss) attributable to Ashland	$ (0.01)	$ 1.37
Diluted earnings per share - Note L		
Income (loss) from continuing operations attributable to Ashland	$ (0.01)	$ 1.38
Loss from discontinued operations	—	(0.03)
Net income (loss) attributable to Ashland	$ (0.01)	$ 1.35
DIVIDENDS PAID PER COMMON SHARE	$ 0.39	$ 0.39
COMPREHENSIVE INCOME (LOSS)		
Net income	$ 10	$ 89
Other comprehensive income (loss), net of tax - Note M		
Unrealized translation loss	(146)	(61)
Pension and postretirement obligation adjustment	(1)	(3)
Unrealized gain on available-for-sale securities	—	6
Other comprehensive loss	(147)	(58)
Comprehensive income (loss)	(137)	31
Comprehensive income attributable to noncontrolling interest	10	—
Comprehensive income (loss) attributable to Ashland	$ (147)	$ 31

SEE NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS.

ASHLAND GLOBAL HOLDINGS INC. AND CONSOLIDATED SUBSIDIARIES
CONDENSED CONSOLIDATED BALANCE SHEETS

(In millions - unaudited)	December 31 2016	September 30 2016
ASSETS		
Current assets		
Cash and cash equivalents	$ 704	$ 1,188
Accounts receivable (a)	858	894
Inventories - Note F	666	671
Other assets	106	113
Total current assets	2,334	2,866
Noncurrent assets		
Property, plant and equipment		
Cost	4,283	4,343
Accumulated depreciation	2,097	2,119
Net property, plant and equipment	2,186	2,224
Goodwill - Note G	2,348	2,401
Intangibles - Note G	1,026	1,064
Restricted investments - Note E	297	292
Asbestos insurance receivable - Note K	194	196
Equity and other unconsolidated investments	60	57
Deferred income taxes	199	177
Other assets	419	420
Total noncurrent assets	6,729	6,831
Total assets	$ 9,063	$ 9,697
LIABILITIES AND EQUITY		
Current liabilities		
Short-term debt - Note H	$ 92	$ 170
Current portion of long-term debt - Note H	15	19
Trade and other payables	458	541
Accrued expenses and other liabilities	451	486
Total current liabilities	1,016	1,216
Noncurrent liabilities		
Long-term debt - Note H	2,825	3,055
Employee benefit obligations - Note J	1,040	1,080
Asbestos litigation reserve - Note K	674	686
Deferred income taxes	69	69
Other liabilities	438	426
Total noncurrent liabilities	5,046	5,316
Commitments and contingencies - Note K		
Equity		
Total Ashland stockholders' equity	3,175	3,347
Noncontrolling interest	(174)	(182)
Total equity	3,001	3,165
Total liabilities and equity	$ 9,063	$ 9,697

(a) Accounts receivable includes an allowance for doubtful accounts of $14 million at December 31, 2016 and September 30, 2016.

SEE NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS.

ASHLAND GLOBAL HOLDINGS INC. AND CONSOLIDATED SUBSIDIARIES
STATEMENT OF CONSOLIDATED EQUITY

(In millions - unaudited)	Common stock	Paid-in capital	Retained earnings	Accumulated other comprehensive income (loss) (a)	Noncontrolling interest (b)	Total
BALANCE AT SEPTEMBER 30, 2016	$ 1	$ 923	$ 2,704	$ (281)	$ (182)	$ 3,165
Total comprehensive income (loss)						
Net income (loss)			(1)		11	10
Other comprehensive loss				(146)	(1)	(147)
Regular dividends, $0.39 per common share			(24)			(24)
Common shares issued under stock incentive and other plans (c)		(1)				(1)
Distributions to noncontrolling interest					(2)	(2)
BALANCE AT DECEMBER 31, 2016	$ 1	$ 922	$ 2,679	$ (427)	$ (174)	$ 3,001

(a) At December 31, 2016 and September 30, 2016, the after-tax accumulated other comprehensive loss attributable to Ashland of $427 million and $281 million, respectively, was comprised of unrecognized prior service credits as a result of certain employee benefit plan amendments of $45 million and $46 million, respectively, net unrealized translation losses of $478 million and $333 million, respectively, and net unrealized gain on available-for-sale securities of $6 million. At December 31, 2016 and September 30, 2016, amounts attributable to noncontrolling interest included unrecognized prior service credits of $9 million and net unrealized translation losses of $3 million and $2 million, respectively.

(b) See Note B for discussion of Valvoline Inc. noncontrolling interest.

(c) Common shares issued were 56,590 for the three months ended December 31, 2016.

SEE NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS.

ASHLAND GLOBAL HOLDINGS INC. AND CONSOLIDATED SUBSIDIARIES
STATEMENTS OF CONDENSED CONSOLIDATED CASH FLOWS

	Three months ended December 31	
(In millions - unaudited)	2016	2015
CASH FLOWS PROVIDED (USED) BY OPERATING ACTIVITIES FROM CONTINUING OPERATIONS		
Net income	$ 10	$ 89
Loss from discontinued operations (net of tax)	—	2
Adjustments to reconcile income from continuing operations to cash flows from operating activities		
Depreciation and amortization	77	83
Original issue discount and debt issuance cost amortization	95	3
Deferred income taxes	2	3
Equity income from affiliates	(4)	(4)
Distributions from equity affiliates	—	5
Stock based compensation expense	6	8
Gain on early retirement of debt	(3)	—
Gain on available-for-sale securities	(3)	(2)
Net loss (gain) on divestitures	1	(2)
Pension contributions	(3)	(4)
Gain on post-employment plan remeasurement	(10)	—
Change in operating assets and liabilities (a)	(156)	(115)
Total cash flows provided by operating activities from continuing operations	12	66
CASH FLOWS PROVIDED (USED) BY INVESTING ACTIVITIES FROM CONTINUING OPERATIONS		
Additions to property, plant and equipment	(43)	(53)
Proceeds from disposal of property, plant and equipment	—	1
Purchase of operations - net of cash acquired	—	(4)
Uses from sale of operations or equity investments	—	(2)
Net purchase of funds restricted for specific transactions	(2)	—
Reimbursements from restricted investments	—	7
Proceeds from the settlement of derivative instruments	4	7
Total cash flows used by investing activities from continuing operations	(41)	(44)
CASH FLOWS PROVIDED (USED) BY FINANCING ACTIVITIES FROM CONTINUING OPERATIONS		
Repayment of long-term debt	(318)	(14)
Premium on long-term debt repayment	(5)	—
Proceeds (repayment) from short-term debt	(78)	319
Repurchase of common stock	—	(500)
Debt issuance costs	(4)	—
Cash dividends paid	(24)	(24)
Distributions to noncontrolling interest	(2)	—
Excess tax benefits related to share-based payments	(4)	—
Total cash flows used by financing activities from continuing operations	(435)	(219)
CASH USED BY CONTINUING OPERATIONS	(464)	(197)
Cash used by discontinued operations		
Operating cash flows	(12)	(10)
Investing cash flows	—	—
Total cash used by discontinued operations	(12)	(10)
Effect of currency exchange rate changes on cash and cash equivalents	(8)	(11)
DECREASE IN CASH AND CASH EQUIVALENTS	(484)	(218)
CASH AND CASH EQUIVALENTS - BEGINNING OF PERIOD	1,188	1,257
CASH AND CASH EQUIVALENTS - END OF PERIOD	$ 704	$ 1,039

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

SEE NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS.

NOTE A – SIGNIFICANT ACCOUNTING POLICIES

Basis of presentation

On September 20, 2016, Ashland was reincorporated under the laws of the State of Delaware through a tax-free reorganization under a new holding company structure (the 2016 Reorganization). As a result of the Reorganization, Ashland Global Holdings Inc. replaced Ashland Inc. as the publicly held corporation and, through its subsidiaries, now conducts all of the operations that historically were conducted by Ashland Inc. The Condensed Consolidated Financial Statements include the accounts of Ashland Global Holdings Inc. and its majority owned subsidiaries and, when applicable, entities for which Ashland has a controlling financial interest or is the primary beneficiary (Ashland).

The accompanying unaudited Condensed Consolidated Financial Statements have been prepared in accordance with accounting principles generally accepted in the United States for interim financial reporting and Securities and Exchange Commission (SEC) regulations. In the opinion of management, all adjustments considered necessary for a fair presentation have been included. These statements omit certain information and footnote disclosures required for complete annual financial statements and, therefore, should be read in conjunction with Ashland's Annual Report on Form 10-K for the fiscal year ended September 30, 2016. Results of operations for the period ended December 31, 2016 are not necessarily indicative of the expected results for the remaining quarter in the fiscal year.

Ashland is composed of three reportable segments: Ashland Specialty Ingredients (Specialty Ingredients), Ashland Performance Materials (Performance Materials) and Valvoline. As of December 31, 2016, Ashland maintains an approximately 83% controlling interest in Valvoline Inc., which holds the Valvoline reportable segment. See Note B for additional information. The term Valvoline as used herein, depending on context, refers to either Valvoline Inc. or Valvoline as a reportable segment of Ashland.

Use of estimates, risks and uncertainties

The preparation of Ashland's Condensed 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.

New accounting standards

A description of new U.S. GAAP accounting standards issued or adopted during the current year is required in interim financial reporting. A detailed listing of new accounting standards relevant to Ashland is included in the Annual Report on Form 10-K for the fiscal year ended September 30, 2016. The following standard relevant to Ashland was adopted in the current period.

In April 2015, the FASB issued accounting guidance to help entities evaluate the accounting for fees paid by a customer in a cloud computing arrangement. Cloud computing arrangements represent the delivery of hosted

NOTE A – SIGNIFICANT ACCOUNTING POLICIES (continued)

services over the internet which includes software, platforms, infrastructure and other hosting arrangements. Under the guidance, customers that gain access to software in a cloud computing arrangement account for the software as internal-use software only if the arrangement includes a software license. This guidance became effective prospectively for Ashland on October 1, 2016.

NOTE B – VALVOLINE

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 (now known as Ashland Global Holdings Inc.) and Valvoline Inc. The initial step of the separation, the initial public offering (IPO) of Valvoline Inc., closed on September 28, 2016. The new Ashland is a premier 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. Valvoline Inc., a controlled subsidiary, operates on a stand-alone basis as a premium consumer-branded lubricant supplier.

After completing the IPO on September 28, 2016, Ashland owns 170 million shares of Valvoline Inc.'s common stock, representing approximately 83% of the total outstanding shares of Valvoline Inc.'s common stock. Ashland presently intends to distribute the remaining Valvoline Inc. shares in 2017 following the release of March-quarter earnings results by both Ashland and Valvoline Inc.

The resulting outside stockholders' interests in Valvoline Inc., which was approximately 17% as of December 31, 2016 and September 30, 2016, are presented separately as a noncontrolling interest within Ashland's equity in the Condensed Consolidated Balance Sheets. As of December 31, 2016 and September 30, 2016, the noncontrolling interest was $174 million and $182 million, respectively. The amount of consolidated net income attributable to these minority holders is presented as a separate caption on the Statement of Consolidated Comprehensive Income.

During the three months ended December 31, 2016 and 2015, Ashland recognized separation costs of $28 million and $6 million, respectively, which are primarily related to transaction and legal fees. Separation costs are primarily recorded within the selling, general and administrative expense caption of the Statements of Consolidated Comprehensive Income.

Transferred Assets and Liabilities

As of September 30, 2016, Valvoline Inc. included substantially all of the Valvoline business as historically reported by Ashland, as well as certain other assets and liabilities transferred to Valvoline Inc. by Ashland as a part of the separation process. The largest transferred liabilities were the net pension and other postretirement plan liabilities, which include a substantial portion of the largest U.S. qualified pension plans and non-qualified U.S. pension plans. As of September 30, 2016, Valvoline Inc.'s net pension and other postretirement plan liabilities totaled approximately $900 million.

Other transferred assets and liabilities primarily consist of deferred compensation, certain Ashland legacy business insurance reserves, tax attributes and certain trade payables. The impact of these other transferring assets and liabilities during 2016 was approximately $15 million of net assets. Additionally, any deferred tax assets and liabilities that relate specifically to these assets and liabilities have been transferred to Valvoline Inc. as well as certain other tax liabilities as a result of the Tax Matters Agreement. For purposes of Ashland's 2017 segment reporting and consistent with prior periods, these transferred assets and liabilities remain included within Unallocated and other.

NOTE B – VALVOLINE (continued)

Time-It Lube

On January 4, 2017, Valvoline announced that it signed a definitive agreement to acquire the business assets related to 28 quick-lube stores from Time-It Lube L.L.C. and Time-It Lube of Texas, LP (together, Time-It Lube) for $48 million. The stores are located in Louisiana and eastern Texas. The acquisition is expected to be completed in the second quarter of fiscal 2017.

Oil Can Henry's

On December 11, 2015, Ashland announced that it signed a definitive agreement to acquire OCH International, Inc. (Oil Can Henry's), which was the 13th largest quick-lube network in the United States, servicing approximately 1 million vehicles annually with 89 quick-lube stores, consisting of 47 company-owned stores and 42 franchise locations, in Oregon, Washington, California, Arizona, Idaho and Colorado. On February 1, 2016, Ashland completed the acquisition.

The acquisition of Oil Can Henry's was valued at $72 million, which included acquired indebtedness of $11 million and other working capital adjustments. Net of acquired indebtedness and certain purchase price adjustments, the net cash outlay was $62 million during 2016. The purchase price allocation primarily included $83 million of goodwill.

NOTE C - DIVESTITURES

Specialty Ingredients Joint Venture

During September 2016, Ashland entered into a definitive sale agreement to sell its ownership interest in a Specialty Ingredients consolidated joint venture. Ashland recognized a loss of $12 million before tax in 2016 to recognize the assets at fair value less cost to sell, using Level 2 nonrecurring fair value measurements. The loss was reported within the net gain (loss) on divestitures caption within the Statement of Consolidated Comprehensive Income. The net assets held for sale are not material to Ashland's Condensed Consolidated Balance Sheets.

Ashland determined this transaction 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. Any additional gain or loss recognized as a result of the transaction is expected to be nominal and would be recognized in the period incurred. The disposition is expected to be completed during fiscal 2017.

NOTE D – 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.

On July 31, 2014, Ashland completed the sale of the Ashland Water Technologies (Water Technologies) business to Clayton, Dubilier & Rice. Ashland made subsequent post-closing adjustments to the discontinued operations caption as defined by the definitive agreement during the three months ended December 31, 2016 and 2015.

Components of amounts reflected in the Statements of Consolidated Comprehensive Income related to discontinued operations are presented in the following table for the three months ended December 31, 2016 and 2015.

NOTE D – DISCONTINUED OPERATIONS (continued)

	Three months ended December 31	
(In millions)	2016	2015
Loss on disposal of discontinued operations (net of tax)		
Water Technologies	$ —	$ (2)
Total loss from discontinued operations (net of tax)	$ —	$ (2)

NOTE E – 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 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 instruments subject to recurring fair value measurements as of December 31, 2016.

NOTE E – FAIR VALUE MEASUREMENTS (continued)

(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
Assets					
Cash and cash equivalents	$ 704	$ 704	$ 704	$ —	$ —
Restricted investments (a)	327	327	327	—	—
Deferred compensation investments (b)	184	184	34	150	—
Investments of captive insurance company (b)	2	2	2	—	—
Foreign currency derivatives	17	17	—	17	—
Total assets at fair value	$ 1,234	$ 1,234	$ 1,067	$ 167	$ —
Liabilities					
Foreign currency derivatives	$ 12	$ 12	$ —	$ 12	$ —

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

The following table summarizes financial asset instruments subject to recurring fair value measurements as of September 30, 2016.

(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
Assets					
Cash and cash equivalents	$ 1,188	$ 1,188	$ 1,188	$ —	$ —
Restricted investments (a)	322	322	322	—	—
Deferred compensation investments (b)	185	185	35	150	—
Investments of captive insurance company (b)	4	4	4	—	—
Foreign currency derivatives	3	3	—	3	—
Total assets at fair value	$ 1,702	$ 1,702	$ 1,549	$ 153	$ —
Liabilities					
Foreign currency derivatives	$ 5	$ 5	$ —	$ 5	$ —

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

Restricted investments

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 (the January 2015 asbestos insurance settlement). During the March 2015 quarter, Ashland placed $335 million of the settlement

NOTE E – FAIR VALUE MEASUREMENTS (continued)

funds from the January 2015 asbestos insurance settlement 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 were classified primarily as noncurrent restricted investment assets, with $30 million classified within other current assets, in the Condensed Consolidated Balance Sheets as of December 31, 2016 and September 30, 2016.

During 2015, Ashland diversified the restricted investments received from the January 2015 asbestos insurance settlement into primarily equity and corporate bond mutual funds that are designated as available-for-sale securities, classified as Level 1 measurements within the fair value hierarchy. 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 Condensed Consolidated Balance Sheets as a component of accumulated other comprehensive income (AOCI). Investment 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. The following table provides a summary of the available-for-sale securities portfolio as of December 31, 2016 and September 30, 2016:

(In millions)	December 31 2016	September 30 2016
Original cost	$ 335	$ 335
Accumulated investment income, settlement funds, and disbursements, net	(24)	(3)
Adjusted cost (a)	311	332
Investment income (b)	3	8
Unrealized gain	13	11
Unrealized loss	(2)	—
Settlement funds	2	4
Disbursements	—	(33)
Fair value	$ 327	$ 322

(a) The adjusted cost of the demand deposit includes accumulated investment income, disbursements and settlements recorded in previous periods.
(b) Investment income for the demand deposit includes interest income as well as dividend income transferred from the equity and corporate bond mutual funds.

The following table presents gross unrealized gains and losses for the available-for-sale securities as of December 31, 2016 and September 30, 2016:

NOTE E – FAIR VALUE MEASUREMENTS (continued)

(In millions)	Adjusted Cost	Gross Unrealized Gain	Gross Unrealized Loss	Fair Value
As of December 31, 2016				
Demand Deposit	$ 11	$ —	$ —	$ 11
Equity Mutual Fund	185	13	—	198
Corporate bond Mutual Fund	120	—	(2)	118
Fair value	$ 316	$ 13	$ (2)	$ 327
As of September 30, 2016				
Demand Deposit	$ 6	$ —	$ —	$ 6
Equity Mutual Fund	185	8	—	193
Corporate bond Mutual Fund	120	3	—	123
Fair value	$ 311	$ 11	$ —	$ 322

The unrealized gains and losses as of December 31, 2016 and September 30, 2016 were recognized within AOCI. Ashland invests in highly-rated investment grade mutual funds. No realized gain or loss was reclassified out of AOCI and no other-than-temporary impairment was recognized in AOCI during the three months ended December 31, 2016 and 2015.

The following table presents the investment income and disbursements related to the investments within the portfolio for the three months ended December 31, 2016 and 2015.

	Three months ended December 31	
(In millions)	2016	2015
Investment income	$ 3	$ 2
Disbursements	—	(7)

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. Gains and losses related to deferred compensation investments are immediately recognized within the Statements of Consolidated Comprehensive Income.

NOTE E – FAIR VALUE MEASUREMENTS (continued)

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 valued at fair value 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 gains and losses recognized during the three months ended December 31, 2016 and 2015 within the Statements of Consolidated Comprehensive Income.

	Three months ended December 31	
(In millions)	2016	2015
Foreign currency derivative gain	$ 2	$ 3

The following table summarizes the fair values of the outstanding foreign currency derivatives as of December 31, 2016 and September 30, 2016 included in accounts receivable and accrued expenses and other liabilities of the Condensed Consolidated Balance Sheets.

(In millions)	December 31 2016	September 30 2016
Foreign currency derivative assets	$ 15	$ 3
Notional contract values	678	333
Foreign currency derivative liabilities	$ 12	$ 4
Notional contract values	629	530

Net investment hedges

Since 2014, Ashland has 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 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 investments 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 Comprehensive Income when the hedged item affects net income. During the three months ended December 31, 2016 and 2015, these foreign currency contracts were settled and for certain hedges Ashland entered into new foreign currency contracts designated as hedges of net investments in foreign subsidiaries. These settlements resulted in net gains, recorded within the cumulative translation adjustment within AOCI, of $4 million and $7 million for the three months ended December 31, 2016 and 2015, respectively.

NOTE E – FAIR VALUE MEASUREMENTS (continued)

As of December 31, 2016 and September 30, 2016, the total notional value of foreign currency contracts equaled $69 million and $94 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 December 31, 2016 and September 30, 2016.

(In millions)	Consolidated balance sheet caption	December 31 2016	September 30 2016
Net investment hedge assets (a)	Accounts receivable	$ 2	$ —
Net investment hedge liabilities (a)	Accrued expenses and other liabilities	—	1

(a) Fair value of $0 denotes a value less than $1 million.

The following table summarizes the change in the unrealized gain (loss) on the net investment hedge instruments recognized within the cumulative translation adjustment within AOCI during the three months ended December 31, 2016 and 2015. No portion of the gain or loss was reclassified to income during the three months ended December 31, 2016 and 2015. There was no hedge ineffectiveness with these instruments during the three months ended December 31, 2016 and 2015.

	Three months ended December 31	
(In millions)	2016	2015
Change in unrealized gain in AOCI (a)	$ 2	$ —
Tax impact of change in unrealized gain in AOCI (a)	(1)	—

(a) $0 denotes a value less than $1 million.

Other financial instruments

At December 31, 2016 and September 30, 2016, Ashland’s consolidated long-term debt (including the current portion and excluding debt issuance cost discounts) had a carrying value of $2,869 million and $3,103 million, respectively, compared to a fair value of $3,020 million and $3,336 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, which are deemed to be Level 2 measurements within the fair value hierarchy.

NOTE F – 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 are valued at cost using the last-in, first-out (LIFO) method.

The following table summarizes Ashland’s inventories as of the reported Condensed Consolidated Balance Sheet dates.

NOTE F – INVENTORIES (continued)

(In millions)	December 31 2016	September 30 2016
Finished products	$ 512	$ 516
Raw materials, supplies and work in process	182	184
LIFO reserves	(28)	(29)
	$ 666	$ 671

NOTE G – 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. For its July 1, 2016 assessment, Ashland determined that its reporting units for the allocation of goodwill include the Specialty Ingredients reportable segment, the Composites and Intermediates/Solvents reporting units within the Performance Materials reportable segment, and the Core North America, Quick Lubes and International reporting units within the Valvoline reportable segment. Based on the results of its goodwill impairment testing as of July 1, 2016, Ashland recorded a pre-tax goodwill impairment charge of $171 million for Intermediates/Solvents during the fourth quarter of 2016.

The following is a progression of goodwill by reportable segment for the three months ended December 31, 2016.

(In millions)	Specialty Ingredients	Performance Materials (a)	Valvoline (b)	Total
Balance as of September 30, 2016	$ 1,991	$ 147	$ 263	$ 2,401
Acquisitions (c)	—	—	4	4
Currency translation adjustment	(54)	(3)	—	(57)
Balance as of December 31, 2016	$ 1,937	$ 144	$ 267	$ 2,348

(a) As of December 31, 2016, goodwill was completely attributable to the Composites reporting unit due to the full impairment of the goodwill for the Intermediates/Solvents reporting unit during the fourth quarter of 2016.
(b) As of December 31, 2016, goodwill consisted of $89 million for the Core North America reporting unit, $139 million for the Quick Lubes reporting unit and $39 million for the International reporting unit.
(c) Relates to Valvoline Instant Oil Change[SM] center acquisitions during the three months ended December 31, 2016.

Other intangible assets

Intangible assets principally consist of trademarks and trade names, intellectual property and customer relationships. 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 3 to 25 years, intellectual property over 5 to 20 years, and customer relationships over 3 to 24 years.

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.

Intangible assets were comprised of the following as of December 31, 2016 and September 30, 2016.

NOTE G – GOODWILL AND OTHER INTANGIBLES (continued)

	December 31, 2016		
(In millions)	Gross carrying amount	Accumulated amortization	Net carrying amount
Definite-lived intangible assets			
Trademarks and trade names	$ 42	$ (20)	$ 22
Intellectual property	659	(284)	375
Customer relationships	530	(202)	328
Total definite-lived intangible assets	1,231	(506)	725
Indefinite-lived intangible assets			
Trademarks and trade names	301	—	301
Total intangible assets	$ 1,532	$ (506)	$ 1,026

	September 30, 2016		
(In millions)	Gross carrying amount	Accumulated amortization	Net carrying amount
Definite-lived intangible assets			
Trademarks and trade names	$ 42	$ (19)	$ 23
Intellectual property	667	(273)	394
Customer relationships	546	(200)	346
Total definite-lived intangible assets	1,255	(492)	763
Indefinite-lived intangible assets			
Trademarks and trade names	301	—	301
Total intangible assets	$ 1,556	$ (492)	$ 1,064

Amortization expense recognized on intangible assets was $19 million for each of the three months ended December 31, 2016 and 2015, and is included in the selling, general and administrative expense caption of the Statements of Consolidated Comprehensive Income. Estimated amortization expense for future periods is $75 million in 2017 (includes three months actual and nine months estimated), $75 million in 2018, $70 million in 2019, $70 million in 2020 and $69 million in 2021. 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 H – DEBT

The following table summarizes Ashland's current and long-term debt as of the dates reported in the Condensed Consolidated Balance Sheets.

NOTE H – DEBT (continued)

(In millions)	December 31 2016	September 30 2016
4.750% notes, due 2022	$ 1,085	$ 1,121
3.875% notes, due 2018	671	700
6.875% notes, due 2043	376	376
5.500% notes, due 2024 (a)	375	375
Term Loan, due 2021 (a)	296	375
2017 accounts receivable securitization facility (a)	75	—
6.50% junior subordinated notes, due 2029	50	140
Other international loans, interest at a weighted-average rate of 4.9% at December 31, 2016 (4.8% to 5.0%)	17	20
Medium-term notes, due 2019, interest of 9.4% at December 31, 2016	5	5
Term Loan, due 2017	—	150
Other (b)	(18)	(18)
Total debt	2,932	3,244
Short-term debt	(92)	(170)
Current portion of long-term debt	(15)	(19)
Long-term debt (less current portion and debt issuance cost discounts)	$ 2,825	$ 3,055

(a) These debt instruments were issued by Valvoline during 2016 and 2017 in connection with the separation process.
(b) Other includes $29 million of debt issuance cost discounts as of December 31, 2016 and September 30, 2016.

The scheduled aggregate maturities of long-term debt by year (including the current portion and excluding debt issuance costs) are as follows: $11 million remaining in 2017, $686 million in 2018, $35 million in 2019, $30 million in 2020 and $210 million in 2021.

Ashland Financing Activities

6.50% junior subordinated notes due 2029

In December 2016, Hercules LLC (Hercules) (formerly Hercules Incorporated), an indirect wholly-owned subsidiary of Ashland, repurchased, through a cash tender offer (the Tender Offer), $182 million of the aggregate principal par value amount of its 6.50% junior subordinated notes due 2029 (2029 notes) for an aggregate purchase price of $177 million. As a result of the Tender Offer, the carrying value of the 2029 notes was reduced by $90 million and Ashland recognized a $92 million charge related to accelerated accretion of the recorded debt discount (compared to the total par value) and $5 million of a net gain related to the repayment of the debt. The charge and net gain are included in the net interest and other financing expense caption of the Statements of Consolidated Comprehensive Income for the three months ended December 31, 2016.

Open market repurchases of 4.750% notes due 2022 and 3.875% notes due 2018

During the first quarter of 2017, Ashland executed open market repurchases of its 4.750% notes due 2022 (2022 notes) and its 3.875% notes due 2018 (2018 notes). As a result of these repurchases, the carrying values of the 2022 notes and 2018 notes were reduced by $36 million and $29 million, respectively. Ashland recognized a $2 million charge related to premiums paid in the open market repurchases and 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 for the three months ended December 31, 2016.

NOTE H – DEBT (continued)

Subsidiary senior unsecured term loan

During August 2016, a wholly owned foreign subsidiary of Ashland entered into a credit agreement which provided for an aggregate principal amount of $150 million in a senior unsecured term loan facility. This term loan was drawn in full as of September 30, 2016 and was fully repaid during the three months ended December 31, 2016.

Remaining borrowing capacity

The borrowing capacity remaining under Ashland's 2015 revolving credit facility was $742 million, due to a reduction of $58 million for letters of credit outstanding at December 31, 2016. Ashland's total borrowing capacity at December 31, 2016 (excluding Valvoline) was $817 million, which included $75 million of available capacity from the accounts receivable securitization facility.

Covenants related to current Ashland debt agreements

Ashland's debt 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 December 31, 2016, Ashland is in compliance with all debt covenant restrictions.

The maximum consolidated leverage ratios permitted under Ashland's most recent credit agreement (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. At December 31, 2016, Ashland's calculation of the consolidated leverage ratio was 3.1, which is below the maximum consolidated leverage ratio of 3.75.

The minimum required consolidated interest coverage ratio under the 2015 Senior Credit Agreement during its entire duration is 3.0. At December 31, 2016, Ashland's calculation of the interest coverage ratio was 4.4, which exceeds the minimum required consolidated ratio of 3.0.

Valvoline Financing Activities

Accounts receivable securitization

In November 2016, Valvoline entered into a $125 million accounts receivable securitization facility (the 2017 accounts receivable securitization facility) pursuant to (i) a Sale Agreement, between Valvoline and LEX Capital LLC, a wholly-owned "bankruptcy remote" special purpose subsidiary of Valvoline (Lex) and (ii) a Transfer and Administration Agreement, among Lex, Valvoline, as Master Servicer, a certain Conduit Investor, Uncommitted Investor, and Letter of Credit Issuer, certain Managing Agents, Administrators and Committed Investors, and PNC Bank National Association, as agent for various secured parties (the Agent).

Under the Sale Agreement, Valvoline will sell, on an ongoing basis, substantially all of its accounts receivable, certain related assets and the right to the collections on those accounts receivable to Lex. Under the terms of the Transfer and Administration Agreement, Lex may, from time to time, obtain up to $125 million (in the form of cash or letters of credit for the benefit of Valvoline) from the Conduit Investor, the Uncommitted Investor and/or the Committed Investors (together the "Investors") through the sale of an undivided interest in such accounts receivable, related assets and collections. The Transfer and Administration Agreement has a term of one year but is extendable at the discretion of the Investors. Valvoline accounts for the 2017 accounts receivable securitization facility as secured borrowings, and the receivables sold pursuant to the facility are included in Ashland's Condensed Consolidated Balance Sheet as accounts receivable. Valvoline classifies any borrowings under this facility as short-term debt within Ashland's Condensed Consolidated Balance Sheet.

NOTE H – DEBT (continued)

During the first quarter of 2017, Valvoline borrowed $75 million under the 2017 accounts receivable securitization facility and used the net proceeds to repay an equal amount of the 2016 term loan facility. As a result, Valvoline recognized a $1 million charge related to 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 for the three months ended December 31, 2016.

Remaining borrowing capacity

At December 31, 2016, the total borrowing capacity remaining under Valvoline's 2016 revolving credit facility was $428 million due to a reduction of $22 million for letters of credit outstanding. Valvoline's total borrowing capacity at December 31, 2016 was $478 million, which included $50 million of available capacity from the 2017 accounts receivable securitization facility.

Covenants related to current Valvoline debt agreements

The Valvoline Credit Agreement contains usual and customary representations and warranties, and usual and customary affirmative and negative covenants, including limitations on liens, additional indebtedness, investments, restricted payments, asset sales, mergers, affiliate transactions and other customary limitations, as well as financial covenants (including maintenance of a maximum consolidated leverage ratio and a minimum consolidated interest coverage ratio) and other customary limitations. As of December 31, 2016, Valvoline Inc. was in compliance with all debt agreement covenant restrictions.

The maximum consolidated leverage ratio permitted under the Valvoline Credit Agreement is 4.5. At December 31, 2016, Valvoline’s calculation of the consolidated leverage ratio was 1.2, which is below the maximum consolidated leverage ratio of 4.5.

The minimum required consolidated interest coverage ratio under the Valvoline Credit Agreement during its entire duration is 3.0. At December 31, 2016, Valvoline’s calculation of the interest coverage ratio was 13.6, which exceeds the minimum required consolidated ratio of 3.0.

NOTE I – INCOME TAXES

Current fiscal year

Ashland’s estimated annual effective income tax rate used to determine income tax expense in interim financial reporting for the year ending September 30, 2017 is 25%. Ashland’s effective tax rate in any interim period is subject to adjustments related to discrete items and the mix of domestic and foreign operating results. The overall effective tax benefit rate was 150% for the three months ended December 31, 2016. The effective income tax rate was impacted by the current quarter income mix, including the Ashland identified key items, which resulted in charges that were taxed at a U.S. statutory rate and drove the overall rate to a tax benefit. The current quarter tax rate was also impacted by net unfavorable tax discrete items of $1 million.

Prior fiscal year

Ashland’s annual effective income tax rate used to determine income tax expense in interim financial reporting for the year ending September 30, 2016 was 25%. The overall effective tax rate was 18% for the three months ended December 31, 2015 and was impacted by net favorable tax discrete items of $7 million, primarily related to the law change from the reinstatement of the research and development credit and certain global restructuring steps.

Unrecognized tax benefits

Changes in unrecognized tax benefits are summarized as follows for the three months ended December 31, 2016.

NOTE I – INCOME TAXES (continued)

(In millions)		
Balance at October 1, 2016	$	168
Increases related to positions taken on items from prior years		4
Decreases related to positions taken on items from prior years		(2)
Increases related to positions taken in the current year		4
Settlement of uncertain tax positions with tax authorities		(1)
Balance at December 31, 2016	$	173

In the next twelve months, Ashland expects a decrease in the amount accrued for uncertain tax positions of up to $3 million for continuing operations and zero for discontinued operations related primarily to audit settlements and statute of limitations expirations in various tax jurisdictions. It is reasonably possible that there could be other material changes to the amount of uncertain tax positions due to activities of the taxing authorities, settlement of audit issues or the reassessment of existing uncertain tax positions; however, Ashland is not able to estimate the impact of these items at this time.

NOTE J – EMPLOYEE BENEFIT PLANS

For the three months ended December 31, 2016, Ashland contributed $2 million to its non-qualified U.S. pension plans, all of which was paid by Valvoline, and $1 million to its non-U.S. pension plans. No contributions were made to Ashland's qualified U.S. pension plans during the three months ended December 31, 2016. Ashland expects to make additional contributions to the non-qualified U.S. plans of approximately $13 million, which will be paid by Valvoline, and to the non-U.S. plans of approximately $9 million during the remainder of 2017.

Plan Transfers, Amendments and Remeasurements

Effective January 1, 2017, Ashland discontinued certain post-employment health and life insurance benefits. The effect of these plan changes resulted in a remeasurement gain of $10 million, $4 million within cost of sales and $6 million within selling, general and administrative expense, in the Statements of Consolidated Comprehensive Income for the three months ended December 31, 2016.

During September 2016, Ashland transferred a substantial portion of the largest U.S. qualified pension and non-qualified U.S. pension plans as well as certain other postretirement obligations to Valvoline Inc. as part of the separation process discussed further in Note B.

Components of net periodic benefit costs (income)

For segment reporting purposes, service cost for continuing operations is proportionately allocated to each segment, excluding the Unallocated and other segment, while all other costs for continuing operations are recorded within the Unallocated and other segment.

NOTE J – EMPLOYEE BENEFIT PLANS (continued)

The following table details the components of pension and other postretirement benefit costs.

	Pension benefits		Other postretirement benefits	
(In millions)	2016	2015	2016	2015
Three months ended December 31				
Service cost (a)	$ 3	$ 6	$ —	$ —
Interest cost	23	31	1	2
Expected return on plan assets	(39)	(47)	—	—
Amortization of prior service credit (a)	—	(1)	(3)	(4)
Actuarial gain	—	—	(10)	—
	$ (13)	$ (11)	$ (12)	$ (2)

(a) Activity of $0 denote values less than $1 million.

NOTE K – 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 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 Stoker Corporation, 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.

	Three months ended December 31		Years ended September 30		
(In thousands)	2016	2015	2016	2015	2014
Open claims - beginning of period	57	60	60	65	65
New claims filed	—	1	2	2	2
Claims settled	—	—	—	—	(1)
Claims dismissed	(1)	(2)	(5)	(7)	(1)
Open claims - end of period	56	59	57	60	65

NOTE K – LITIGATION, CLAIMS AND CONTINGENCIES (continued)

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 annual update of this estimate completed during the June 2016 quarter, it was determined that the liability for Ashland asbestos-related claims should be increased by $37 million. Total reserves for asbestos claims were $406 million at December 31, 2016 compared to $415 million at September 30, 2016.

A progression of activity in the asbestos reserve is presented in the following table.

	Three months ended December 31		Years ended September 30		
(In millions)	2016	2015	2016	2015	2014
Asbestos reserve - beginning of period	$ 415	$ 409	$ 409	$ 438	$ 463
Reserve adjustment	—	—	37	—	4
Amounts paid	(9)	(8)	(31)	(29)	(29)
Asbestos reserve - end of period	$ 406	$ 401	$ 415	$ 409	$ 438

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, all of which are solvent.

At December 31, 2016, Ashland's receivable for recoveries of litigation defense and claim settlement costs from insurers amounted to $149 million (excluding the Hercules receivable for asbestos claims), of which $7 million relates to costs previously paid. Receivables from insurers amounted to $151 million at September 30, 2016. During the June 2016 quarter, 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 $16 million increase in the receivable for probable insurance recoveries.

During the March 2016 quarter, Ashland entered into settlement agreements totaling $4 million with certain insurers, which resulted in a reduction of the Ashland insurance receivable within the Condensed Consolidated Balance Sheets by the same amount. During the June 2016 quarter, Ashland placed $4 million of the settlement funds into the renewable annual trust.

A progression of activity in the Ashland insurance receivable is presented in the following table.

NOTE K – LITIGATION, CLAIMS AND CONTINGENCIES (continued)

	Three months ended December 31		Years ended September 30		
(In millions)	2016	2015	2016	2015	2014
Insurance receivable - beginning of period	$ 151	$ 150	$ 150	$ 402	$ 408
Receivable adjustment	—	—	16	(3)	22
Insurance settlement	—	—	(4)	(227)	—
Amounts collected	(2)	(5)	(11)	(22)	(28)
Insurance receivable - end of period	$ 149	$ 145	$ 151	$ 150	$ 402

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.

	Three months ended December 31		Years ended September 30		
(In thousands)	2016	2015	2016	2015	2014
Open claims - beginning of period	15	20	20	21	21
New claims filed	—	—	1	1	1
Claims dismissed	—	—	(6)	(2)	(1)
Open claims - end of period	15	20	15	20	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 the June 2016 quarter, it was determined that the liability for Hercules asbestos-related claims should be increased by $25 million. Total reserves for asbestos claims were $318 million at December 31, 2016 compared to $321 million at September 30, 2016.

A progression of activity in the asbestos reserve is presented in the following table.

	Three months ended December 31		Years ended September 30		
(In millions)	2016	2015	2016	2015	2014
Asbestos reserve - beginning of period	$ 321	$ 311	$ 311	$ 329	$ 342
Reserve adjustment	—	—	25	4	10
Amounts paid	(3)	(5)	(15)	(22)	(23)
Asbestos reserve - end of period	$ 318	$ 306	$ 321	$ 311	$ 329

NOTE K – LITIGATION, CLAIMS AND CONTINGENCIES (continued)

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 solvent domestic insurers.

As of December 31, 2016 and September 30, 2016, the receivables from insurers amounted to $63 million. During the June 2016 quarter, 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 $7 million increase in the receivable for probable insurance recoveries.

A progression of activity in the Hercules insurance receivable is presented in the following table.

	Three months ended December 31		Years ended September 30		
(In millions)	2016	2015	2016	2015	2014
Insurance receivable - beginning of period	$ 63	$ 56	$ 56	$ 77	$ 75
Receivable adjustment	—	—	7	1	3
Insurance settlement	—	—	—	(22)	—
Amounts collected	—	—	—	—	(1)
Insurance receivable - end of period	$ 63	$ 56	$ 63	$ 56	$ 77

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, mortality rates, 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 $670 million for the Ashland asbestos-related litigation (current reserve of $406 million) and approximately $490 million for the Hercules asbestos-related litigation (current reserve of $318 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, or actuarial refinement or improvements to the assumptions used within these models are initiated, Ashland may need to further increase the estimates of the costs associated with asbestos claims and these increases could be material over time.

NOTE K – LITIGATION, CLAIMS AND CONTINGENCIES (continued)

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 December 31, 2016, such locations included 81 waste treatment or disposal sites where Ashland has been identified as a potentially responsible party under Superfund or similar state laws, 130 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 64 are being actively remediated.

Ashland's reserves for environmental remediation and related environmental litigation amounted to $174 million at December 31, 2016 compared to $177 million September 30, 2016, of which $131 million at December 31, 2016 and $134 million at September 30, 2016 were classified in other noncurrent liabilities on the Condensed Consolidated Balance Sheets.

The following table provides a reconciliation of the changes in the environmental remediation reserves during the three months ended December 31, 2016 and 2015.

	Three months ended December 31	
(In millions)	2016	2015
Reserve - beginning of period	$ 177	$ 186
Disbursements	(7)	(10)
Revised obligation estimates and accretion	4	4
Reserve - end of period	$ 174	$ 180

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, probability techniques, 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 December 31, 2016 and September 30, 2016, Ashland's recorded receivable for these probable insurance recoveries was $23 million, of which $15 million at December 31, 2016 and September 30, 2016 were classified in other noncurrent assets on the Condensed 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 three months ended December 31, 2016 and 2015.

NOTE K – LITIGATION, CLAIMS AND CONTINGENCIES (continued)

	Three months ended December 31	
(In millions)	2016	2015
Environmental expense	$ 4	$ 4
Legal expense	2	2
Total expense	6	6
Insurance receivable (a)	—	—
Total expense, net of receivable activity	$ 6	$ 6

(a) Activity of $0 denotes value less than $1 million.

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 $380 million. No individual remediation location is significant, as the largest reserve for any site is less than 15% of the remediation reserve.

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 December 31, 2016 and September 30, 2016. 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 December 31, 2016.

NOTE L – EARNINGS PER SHARE

The following is the computation of basic and diluted earnings per share (EPS) from continuing operations attributable to Ashland. Stock appreciation rights (SARs), stock options and warrants available to purchase shares outstanding for each reporting period whose grant price was greater than the average market price of Ashland Common Stock for each applicable period 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 approximately 0.9 million and 1.2 million at December 31, 2016 and 2015, respectively. Earnings per share is reported under the treasury stock method.

NOTE L – EARNINGS PER SHARE (continued)

	Three months ended December 31	
(In millions except per share data)	2016	2015
Numerator		
Numerator for basic and diluted EPS –		
Income from continuing operations	$ 10	$ 91
Less: Income from continuing operations attributable to noncontrolling interest	11	—
Income (loss) from continuing operations attributable to Ashland, net of tax	$ (1)	$ 91
Denominator		
Denominator for basic EPS – Weighted-average		
common shares outstanding	62	65
Share-based awards convertible to common shares (a)	—	1
Denominator for diluted EPS – Adjusted weighted-		
average shares and assumed conversions	62	66
EPS from continuing operations attributable to Ashland		
Basic	$ (0.01)	$ 1.39
Diluted	(0.01)	1.38

(a) As a result of the loss from continuing operations attributable to Ashland during the three months ended December 31, 2016, the effect of the share-based awards convertible to common shares would be antidilutive. As such, they have been excluded from the diluted EPS calculation.

NOTE M – EQUITY ITEMS

Stock repurchase programs

In April 2015, Ashland's Board of Directors approved a $1 billion share repurchase authorization that will expire on December 31, 2017 (the 2015 stock repurchase program). This authorization allows for Ashland’s 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. The following summarizes the stock repurchases under the 2015 stock repurchase program.

2015 stock repurchase program agreement

In November 2015, under the 2015 stock repurchase program, Ashland announced that it entered into an accelerated share repurchase agreement (2016 ASR Agreement) with Goldman, Sachs & Co. Under the 2016 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. In February 2016, Goldman, Sachs & Co. exercised their early termination option under the 2016 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 $99.01 per share. Based on this settlement price, the final number of shares repurchased by Ashland that were delivered by Goldman, Sachs & Co. under the 2016 ASR Agreement was 5.1 million shares. Ashland received the additional 1.2 million shares during the March 2016 quarter to settle the difference between the initial share delivery and the total number of shares repurchased. After the 2016 ASR Agreement, $500 million of share repurchase authorization remains under the 2015 stock repurchase program.

NOTE M – EQUITY ITEMS (continued)

Stockholder dividends

Ashland dividends

In May 2015, the Board of Directors of Ashland announced a quarterly cash dividend increase to 39 cents per share to eligible shareholders of record. This amount was paid for quarterly dividends in the first quarter of fiscal 2017 and each quarter of fiscal 2016.

Valvoline dividends

In November 2016, the Board of Directors of Valvoline Inc. announced a quarterly cash dividend of 4.9 cents per share to eligible shareholders of record. This was Valvoline Inc.'s first dividend declaration and was paid for quarterly dividends during the first quarter of fiscal 2017. Since Ashland owns approximately 83% of Valvoline Inc., the net cash outflow of $2 million was payments made to the remaining 17% of shareholders outstanding and is included within the Statements of Condensed Consolidated Cash Flows for the three months ended December 31, 2016.

Accumulated other comprehensive income (loss)

Components of other comprehensive income (loss) recorded in the Statements of Consolidated Comprehensive Income are presented below, before tax and net of tax effects.

	2016			2015		
(In millions)	Before tax	Tax benefit	Net of tax	Before tax	Tax (expense) benefit	Net of tax
Three months ended December 31						
Other comprehensive income (loss)						
Unrealized translation loss	$ (150)	$ 4	$ (146)	$ (63)	$ 2	$ (61)
Pension and postretirement obligation adjustment:						
Amortization of unrecognized prior service credits included in net income (a)	(3)	2	(1)	(5)	2	(3)
Unrealized gain on available-for-sale securities	—	—	—	9	(3)	6
Total other comprehensive loss	$ (153)	$ 6	$ (147)	$ (59)	$ 1	$ (58)

(a) Amortization of unrecognized prior service credits are included in the calculation of net periodic benefit costs (income) for pension and other postretirement plans. For specific financial statement captions impacted by the amortization see the table below.

As discussed in the table above, certain pension and postretirement costs (income) are amortized from accumulated other comprehensive income (loss) 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 within. See Note J for more information.

	Three months ended December 31	
(In millions)	2016	2015
Cost of sales	$ (1)	$ (2)
Selling, general and administrative expense	(2)	(3)
Total amortization of unrecognized prior service credits	$ (3)	$ (5)

NOTE N - STOCK INCENTIVE PLANS

Ashland has stock incentive plans under which key employees or directors are granted stock-settled 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 within the selling, general and administrative expense caption of the Statements of Consolidated Comprehensive Income. Stock-based compensation expense was $8 million and $9 million for the three months ended December 31, 2016 and 2015, respectively. Stock-based compensation expense during the three months ended December 31, 2016 included cash-settled nonvested stock awards expense and cash-settled performance units expense of $1 million each, while the three months ended December 31, 2015 included only $1 million of expense for cash-settled nonvested stock awards.

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. SARS granted for each of the three months ended December 31, 2016 and 2015 were 0.4 million. As of December 31, 2016, there was $14 million of total unrecognized compensation costs related to SARs. That cost is expected to be recognized over a weighted-average period of 2.3 years. 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.

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 or units are subject to forfeiture upon termination of service before the vesting period ends. During 2016 and 2017, these awards were primarily granted as stock units that will convert to shares upon vesting, while the grants in prior years were generally made in shares. Only nonvested stock awards granted in the form of shares entitle employees or directors to vote the shares. Dividends on nonvested stock awards granted are in the form of additional units or shares of nonvested stock awards, which are subject to vesting and forfeiture provisions. Nonvested stock awards granted were 80,800 and 87,050 for the three months ended December 31, 2016 and 2015, respectively. As of December 31, 2016, there was $16 million of total unrecognized compensation costs related to nonvested stock awards. That cost is expected to be recognized over a weighted-average period of 1.8 years.

Cash-settled nonvested stock awards

Certain nonvested stock awards are granted to employees and are settled in cash upon vesting. As of December 31, 2016, 96,400 cash-settled nonvested stock awards were outstanding. The value of these cash-settled nonvested stock awards changes in connection with changes in the fair market value of the Ashland Common Stock. These awards generally vest over a period of three years. The expense recognized related to cash-settled nonvested stock awards was $1 million during the three months ended December 31, 2016 and 2015.

NOTE N – STOCK INCENTIVE PLANS (continued)

Performance awards

Ashland sponsors a long-term incentive plan that awards performance shares/units to certain key employees that are primarily tied to Ashland's overall financial performance relative to internal targets. Additionally, certain outstanding performance awards are tied to Ashland's overall financial performance relative to the financial performance of selected industry peer groups. Awards are granted annually, with each award covering a three-year vesting period.

For awards granted in prior years, 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 Condensed Consolidated Balance Sheets. Performance measures used to determine the actual number of performance shares issuable upon 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. TSR relative to peers is considered a market condition while ROI is considered a performance condition under applicable U.S. GAAP.

For awards granted in the current year, upon vesting, each performance unit will be settled in cash based on the fair market value of Ashland or Valvoline common stock. For these awards, dependent upon whether the participant is an employee of Ashland or Valvoline, the performance measure used to determine the actual number of performance units issuable upon vesting is the financial performance of Ashland or Valvoline compared to award targets. The financial performance award metric is considered a performance condition under applicable U.S. GAAP. Additionally, the actual number of performance units issuable upon vesting can be potentially increased or decreased based on a TSR performance modifier relative to peers for Ashland and Valvoline.

Nonvested performance shares/units do not entitle employees to vote the shares or to receive any dividends thereon. Performance shares/units granted for the three months ended December 31, 2016 and 2015 were 0.1 million. As of December 31, 2016, there was $16 million of total unrecognized compensation costs related to performance shares/units. That cost is expected to be recognized over a weighted-average period of 2.2 years.

Other commitments

Executive performance incentive and retention program

During 2016, certain executives were granted 260 thousand performance-based restricted shares of Ashland in order to provide an incentive to remain employed in the period after the full separation. At December 31, 2016, total nonvested shares outstanding, assuming vesting at the 100% performance level, are 264 thousand shares, which includes the cumulative value of forfeitable dividends.

The expense associated with these awards is contingent upon the completion of the full separation and therefore will not be recorded until the full and complete separation occurs. Based on the price of Ashland's common stock on the grant date, the total estimated unrecognized compensation expense is $15 million assuming the performance mid-point target is met. At that time, the awards will be recognized ratably over the remaining vesting period.

NOTE O – 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.

NOTE O – REPORTABLE SEGMENT INFORMATION (continued)

Ashland's businesses are managed within three reportable segments: 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 cellulose ethers, vinyl pyrrolidones, acrylic polymers, polyester and polyurethane-based adhesives, and plant and seed extract. 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.

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.

Valvoline is a leading worldwide producer and distributor of premium-branded automotive, commercial and industrial lubricants, and automotive chemicals. In 2016, it ranked as the #2 quick-lube chain by number of stores and #3 passenger car motor oil in the DIY market by volume brand in the United States. The brand operates and franchises 1,076 Valvoline Instant Oil Change℠ centers in the United States. It also markets Valvoline™ lubricants and automotive chemicals; MaxLife™ lubricants created for higher-mileage engines; SynPower™ synthetic motor oil; and Zerex™ 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 February 2016, Ashland completed the acquisition of Oil Can Henry's resulting in the addition of 89 quick-lube stores. See Note B for information on the acquisition of Oil Can Henry's.

During 2015, Ashland announced a plan to separate Valvoline into an independent, publicly traded company. On September 22, 2016, Ashland and Valvoline Inc. announced an IPO of Valvoline Inc.'s common stock and closed the IPO on September 28, 2016. As a result of the IPO, Ashland maintains an approximately 83% ownership interest in Valvoline Inc. as of September 30, 2016. See Note B for additional information. The financial information within this footnote is reflective of the manner in which Ashland manages the Valvoline reportable segment and the Valvoline reportable segment does not include any assets or liabilities transferred to Valvoline Inc. by Ashland in September 2016. Valvoline's financial position and results of operations as reported as a segment of Ashland may be different than how they are reported on a stand-alone basis.

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, including internal separation costs, and legacy costs or adjustments that relate to divested businesses that are no longer operated by Ashland.

NOTE O – REPORTABLE SEGMENT INFORMATION (continued)

Reportable segment results

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, 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 following table presents various financial information for each reportable segment for the three months ended December 31, 2016 and 2015.

	Three months ended December 31	
(In millions - unaudited)	2016	2015
SALES		
Specialty Ingredients	$ 482	$ 476
Performance Materials	222	231
Valvoline	489	456
	$ 1,193	$ 1,163
OPERATING INCOME (LOSS)		
Specialty Ingredients	$ 40	$ 38
Performance Materials	8	24
Valvoline	99	92
Unallocated and other	(10)	(3)
	$ 137	$ 151

NOTE P – SUPPLEMENTAL GUARANTOR INFORMATION

The following tables present condensed consolidating financial information for (a) Ashland Global Holdings Inc. (for purposes of this discussion and table, Parent Guarantor); (b) Ashland LLC (formerly Ashland Inc.), the issuer of the 3.875% notes due 2018, 4.750% notes due 2022 and 6.875% notes due 2043 (collectively referred to as the Senior Notes) (the Issuer); and (c) all other non-guarantor subsidiaries of the Parent Guarantor on a combined basis, none of which guaranteed the Senior Notes (the Other Non-Guarantor Subsidiaries).

Ashland Global Holdings Inc. was incorporated on May 6, 2016 as a direct wholly owned subsidiary of Ashland Inc. (now Ashland LLC) to reincorporate in Delaware and to help facilitate the separation of the Valvoline business from the specialty chemical businesses. As a result of the Reorganization, Ashland Global Holdings Inc. replaced Ashland Inc. as the publicly held corporation, and Ashland Inc. was converted to a Kentucky limited liability company and is now an indirect, wholly owned subsidiary of Ashland Global Holdings Inc. Ashland Global Holdings Inc. fully and unconditionally guaranteed the Senior Notes and has no significant independent assets or operations. For periods prior to September 30, 2016, the parent entity was Ashland LLC (formerly Ashland Inc.).

NOTE P – SUPPLEMENTAL GUARANTOR INFORMATION (continued)

Ashland presents all investments in subsidiaries in the supplemental guarantor information using the equity method of accounting. Therefore, the net income (loss) of the subsidiaries accounted for using the equity method is in their parents’ investment accounts. For each financial statement period presented within the following tables, Ashland Global Holdings Inc.’s activity reflects the accounting for investments in subsidiaries under the equity method reflective of the 2016 Reorganization and resulting presentation. The elimination entries within the tables primarily eliminate investments in subsidiaries and inter-company balances and transactions. The total net effect of the settlement of these inter-company transactions is reflected in the Condensed Statements of Cash Flows as a financing activity. The following supplemental condensed consolidating financial statements present information about Ashland Global Holdings Inc., Ashland LLC and other non-guarantor subsidiaries.

Condensed Statements of Comprehensive Income

Three months ended December 31, 2016

(In millions)	Ashland Global Holdings Inc. (Parent Guarantor)	Ashland LLC (Issuer)	Other Non-Guarantor Subsidiaries	Eliminations	Consolidated
Sales	$ —	$ 137	$ 1,065	$ (9)	$ 1,193
Cost of sales	—	96	719	(8)	807
Gross profit	—	41	346	(1)	386
Selling, general and administrative expense	8	32	199	—	239
Research and development expense	—	3	20	—	23
Equity and other income (loss)	—	(15)	28	—	13
Operating income (loss)	(8)	(9)	155	(1)	137
Net interest and other financing expense	—	34	98	—	132
Net loss on divestitures	—	(1)	—	—	(1)
Income (loss) from continuing operations					
before income taxes	(8)	(44)	57	(1)	4
Income tax expense (benefit)	—	5	(11)	—	(6)
Equity in net income (loss) of subsidiaries	7	1	—	(8)	—
Net income (loss)	(1)	(48)	68	(9)	10
Net income attributable to noncontrolling interests	—	—	11	—	11
Net income (loss) attributable to Ashland	$ (1)	$ (48)	$ 57	$ (9)	$ (1)
Comprehensive income (loss)	(137)	(41)	(86)	127	(137)
Comprehensive income attributable					
to noncontrolling interests	10	—	10	(10)	10
Comprehensive income (loss) attributable					
to Ashland	$ (147)	$ (41)	$ (96)	$ 137	$ (147)

NOTE P – SUPPLEMENTAL GUARANTOR INFORMATION (continued)

Condensed Statements of Comprehensive Income

Three months ended December 31, 2015

(In millions)	Ashland Global Holdings Inc. (Parent Guarantor)	Ashland LLC (Issuer)	Other Non-Guarantor Subsidiaries	Eliminations	Consolidated
Sales	$ —	$ 156	$ 1,014	$ (7)	$ 1,163
Cost of sales	—	102	675	(6)	771
Gross profit	—	54	339	(1)	392
Selling, general and administrative expense	—	32	192	—	224
Research and development expense	—	3	22	—	25
Equity and other income (loss)	—	(2)	10	—	8
Operating income (loss)	—	17	135	(1)	151
Net interest and other financing expense	—	38	4	—	42
Net gain on divestitures	—	1	1	—	2
Income (loss) from continuing operations before income taxes	—	(20)	132	(1)	111
Income tax expense (benefit)	—	(27)	47	—	20
Equity in net income (loss) of subsidiaries	89	95	—	(184)	—
Income (loss) from continuing operations	89	102	85	(185)	91
Loss from discontinued operations (net of tax)	—	(1)	(1)	—	(2)
Net income (loss)	$ 89	$ 101	$ 84	$ (185)	$ 89
Comprehensive income (loss)	$ 31	$ 100	$ 27	$ (127)	$ 31

NOTE P – SUPPLEMENTAL GUARANTOR INFORMATION (continued)

Condensed Balance Sheets

At December 31, 2016

(In millions)	Ashland Global Holdings Inc. (Parent Guarantor)	Ashland LLC (Issuer)	Other Non-Guarantor Subsidiaries	Eliminations	Consolidated
ASSETS					
Current assets					
Cash and cash equivalents	$ —	$ 148	$ 556	$ —	$ 704
Accounts receivable	—	47	811	—	858
Inventories	—	45	621	—	666
Other assets	6	10	100	(10)	106
Total current assets	6	250	2,088	(10)	2,334
Noncurrent assets					
Property, plant and equipment, net	—	241	1,945	—	2,186
Goodwill	—	141	2,207	—	2,348
Intangibles	—	35	991	—	1,026
Restricted investments	—	—	297	—	297
Asbestos insurance receivable	—	131	63	—	194
Equity and other unconsolidated investments	—	2	58	—	60
Investment in subsidiaries	2,995	7,503	—	(10,498)	—
Deferred income taxes	31	97	199	(128)	199
Intercompany receivables	—	19	2,539	(2,558)	—
Other assets	—	254	165	—	419
Total noncurrent assets	3,026	8,423	8,464	(13,184)	6,729
Total assets	$ 3,032	$ 8,673	$ 10,552	$ (13,194)	$ 9,063
LIABILITIES AND EQUITY					
Current liabilities					
Short-term debt	$ —	$ —	$ 92	$ —	$ 92
Current portion of long-term debt	—	—	15	—	15
Accounts payable and other accrued liabilities	—	222	697	(10)	909
Total current liabilities	—	222	804	(10)	1,016
Noncurrent liabilities					
Long-term debt	—	2,116	709	—	2,825
Employee benefit obligations	—	38	1,002	—	1,040
Asbestos litigation reserve	—	371	303	—	674
Deferred income taxes	—	—	197	(128)	69
Intercompany payables	31	2,508	19	(2,558)	—
Other liabilities	—	220	218	—	438
Total noncurrent liabilities	31	5,253	2,448	(2,686)	5,046
Equity					
Total Ashland stockholders' equity	3,001	3,198	7,474	(10,498)	3,175
Noncontrolling interests	—	—	(174)	—	(174)
Total equity	3,001	3,198	7,300	(10,498)	3,001
Total liabilities and equity	$ 3,032	$ 8,673	$ 10,552	$ (13,194)	$ 9,063

NOTE P – SUPPLEMENTAL GUARANTOR INFORMATION (continued)

Condensed Balance Sheets

At September 30, 2016

(In millions)	Ashland Global Holdings Inc. (Parent Guarantor)	Ashland LLC (Issuer)	Other Non-Guarantor Subsidiaries	Eliminations	Consolidated
ASSETS					
Current assets					
Cash and cash equivalents	$ —	$ 76	$ 1,112	$ —	$ 1,188
Accounts receivable	—	18	876	—	894
Inventories	—	42	629	—	671
Other assets	7	16	98	(8)	113
Total current assets	7	152	2,715	(8)	2,866
Noncurrent assets					
Property, plant and equipment, net	—	246	1,978	—	2,224
Goodwill	—	141	2,260	—	2,401
Intangibles	—	35	1,029	—	1,064
Restricted investments	—	—	292	—	292
Asbestos insurance receivable	—	133	63	—	196
Equity and other unconsolidated investments	—	2	55	—	57
Investment in subsidiaries	3,127	7,597	—	(10,724)	—
Deferred income taxes	31	97	146	(97)	177
Intercompany receivables	—	5	2,264	(2,269)	—
Other assets	—	253	167	—	420
Total noncurrent assets	3,158	8,509	8,254	(13,090)	6,831
Total assets	$ 3,165	$ 8,661	$ 10,969	$ (13,098)	$ 9,697
LIABILITIES AND EQUITY					
Current liabilities					
Short-term debt	$ —	$ —	$ 170	$ —	$ 170
Current portion of long-term debt	—	—	19	—	19
Accounts payable and other accrued liabilities	—	244	791	(8)	1,027
Total current liabilities	—	244	980	(8)	1,216
Noncurrent liabilities					
Long-term debt	—	2,182	873	—	3,055
Employee benefit obligations	—	44	1,036	—	1,080
Asbestos litigation reserve	—	381	305	—	686
Deferred income taxes	—	—	166	(97)	69
Intercompany payables	—	2,264	5	(2,269)	—
Other liabilities	—	220	206	—	426
Total noncurrent liabilities	—	5,091	2,591	(2,366)	5,316
Equity					
Total Ashland stockholders’ equity	3,165	3,326	7,580	(10,724)	3,347
Noncontrolling interest	—	—	(182)	—	(182)
Total equity	3,165	3,326	7,398	(10,724)	3,165
Total liabilities and equity	$ 3,165	$ 8,661	$ 10,969	$ (13,098)	$ 9,697

NOTE P – SUPPLEMENTAL GUARANTOR INFORMATION (continued)

Condensed Statements of Cash Flows

Three months ended December 31, 2016

(In millions)	Ashland Global Holdings Inc. (Parent Guarantor)	Ashland LLC (Issuer)	Other Non-Guarantor Subsidiaries	Eliminations	Consolidated
Total cash flows provided (used) by operating activities from continuing operations	$ —	$ (83)	$ 95	$ —	$ 12
Cash flows provided (used) by investing activities from continuing operations					
Additions to property, plant and equipment	—	(3)	(40)	—	(43)
Intercompany dividends	8	8	—	(16)	—
Net purchases of funds restricted for specific transactions	—	(2)	—	—	(2)
Other investing activities, net	—	4	—	—	4
Total cash flows provided (used) by investing activities from continuing operations	8	7	(40)	(16)	(41)
Cash flows provided (used) by financing activities from continuing operations					
Repayment of long-term debt	—	(65)	(253)	—	(318)
Premium on long-term debt repayment	—	(1)	(4)	—	(5)
Repayment from short-term debt	—	—	(78)	—	(78)
Cash dividends paid	(24)	—	—	—	(24)
Distributions to noncontrolling interest	—	—	(2)	—	(2)
Intercompany dividends	(8)	—	(8)	16	—
Other intercompany activity, net	24	231	(255)	—	—
Other financing activities, net	—	(7)	(1)	—	(8)
Total cash flows provided (used) by financing activities from continuing operations	(8)	158	(601)	16	(435)
Cash provided (used) by continuing operations	—	82	(546)	—	(464)
Cash used by discontinued operations					
Operating cash flows	—	(10)	(2)	—	(12)
Investing cash flows	—	—	—	—	—
Total cash used by discontinued operations	—	(10)	(2)	—	(12)
Effect of currency exchange rate changes on cash and cash equivalents	—	—	(8)	—	(8)
Increase (decrease) in cash and cash equivalents	—	72	(556)	—	(484)
Cash and cash equivalents - beginning of year	—	76	1,112	—	1,188
Cash and cash equivalents - end of year	$ —	$ 148	$ 556	$ —	$ 704

NOTE P – SUPPLEMENTAL GUARANTOR INFORMATION (continued)

Condensed Statements of Cash Flows

Three months ended December 31, 2015

(In millions)	Ashland Global Holdings Inc. (Parent Guarantor)	Ashland LLC (Issuer)	Other Non-Guarantor Subsidiaries	Eliminations	Consolidated
Total cash flows provided (used) by operating activities from continuing operations	$ —	$ (123)	$ 189	$ —	$ 66
Cash flows provided (used) by investing activities from continuing operations					
Additions to property, plant and equipment	—	(2)	(51)	—	(53)
Purchase of operations - net of cash acquired	—	—	(4)	—	(4)
Reimbursements from restricted investments	—	7	—	—	7
Other investing activities, net	—	5	1	—	6
Total cash flows provided (used) by investing activities from continuing operations	—	10	(54)	—	(44)
Cash flows provided (used) by financing activities from continuing operations					
Repayment of long-term debt	—	(14)	—	—	(14)
Proceeds (repayment) from short-term debt	—	409	(90)	—	319
Repurchase of common stock	—	(500)	—	—	(500)
Cash dividends paid	—	(24)	—	—	(24)
Other intercompany activity, net	—	233	(233)	—	—
Total cash flows provided (used) by financing activities from continuing operations	—	104	(323)	—	(219)
Cash used by continuing operations	—	(9)	(188)	—	(197)
Cash used by discontinued operations					
Operating cash flows	—	(5)	(5)	—	(10)
Investing cash flows	—	—	—	—	—
Total cash used by discontinued operations	—	(5)	(5)	—	(10)
Effect of currency exchange rate changes on cash and cash equivalents	—	—	(11)	—	(11)
Decrease in cash and cash equivalents	—	(14)	(204)	—	(218)
Cash and cash equivalents - beginning of year	—	21	1,236	—	1,257
Cash and cash equivalents - end of year	$ —	$ 7	$ 1,032	$ —	$ 1,039

FORWARD-LOOKING STATEMENTS

This Form 10-Q 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,” “objectives,” “may,” “will,” “should,” “plans” and “intends” and the negative of these words or other comparable terminology. These forward-looking statements include statements relating to the status of the separation process and the expected completion of the separation through the subsequent distribution of Valvoline common stock. In addition, Ashland may from time to time make forward-looking statements in its annual report, 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, the separation of Ashland’s specialty chemicals businesses and Valvoline Inc. (Valvoline), the initial public offering of 34,500,000 shares of Valvoline common stock (the “IPO”), the expected timetable for completing the separation, the strategic and competitive advantages 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 separation will not be consummated within the anticipated time period or at all, including as the result of regulatory, market or other factors; regulatory, market or other factors and conditions affecting the distribution of Ashland’s remaining interests in Valvoline; the potential for disruption to Ashland’s business in connection with the separation; the potential that Ashland does not realize all of the expected benefits of the IPO, new holding company reorganization or 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); and 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 of estimates, risks and uncertainties” in Note A of Notes to Consolidated Financial Statements and in Item 1A in its most recent Form 10-K filed with the SEC, as well as risks and uncertainties related to the separation that are described in the Form S-4 filed with the SEC, which are available on Ashland’s website at http://investor.ashland.com or on the SEC’s website, and Valvoline’s Form S-1 filed with the SEC, available on the SEC’s website. 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 Form 10-Q whether as a result of new information, future events or otherwise. Information on Ashland’s website is not incorporated into or a part of this Form 10-Q.

ASHLAND GLOBAL HOLDINGS INC. AND CONSOLIDATED SUBSIDIARIES
MANAGEMENT'S DISCUSSION AND ANALYSIS

The following discussion should be read in conjunction with the Condensed Consolidated Financial Statements and the accompanying Notes to Condensed Consolidated Financial Statements herein. As Ashland Global Holdings Inc. is the successor to Ashland Inc., the information set forth refers to Ashland Inc. for the periods prior to September 30, 2016 and to Ashland Global Holdings Inc. on and after September 30, 2016.

BUSINESS OVERVIEW

Ashland profile

Ashland is a premier global leader in providing specialty chemical solutions to customers in a wide range of consumer and industrial markets, including adhesives, architectural coatings, automotive, construction, energy, food and beverage, personal care and pharmaceutical. Ashland also maintains a controlling interest in Valvoline Inc., a premium consumer-branded lubricant supplier. With approximately 11,000 employees worldwide (including approximately 5,000 employees of Valvoline), Ashland serves customers in more than 100 countries.

Ashland's sales generated outside of North America were 46% and 47% for the three months ended December 31, 2016 and 2015, respectively. Sales by region expressed as a percentage of total consolidated sales for the three months ended December 31 were as follows:

	Three months ended December 31	
Sales by Geography	2016	2015
North America (a)	54%	53%
Europe	21%	23%
Asia Pacific	18%	17%
Latin America & other	7%	7%
	100%	100%

(a) Ashland includes only U.S. and Canada in its North America 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. The term Valvoline as used herein, depending on context, refers to either Valvoline Inc. or Valvoline as a reportable segment of Ashland. For further descriptions of each reportable segment, see "Results of Operations – Reportable Segment Review" beginning on page 50.

The contribution to sales by each reportable segment expressed as a percentage of total consolidated sales for the three months ended December 31 were as follows:

	Three months ended December 31	
Sales by Reportable Segment	2016	2015
Specialty Ingredients	40%	41%
Performance Materials	19%	20%
Valvoline	41%	39%
	100%	100%

KEY DEVELOPMENTS

The following recent transactions and operational decisions had an impact on Ashland's current and future cash flows, results of operations and financial position.

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 (now known as Ashland Global Holdings Inc.) and Valvoline Inc. The initial step of the separation, the initial public offering (IPO) of Valvoline Inc., closed on September 28, 2016. The new Ashland is a premier 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. Valvoline Inc., a controlled subsidiary, operates on a stand-alone basis as a premium consumer-branded lubricant supplier.

After completing the IPO on September 28, 2016, Ashland owns 170 million shares of Valvoline Inc.'s common stock, representing approximately 83% of the total outstanding shares of Valvoline Inc.'s common stock. Ashland presently intends to distribute the remaining Valvoline Inc. shares in 2017 following the release of March-quarter earnings results by both Ashland and Valvoline Inc.

The resulting outside stockholders' interests in Valvoline Inc., which was approximately 17% as of December 31, 2016 and September 30, 2016, are presented separately as a noncontrolling interest within Ashland's equity in the Condensed Consolidated Balance Sheets. As of December 31, 2016 and September 30, 2016, the noncontrolling interest was $174 million and $182 million, respectively. The amount of consolidated net income attributable to these minority holders is presented as a separate caption on the Statement of Consolidated Comprehensive Income.

During the three months ended December 31, 2016 and 2015, Ashland recognized separation costs of $28 million and $6 million, respectively, which are primarily related to transaction and legal fees. Separation costs are primarily recorded within the selling, general and administrative expense caption of the Statements of Consolidated Comprehensive Income.

Transferred Assets and Liabilities

As of September 30, 2016, Valvoline Inc. included substantially all of the Valvoline business as historically reported by Ashland, as well as certain other assets and liabilities transferred to Valvoline Inc. by Ashland as a part of the separation process. The largest transferred liabilities were the net pension and other postretirement plan liabilities, which include a substantial portion of the largest U.S. qualified pension plans and non-qualified U.S. pension plans. As of September 30, 2016, Valvoline Inc.'s net pension and other postretirement plan liabilities totaled approximately $900 million.

Other transferred assets and liabilities primarily consist of deferred compensation, certain Ashland legacy business insurance reserves, tax attributes and certain trade payables. The impact of these other transferring assets and liabilities during 2016 was approximately $15 million of net assets. Additionally, any deferred tax assets and liabilities that relate specifically to these assets and liabilities have been transferred to Valvoline Inc. as well as certain other tax liabilities as a result of the Tax Matters Agreement. For purposes of Ashland's 2017 segment reporting and consistent with prior periods, these transferred assets and liabilities remain included within Unallocated and other.

Time-It Lube

On January 4, 2017, Valvoline announced that it signed a definitive agreement to acquire the business assets related to 28 quick-lube stores from Time-It Lube L.L.C. and Time-It Lube of Texas, LP (together, Time-It

Lube) for $48 million. The stores are located in Louisiana and eastern Texas. The acquisition is expected to be completed in the second quarter of fiscal 2017.

Financing Activities

6.50% junior subordinated notes due 2029

In December 2016, Hercules LLC (Hercules) (formerly Hercules Incorporated), an indirect wholly-owned subsidiary of Ashland, repurchased, through a cash tender offer (the Tender Offer), $182 million of the aggregate principal par value amount of its 6.50% junior subordinated notes due 2029 (2029 notes) for an aggregate purchase price of $177 million. As a result of the Tender Offer, the carrying value of the 2029 notes was reduced by $90 million and Ashland recognized a $92 million charge related to accelerated accretion of the recorded debt discount (compared to the total par value) and $5 million of a net gain related to the repayment of the debt. The charge and net gain are included in the net interest and other financing expense caption of the Statements of Consolidated Comprehensive Income for the three months ended December 31, 2016.

Open market repurchases of 4.750% notes due 2022 and 3.875% notes due 2018

During the first quarter of 2017, Ashland executed open market repurchases of its 4.750% notes due 2022 (2022 notes) and its 3.875% notes due 2018 (2018 notes). As a result of these repurchases, the carrying values of the 2022 notes and 2018 notes were reduced by $36 million and $29 million, respectively. Ashland recognized a $2 million charge related to premiums paid in the open market repurchases and 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 for the three months ended December 31, 2016.

Subsidiary senior unsecured term loan

During August 2016, a wholly owned foreign subsidiary of Ashland entered into a credit agreement which provided for an aggregate principal amount of $150 million in a senior unsecured term loan facility. This term loan was drawn in full as of September 30, 2016 and was fully repaid during the three months ended December 31, 2016.

Valvoline accounts receivable securitization

In November 2016, Valvoline entered into a $125 million accounts receivable securitization facility (the 2017 accounts receivable securitization facility) pursuant to (i) a Sale Agreement, between Valvoline and LEX Capital LLC, a wholly-owned "bankruptcy remote" special purpose subsidiary of Valvoline (Lex) and (ii) a Transfer and Administration Agreement, among Lex, Valvoline, as Master Servicer, a certain Conduit Investor, Uncommitted Investor, and Letter of Credit Issuer, certain Managing Agents, Administrators and Committed Investors, and PNC Bank National Association, as agent for various secured parties (the Agent).

Under the Sale Agreement, Valvoline will sell, on an ongoing basis, substantially all of its accounts receivable, certain related assets and the right to the collections on those accounts receivable to Lex. Under the terms of the Transfer and Administration Agreement, Lex may, from time to time, obtain up to $125 million (in the form of cash or letters of credit for the benefit of Valvoline) from the Conduit Investor, the Uncommitted Investor and/or the Committed Investors (together the "Investors") through the sale of an undivided interest in such accounts receivable, related assets and collections. The Transfer and Administration Agreement has a term of one year but is extendable at the discretion of the Investors. Valvoline accounts for the 2017 accounts receivable securitization facility as secured borrowings, and the receivables sold pursuant to the facility are included in Ashland's Condensed Consolidated Balance Sheet as accounts receivable. Valvoline classifies any borrowings under this facility as short-term debt within Ashland's Condensed Consolidated Balance Sheet.

During the first quarter of 2017, Valvoline borrowed $75 million under the 2017 accounts receivable securitization facility and used the net proceeds to repay an equal amount of the 2016 term loan facility. As a result, Valvoline recognized a $1 million charge related to 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 for the three months ended December 31, 2016.

Other Post-employment Benefit Plans Amendment and Remeasurement

Effective January 1, 2017, Ashland discontinued certain post-employment health and life insurance benefits. The effect of these plan changes resulted in a remeasurement gain of $10 million, $4 million within cost of sales and $6 million within selling, general and administrative expense, in the Statements of Consolidated Comprehensive Income for the three months ended December 31, 2016.

RESULTS OF OPERATIONS – CONSOLIDATED REVIEW

Use of non-GAAP measures

Ashland has included within this document the following non-GAAP measures, on both a consolidated and reportable segment basis, which are not defined within U.S. GAAP and do not purport to be alternatives to net income or cash flows from operating activities as a measure of operating performance or cash flows:

- EBITDA - net income, plus income tax expense (benefit), net interest and other financing expenses, and depreciation and amortization.
- Adjusted EBITDA - EBITDA adjusted for noncontrolling interests, discontinued operations, net gain (loss) on acquisitions and divestitures, other income and (expense) and key items (including the remeasurement gains and losses related to pension and other postretirement plans).
- Adjusted EBITDA margin - Adjusted EBITDA divided by sales.
- Free cash flow - operating cash flows less capital expenditures and certain other adjustments as applicable.

Management believes the use of EBITDA and Adjusted EBITDA measures on a consolidated and reportable segment basis assist investors in understanding the ongoing operating performance by presenting comparable financial results between periods. Ashland believes that by removing the impact of depreciation and amortization and excluding certain non-cash charges, amounts spent on interest and taxes and certain other charges that are highly variable from year to year, EBITDA and Adjusted EBITDA provide Ashland's investors with performance measures that reflect the impact to operations from trends in changes in sales, margin and operating expenses, providing a perspective not immediately apparent from net income and operating income. The adjustments Ashland makes to derive the non-GAAP measures of EBITDA and Adjusted EBITDA exclude items which may cause short-term fluctuations in net income and operating income and which Ashland does not consider to be the fundamental attributes or primary drivers of its business. EBITDA and Adjusted EBITDA provide disclosure on the same basis as that used by Ashland's management to evaluate financial performance on a consolidated and reportable segment basis and provide consistency in our financial reporting, facilitate internal and external comparisons of Ashland's historical operating performance and its business units and provide continuity to investors for comparability purposes.

The free cash flow metric enables Ashland 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. Unlike cash flow provided by operating activities, free cash flow includes the impact of capital expenditures from continuing operations, as well as other items Ashland has deemed nonoperational, providing a more complete picture of cash generation. Free cash flow has certain limitations, including that it does not reflect adjustment for certain non-discretionary cash flows such as mandatory debt repayments. The amount of mandatory versus discretionary expenditures can vary significantly between periods.

These non-GAAP measures should be considered supplemental in nature and should not be construed as more significant than comparable measures defined by U.S. GAAP. Limitations associated with the use of these non-GAAP measures include that these measures do not present all of the amounts associated with our results as determined in accordance with U.S. GAAP. The non-GAAP measures provided are 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 items that impact comparability between periods. In addition, certain financial covenants related to Ashland's 2015 Senior Credit Agreement and Valvoline's 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 yet 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 (see the Adjusted EBITDA reconciliation table on page 46 for additional details on exact amounts included within this non-GAAP measure related to pension and other postretirement plans.) 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. For further information on the actuarial assumptions and plan assets referenced above, see the MD&A - Critical Accounting Policies - Employee benefit obligations and Note N of the Notes to Consolidated Financial Statements within the 2016 Form 10-K.

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.

Key financial results for the three months ended December 31, 2016 and 2015 included the following:

- Ashland's net income (loss) attributable to Ashland amounted to a loss of $1 million and income of $89 million for the three months ended December 31, 2016 and 2015, respectively, or a loss of $0.01 and income of $1.35 diluted earnings per share, respectively.
- Ashland's net income attributable to noncontrolling interest amounted to $11 million for the three months ended December 31, 2016 and reflects the noncontrolling interest of Valvoline Inc.
- Income from continuing operations, which excludes results from discontinued operations, amounted to $10 million and $91 million for the three months ended December 31, 2016 and 2015, respectively.
- The effective income tax benefit rate of 150% and expense rate of 18% for the three months ended December 31, 2016 and 2015, respectively, were both affected by certain discrete items.

- Ashland incurred pretax net interest and other financing expense of $132 million and $42 million for the three months ended December 31, 2016 and 2015, respectively. The current quarter was impacted by $92 million of net charges associated with current quarter debt financing activity.
- Operating income was $137 million and $151 million for the three months ended December 31, 2016 and 2015, 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 $137 million and $151 million for the three months ended December 31, 2016 and 2015, respectively. The current and prior year quarters' operating income include certain key items that are excluded to arrive at Adjusted EBITDA. These key items are summarized as follows:

- Separation, restructuring and other costs, net, include the following:
    - $28 million and $6 million of costs related to the separation of Valvoline during the three months ended December 31, 2016 and 2015, respectively;
    - $5 million reversal of the severance accrual and $2 million of accelerated depreciation related to a restructuring plan within an existing manufacturing facility during the three months ended December 31, 2015;
- Remeasurement gain of $10 million associated with the discontinuation of certain post-employment health and life insurance benefits during the three months ended December 31, 2016; and
- $5 million and $10 million charges for legal reserves during the three months ended December 31, 2016 and 2015, respectively.

Operating income for the three months ended December 31, 2016 and 2015 included depreciation and amortization of $77 million and $81 million, respectively (which excluded accelerated depreciation of $2 million for the three months ended December 31, 2015). EBITDA totaled $213 million and $232 million for the three months ended December 31, 2016 and 2015, respectively. EBITDA and Adjusted EBITDA results in the table below have been prepared to illustrate the ongoing effects of Ashland’s operations, which exclude certain key items and the impact of Ashland's noncontrolling interest in Valvoline Inc.

(In millions)	Three months ended December 31 2016	2015
Net income	$ 10	$ 89
Income tax expense (benefit)	(6)	20
Net interest and other financing expense	132	42
Depreciation and amortization (a)	77	81
EBITDA	213	232
Net income attributable to noncontrolling interest	(11)	—
Adjusted EBITDA adjustments attributable to noncontrolling interest (b)	(10)	—
Loss from discontinued operations (net of tax)	—	2
Separation, restructuring and other costs, net	28	1
Gain on post-employment plan remeasurement	(10)	—
Legal reserve	5	10
Accelerated depreciation	—	2
Adjusted EBITDA (c)	$ 215	$ 247

(a) Excludes $2 million of accelerated depreciation for the three months ended December 31, 2015.
(b) Includes certain items attributable to the approximately 17% noncontrolling interest in Valvoline Inc. such as income tax expense, net interest and other financing expense, depreciation and amortization, separation costs and the gain on post-employment plan remeasurement.
(c) Includes $12 million and $13 million during the three months ended December 31, 2016 and 2015, respectively, of net periodic pension and other postretirement income recognized ratably through the fiscal year. This income is comprised of service cost, interest cost, expected return on plan assets, and amortization of prior service credit and is disclosed in further detail in Note J of the Notes to Condensed Consolidated Financial Statements.

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 three months ended December 31, 2016 and 2015.

(In millions)	Three months ended December 31 2016	2015	Change
Sales	$ 1,193	$ 1,163	$ 30

The following table provides a reconciliation of the change in sales between the three months ended December 31, 2016 and 2015.

(In millions)	Three months ended December 31, 2016
Volume	$ 55
Pricing	(29)
Product mix	(4)
Currency exchange	(5)
Acquisitions and divestitures	13
Change in sales	$ 30

Sales for the current quarter increased $30 million compared to the prior year quarter. Improved volume increased sales by $55 million, or 5%, while pricing declines decreased sales by $29 million, or 3%. The acquisition of Oil Can Henry's within the Valvoline reportable segment, partially offset by the exit from certain product lines within the Specialty Ingredients reportable segment, increased sales by $13 million. Unfavorable foreign currency exchange and changes in product mix decreased sales by $5 million and $4 million, respectively.

	Three months ended December 31		
(In millions)	2016	2015	Change
Cost of sales	$ 807	$ 771	$ 36
Gross profit as a percent of sales	32.4%	33.7%	

Fluctuations in cost of sales are driven primarily by raw material prices, volume and changes in product mix, currency exchange, net 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 quantified reconciliation of the changes in cost of sales between the three months ended December 31, 2016 and 2015.

(In millions)	Three months ended December 31, 2016
Changes in:	
Volume	$ 38
Acquisition and divestitures	9
Currency exchange	(4)
Production costs	(4)
Product mix	(3)
Pension and other postretirement benefit plans expense (income)	(3)
Severance and other costs	5
Accelerated depreciation	(2)
Change in cost of sales	$ 36

Cost of sales for the current quarter increased $36 million compared to the prior year quarter primarily due higher volume levels which increased cost of sales by $38 million, or 5%. The acquisition of Oil Can Henry's and divestiture of certain product lines increased cost of sales by $9 million. Favorable foreign currency exchange and lower production costs each decreased cost of sales by $4 million, while changes in product mix decreased cost of sales by $3 million. Additionally, as part of a restructuring plan within an existing manufacturing facility in the Specialty Ingredients reportable segment, the prior year quarter included a $5 million reversal of the severance accrual as the structure of the program was finalized and $2 million of accelerated depreciation.

	Three months ended December 31		
(In millions)	2016	2015	Change
Selling, general and administrative expense	$ 239	$ 224	$ 15
As a percent of sales	20.0%	19.3%	

Selling, general and administrative expense for the current quarter increased $15 million compared to the prior year quarter with expenses as a percent of sales increasing 0.7 percentage points. Key drivers of the fluctuation in selling, general and administrative expense compared to the prior year quarter were:

- $28 million of costs related to the separation of Valvoline during the current quarter compared to $6 million in the prior year quarter;
- $5 million and $10 million charges for legal reserves during the current quarter and prior year quarter, respectively; and

- a $6 million gain on the remeasurement of certain post-employment health and life insurance benefits during the current quarter.

	Three months ended December 31		
(In millions)	2016	2015	Change
Research and development expense	$ 23	$ 25	$ (2)

Research and development expense remained relatively consistent with the prior year quarter.

	Three months ended December 31		
(In millions)	2016	2015	Change
Equity and other income			
Equity income	$ 4	$ 4	$ —
Other income	9	4	5
	$ 13	$ 8	$ 5

Equity income remained consistent with the prior year quarter, while other income increased $5 million primarily due to an increase in other income within the Specialty Ingredients and Valvoline reportable segments.

	Three months ended December 31		
(In millions)	2016	2015	Change
Net interest and other financing expense (income)			
Interest expense	$ 135	$ 43	$ 92
Interest income	(1)	(1)	—
Available-for-sale securities income	(3)	(2)	(1)
Other financing costs	1	2	(1)
	$ 132	$ 42	$ 90

Net interest and other financing expense increased $90 million during the current quarter compared to the prior year quarter. The current quarter increase in interest expense was primarily due to $92 million of accelerated accretion related to the December 2016 Tender Offer of the 2029 notes. Available-for-sale securities income of $3 million compared to $2 million in the prior year quarter represents investment income related to restricted investments discussed in Note E of the Notes to Condensed Consolidated Financial Statements.

	Three months ended December 31		
(In millions)	2016	2015	Change
Net gain (loss) on divestitures			
MAP Transaction adjustments	$ (1)	$ 1	$ (2)
Castings Solutions joint venture	—	1	(1)
	$ (1)	$ 2	$ (3)

The activity in the current and prior year quarters relate to post-closing adjustments for certain divestitures.

	Three months ended December 31		
(In millions)	2016	2015	Change
Income tax expense (benefit)	$ (6)	$ 20	$ (26)
Effective tax rate	(150)%	18%	

The overall effective tax rate was a benefit of 150% and expense of 18% for the three months ended December 31, 2016 and 2015, respectively. The effective income tax rate was impacted by the current quarter income mix, including the Ashland identified key items, which resulted in charges that were taxed at a U.S. statutory rate and drove the overall rate to a tax benefit. The current quarter tax rate was also impacted by net unfavorable tax discrete items of $1 million. The prior year quarter included net favorable discrete items of $7 million, primarily related to the law change from the reinstatement of the research and development credit and certain global restructuring steps.

	Three months ended December 31		
(In millions)	2016	2015	Change
Loss from discontinued operations (net of tax)			
Water Technologies	$ —	$ (2)	$ 2
	$ —	$ (2)	$ 2

The prior year quarter included a tax adjustment related to the sale of Ashland Water Technologies (Water Technologies).

	Three months ended December 31		
(In millions)	2016	2015	Change
Net income attributable to noncontrolling interest	$ 11	$ —	$ 11

Since Ashland's ownership interest in Valvoline Inc., which includes the operations of the Valvoline reportable segment, is now approximately 83%, the amount of net income attributable to the outside stockholders' approximately 17% noncontrolling interest in Valvoline Inc. is presented within this caption on the Statement of Consolidated Comprehensive Income for the three months ended December 31, 2016.

Other comprehensive income (loss)

A comparative analysis of the components of other comprehensive income (loss) is provided below for the three months ended December 31, 2016 and 2015.

	Three months ended December 31		
(In millions)	2016	2015	Change
Other comprehensive income (loss) (net of taxes)			
Unrealized translation loss	$ (146)	$ (61)	$ (85)
Pension and postretirement obligation adjustment	(1)	(3)	2
Unrealized gain on available-for-sale securities	—	6	(6)
	$ (147)	$ (58)	$ (89)

Total other comprehensive loss, net of tax, for the current quarter decreased $89 million compared to the prior year quarter as a result of the following components:

- For the three months ended December 31, 2016, other comprehensive loss, net of tax, from foreign currency translation adjustments was $146 million compared to $61 million for the three months ended December 31, 2015, mainly as a result of the strengthening of the U.S. Dollar against other global currencies, such as the Euro. The fluctuations in unrealized translation gains and losses is primarily due to translating foreign subsidiary financial statements from local currencies to U.S. Dollars.
- Pension and postretirement obligation adjustment was $1 million compared to $3 million for the three months ended December 31, 2016 and 2015, respectively. These amounts of unrecognized prior service credits, net of tax, related to pension and other postretirement benefit plans were amortized and reclassified into net income.

- Unrealized gain of $6 million on available-for-sale securities, net of tax, related to restricted investments, were recognized within other comprehensive loss during the three months ended December 31, 2015.

RESULTS OF OPERATIONS – REPORTABLE SEGMENT REVIEW

Ashland’s businesses are managed within three reportable segments: Specialty Ingredients, Performance Materials and Valvoline. During September 2016, Valvoline Inc. completed the IPO of its common stock as discussed further within the “Key Developments” section of Management’s Discussion and Analysis herein. As a result, Ashland had an approximately 83% ownership interest in Valvoline Inc. as of December 31, 2016.

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, and other costs or adjustments that generally 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 businesses change. 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 segment. Each of these non-GAAP measures is defined as follows: EBITDA (operating income (loss) 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 Statements of Consolidated Comprehensive Income caption.

The following table discloses sales, operating income, depreciation and amortization and statistical operating information by reportable segment for the three months ended December 31, 2016 and 2015.

(In millions)	Three months ended December 31 2016	2015
Sales		
Specialty Ingredients	$ 482	$ 476
Performance Materials	222	231
Valvoline	489	456
	$ 1,193	$ 1,163
Operating income (loss)		
Specialty Ingredients	$ 40	$ 38
Performance Materials	8	24
Valvoline	99	92
Unallocated and other	(10)	(3)
	$ 137	$ 151
Depreciation and amortization		
Specialty Ingredients	$ 55	$ 61
Performance Materials	13	13
Valvoline	9	9
	$ 77	$ 83
Operating information		
Specialty Ingredients		
Sales per shipping day	$ 7.9	$ 7.7
Metric tons sold (thousands)	72.6	68.7
Gross profit as a percent of sales (a)	32.0%	32.9%
Performance Materials		
Sales per shipping day	$ 3.6	$ 3.7
Metric tons sold (thousands)	110.6	106.2
Gross profit as a percent of sales (a)	15.4%	22.1%
Valvoline		
Lubricant sales gallons	43.1	40.4
Premium lubricants (percent of U.S. branded volumes)	47.2%	43.0%
Gross profit as a percent of sales (a)	37.9%	38.3%

(a) Gross profit is defined as sales, less cost of sales divided by sales.

Sales by region expressed as a percentage of reportable segment sales for the three months ended December 31, 2016 and 2015 were as follows. Ashland includes only U.S. and Canada in its North American designation.

	Three months ended December 31, 2016		
Sales by Geography	Specialty Ingredients	Performance Materials	Valvoline
North America	39%	43%	75%
Europe	29%	36%	7%
Asia Pacific	22%	16%	14%
Latin America & other	10%	5%	4%
	100%	100%	100%

	Three months ended December 31, 2015		
Sales by Geography	Specialty Ingredients	Performance Materials	Valvoline
North America	38%	40%	75%
Europe	32%	39%	7%
Asia Pacific	20%	14%	14%
Latin America & other	10%	7%	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 cellulose ethers, vinyl pyrrolidones, acrylic polymers, polyester and polyurethane-based adhesives, and plant and seed extract. 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.

December 2016 quarter compared to December 2015 quarter

Specialty Ingredients’ sales increased $6 million to $482 million in the current quarter. Changes in volume increased sales by $22 million, or 5%, as metric tons sold increased to 72.6 thousand in the current quarter primarily due to favorable results within the Industrial Specialties division. Changes in product mix decreased sales by $7 million, while pricing declines and unfavorable foreign currency exchange each decreased sales by $4 million. The exit from certain product lines decreased sales by $1 million.

Gross profit during the current quarter decreased $3 million compared to the prior year quarter. The prior year quarter was favorably impacted by a $5 million reversal of the severance accrual and $2 million of accelerated depreciation related to a restructuring plan within an existing manufacturing facility. Improved volume during the current quarter resulted in an $8 million increase in gross profit compared to the prior year quarter. This increase was offset by decreases due to pricing declines, changes in product mix and unfavorable foreign currency exchange of $4 million, $3 million and $1 million, respectively. In total, gross profit margin during the current quarter decreased 0.9 percentage points as compared to the prior year quarter to 32.0%.

Selling, general and administrative expenses (which include research and development expenses throughout the reportable segment discussion and analysis) decreased $4 million in the current quarter as compared to the prior year quarter primarily due to favorable corporate resource allocations of $2 million, decreased travel expenses of $1 million and favorable foreign currency exchange of $1 million. Equity and other income increased $1 million compared with the prior year quarter, primarily due to other income related to a gain on the sale of certain assets.

Operating income totaled $40 million for the current quarter compared to $38 million in the prior year quarter. EBITDA decreased $2 million to $95 million in the current quarter, while Adjusted EBITDA increased $1 million to $95 million in the current quarter. Adjusted EBITDA margin in the current quarter of 19.7% remained consistent with the prior year quarter.

EBITDA and Adjusted EBITDA reconciliation

The following EBITDA presentation for the three months ended December 31, 2016 and 2015 below 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. The $5 million reversal of severance and $2 million of accelerated depreciation during the prior year quarter relates to a manufacturing facility restructuring plan. There were no unusual or key items that affected comparability for EBITDA during the current quarter.

	Three months ended December 31	
(In millions)	2016	2015
Operating income	$ 40	$ 38
Depreciation and amortization (a)	55	59
EBITDA	95	97
Severance	—	(5)
Accelerated depreciation	—	2
Adjusted EBITDA	$ 95	$ 94

(a) Excludes $2 million of accelerated depreciation for the three months ended December 31, 2015.

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 comprised of two divisions: Composites and Intermediates/Solvents.

December 2016 quarter compared to December 2015 quarter

Performance Materials’ sales decreased $9 million to $222 million in the current quarter. Lower product pricing decreased sales by $14 million, or 6%, while volume increased sales by $10 million, or 4%, as metric tons sold increased to 110.6 thousand in the current quarter. Changes in product mix and unfavorable foreign currency exchange decreased sales by $4 million and $1 million, respectively.

Gross profit decreased $16 million in the current quarter compared to the prior year quarter. The current quarter gross profit was negatively impacted by $9 million of costs associated with an approximately 40-day planned plant shutdown at one of Intermediates/Solvents' manufacturing facilities. The prior year quarter included $4 million of plant shutdown costs at both Intermediates/Solvents' manufacturing facilities. Pricing declines were partially offset by lower raw material costs within both the Composites and Intermediates/Solvents divisions and decreased gross profit by $12 million. Changes in volume increased gross profit by $3 million while changes in product mix decreased gross profit by $2 million. In total, gross profit margin decreased 6.7 percentage points as compared to the prior year quarter to 15.4%.

Selling, general and administrative expenses during the current quarter remained relatively consistent compared to the prior year quarter, primarily due to $1 million of favorable corporate resource allocations that were offset by a $1 million increase in bad debt expense. Equity and other income remained consistent compared to the prior year quarter.

Operating income totaled $8 million in the current quarter compared to $24 million in the prior year quarter. EBITDA decreased $16 million to $21 million in the current quarter, while EBITDA margin decreased 6.5 percentage points in the current quarter to 9.5%.

EBITDA and Adjusted EBITDA reconciliation

The following EBITDA presentation for the three months ended December 31, 2016 and 2015 below 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. There were no unusual or key items that affected comparability for EBITDA during the current and prior year quarters.

	Three months ended December 31	
(In millions)	2016	2015
Operating income	$ 8	$ 24
Depreciation and amortization	13	13
EBITDA	$ 21	$ 37

Valvoline

Valvoline is a leading worldwide producer and distributor of premium-branded automotive, commercial and industrial lubricants, and automotive chemicals. In 2016, it ranked as the #2 quick-lube chain by number of stores and #3 passenger car motor oil in the DIY market by volume brand in the United States. The brand operates and franchises 1,076 Valvoline Instant Oil Change℠ centers in the United States. It also markets Valvoline™ lubricants and automotive chemicals; MaxLife™ lubricants created for higher-mileage engines; SynPower™ synthetic motor oil; and Zerex™ 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 September 2016, Valvoline Inc. completed the IPO of its common stock as discussed further within the “Key Developments” section of Management’s Discussion and Analysis herein. As a result, Ashland maintains an approximately 83% ownership interest in Valvoline Inc. as of December 31, 2016. Valvoline’s results as a segment of Ashland may not equal the results of Valvoline Inc. reported on a stand-alone basis.

During February 2016, Ashland completed the acquisition of Oil Can Henry’s resulting in the addition of 89 quick-lube stores. For additional information on the separation and acquisition, see Note B in the Notes to Condensed Consolidated Financial Statements.

December 2016 quarter compared to December 2015 quarter

Valvoline’s sales increased $33 million to $489 million in the current quarter. Higher volume increased sales by $23 million, or 5%, as lubricant gallons sold increased to 43.1 million, and the acquisition of Oil Can Henry's in February 2016 increased sales by $14 million, or 3%. These increases were partially offset by lower product pricing which decreased sales by $11 million, or 2%, while changes in product mix increased sales by $7 million.

Gross profit increased $10 million during the current quarter compared to the prior year quarter. Changes in volume increased gross profit by $6 million, while changes in product mix and the acquisition of Oil Can Henry's each increased gross profit by $4 million. Unfavorable pricing, partially offset by lower raw material costs, decreased gross profit by $4 million. In total, gross profit margin decreased 0.4 percentage points as compared to the prior year quarter to 37.9%.

Selling, general and administrative expenses increased $7 million during the current quarter as compared to the prior year quarter, primarily due to employee cost increases of $3 million, increased corporate resource costs of $1 million, and additional expenses related to the acquisition of Oil Can Henry's of $1 million. Equity and other income increased $4 million compared with the prior year quarter, primarily due to increased other income.

Operating income totaled $99 million in the current quarter as compared to $92 million in the prior year quarter. EBITDA increased $7 million to $108 million in the current quarter, while EBITDA margin remained consistent with the prior year quarter at 22.1%.

EBITDA and Adjusted EBITDA reconciliation

The following EBITDA presentation for the three months ended December 31, 2016 and 2015 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. There were no unusual or key items that affected comparability for EBITDA during the current and prior year quarters.

	Three months ended December 31	
(In millions)	2016	2015
Operating income	$ 99	$ 92
Depreciation and amortization	9	9
EBITDA	$ 108	$ 101

Unallocated and other

The following table summarizes the key components of the Unallocated and other segment's operating income (loss) for the three months ended December 31, 2016 and 2015.

	Three months ended December 31	
(In millions)	2016	2015
Pension and other postretirement net periodic income (excluding service cost)	$ 18	$ 19
Gain on post-employment plan remeasurement	10	—
Restructuring activities (includes separation and severance costs)	(28)	(6)
Environmental expense for divested businesses	(4)	(6)
Legal reserve	(5)	(10)
Other expense	(1)	—
Total expense	$ (10)	$ (3)

December 2016 quarter compared to December 2015 quarter

Unallocated and other recorded expense of $10 million and $3 million for the three months ended December 31, 2016 and 2015, respectively. Unallocated and other includes pension and other postretirement net periodic costs and income that have not been allocated to reportable segments. These include interest cost, expected return on assets and amortization of prior service credit as these items are considered financing activities managed at the corporate level, as opposed to service costs which are allocated to reportable segments. The recurring pension and other postretirement components in Unallocated and other resulted in income during the current and prior year quarter of $18 million and $19 million, respectively. The change in pension and other postretirement income in the current quarter is primarily driven by changes in the discount rate and other actuarial assumptions compared to the prior year quarter. The current quarter also included a $10 million gain on the remeasurement of certain post-employment health and life insurance benefit plans that were discontinued.

The remaining unallocated items for the current quarter primarily included $28 million of costs incurred related to the Valvoline separation, $5 million of expense for a legal reserve, and $4 million for environmental reserve adjustments. In the prior year quarter, unallocated costs also primarily included expense of $10 million for a legal reserve, $6 million of costs incurred related to the Valvoline separation and $6 million for environmental reserve adjustments.

FINANCIAL POSITION

Liquidity

Ashland had $704 million in cash and cash equivalents as of December 31, 2016, of which $392 million was held by foreign subsidiaries and had no significant limitations that would prohibit remitting the funds to satisfy corporate obligations. However, if such amounts were repatriated to the United States, additional taxes would likely need to be accrued and paid depending on 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 Condensed Consolidated Cash Flows, are summarized as follows for the three months ended December 31, 2016 and 2015.

	Three months ended December 31	
(In millions)	2016	2015
Cash provided (used) by:		
Operating activities from continuing operations	$ 12	$ 66
Investing activities from continuing operations	(41)	(44)
Financing activities from continuing operations	(435)	(219)
Discontinued operations	(12)	(10)
Effect of currency exchange rate changes on cash and cash equivalents	(8)	(11)
Net decrease in cash and cash equivalents	$ (484)	$ (218)

Operating activities

The following discloses the cash flows associated with Ashland’s operating activities for the three months ended December 31, 2016 and 2015.

	Three months ended December 31	
(In millions)	2016	2015
Cash flows provided (used) by operating activities from continuing operations		
Net income	$ 10	$ 89
Loss from discontinued operations (net of tax)	—	2
Adjustments to reconcile income from continuing operations to cash flows from operating activities		
Depreciation and amortization	77	83
Original issue discount and debt issuance cost amortization	95	3
Deferred income taxes	2	3
Equity income from affiliates	(4)	(4)
Distributions from equity affiliates	—	5
Stock based compensation expense	6	8
Gain on early retirement of debt	(3)	—
Gain on available-for-sale securities	(3)	(2)
Net loss (gain) on divestitures	1	(2)
Pension contributions	(3)	(4)
Gain on post-employment plan remeasurement	(10)	—
Change in operating assets and liabilities (a)	(156)	(115)
Total cash flows provided by operating activities from continuing operations	$ 12	$ 66

(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 a cash inflows of $12 million in the current quarter and $66 million in the prior year quarter. The cash results during each quarter are primarily driven by net income, excluding discontinued operation results, adjusted for certain non-cash items including depreciation and amortization (including original issue discount and debt issuance cost amortization), losses and gains on divestitures as well as changes in working capital, which are fluctuations within accounts receivable, inventory, trade payables and accrued expenses. Ashland continues to emphasize working capital management as a high priority and focus.

Changes in net working capital accounted for outflows of $46 million and $74 million for the three months ended December 31, 2016 and 2015, respectively, and were driven by the following:

- Accounts receivable - The cash inflows of $47 million and $126 million during the current and prior year quarters, respectively, were primarily due to collections in excess of sales during the first quarter of each fiscal year compared to the prior fiscal year.
- Inventory - The current quarter had a cash inflow of $14 million compared to a cash outflow of $5 million during the prior year quarter. The cash inflow during the current quarter was primarily a result of production management within the Specialty Ingredients reportable segment.
- Trade and other payables - The cash outflows of $107 million and $195 million during the current and prior year quarters, respectively, were primarily driven by seasonal declines in trade payables, and incentive compensation payouts to employees and certain Valvoline separation payments from the prior year paid during the first quarter of the fiscal year.

The remaining outflows of $110 million and $41 million in the current and prior year quarters, respectively, relate primarily to adjustments to certain accruals and long term assets and liabilities as well as income taxes received and paid.

Operating cash flows for the current quarter included income from continuing operations of $10 million and noncash adjustments of $77 million for depreciation and amortization and $95 million for original issue discount and debt issuance cost amortization, including $92 million of accelerated accretion related to the Tender Offer of the 2029 notes.

Operating cash flows for the prior year quarter included income from continuing operations of $91 million and noncash adjustments of $83 million for depreciation and amortization and $3 million for debt issuance cost amortization.

Investing activities

The following discloses the cash flows associated with Ashland's investing activities for the three months ended December 31, 2016 and 2015.

	Three months ended December 31	
(In millions)	2016	2015
Cash flows provided (used) by investing activities from continuing operations		
Additions to property, plant and equipment	$ (43)	$ (53)
Proceeds from disposal of property, plant and equipment	—	1
Purchase of operations - net of cash acquired	—	(4)
Uses from sale of operations or equity investments	—	(2)
Net purchase of funds restricted for specific transactions	(2)	—
Reimbursements from restricted investments	—	7
Proceeds from the settlement of derivative instruments	4	7
Total cash flows used by investing activities from continuing operations	$ (41)	$ (44)

Cash used by investing activities was $41 million and $44 million for the current and prior year quarters, respectively. The significant cash investing activities for the current and prior year quarters primarily related to cash outflows from property additions of $43 million and $53 million, respectively.

The prior year quarter includes a reimbursement of $7 million from the restrictive renewable annual trust established as a result of the January 2015 asbestos insurance settlement and proceeds from the settlement of derivative instruments of $7 million.

Financing activities

The following discloses the cash flows associated with Ashland's financing activities for the three months ended December 31, 2016 and 2015.

(In millions)	Three months ended December 31 2016	2015
Cash flows provided (used) by financing activities from continuing operations		
Repayment of long-term debt	$ (318)	$ (14)
Premium on long-term debt repayment	(5)	—
Proceeds (repayment) from short-term debt	(78)	319
Repurchase of common stock	—	(500)
Debt issuance costs	(4)	—
Cash dividends paid	(24)	(24)
Distributions to noncontrolling interest	(2)	—
Excess tax benefits related to share-based payments	(4)	—
Total cash flows used by financing activities from continuing operations	$ (435)	$ (219)

Cash used by financing activities was $435 million for the current quarter as compared to $219 million for the prior year quarter. Significant cash financing activities for the current quarter included cash outflows of $318 million related to the repayments of a portion of the 2029 notes, 2022 notes, 2018 notes and 2016 term loan facility. See further discussion regarding financing activities within the "Key Developments" section of Management's Discussion and Analysis herein. Additionally, the current quarter included short-term debt net repayments of $78 million, primarily related to repayment of the $150 million term loan due 2017 and international loans partially offset by the issuance of the Valvoline 2017 accounts receivable securitization of $75 million. The current quarter included cash dividends paid of $0.39 per share, for a total of $24 million.

Significant cash financing activities for the prior year quarter included a cash outflow of $500 million for the repurchase of common stock and cash inflows of $319 million primarily related to the loans outstanding under the 2015 revolving credit facility and activity within the accounts receivable securitization facility. Additionally, the prior year quarter included cash dividends paid of $0.39 per share, for a total of $24 million, and the repayment of long-term debt, primarily related to the 2015 term loan facility, of $14 million.

Cash used by discontinued operations

The following discloses the cash flows associated with Ashland's discontinued operations for the three months ended December 31, 2016 and 2015.

(In millions)	Three months ended December 31 2016	2015
Cash used by discontinued operations		
Operating cash flows	$ (12)	$ (10)
Investing cash flows	—	—
Total cash used by discontinued operations	$ (12)	$ (10)

Cash flows for discontinued operations for both quarters relate to other previously divested businesses, including net payments of asbestos and environmental liabilities.

Free cash flow and other liquidity resources

The following represents Ashland's calculation of free cash flow for the disclosed quarters. Free cash flow does not reflect adjustments for certain non-discretionary cash flows such as mandatory debt repayments.

(In millions)	Three months ended December 31 2016	2015
Cash flows provided by operating activities from continuing operations	$ 12	$ 66
Adjustments:		
Additions to property, plant and equipment	(43)	(53)
Free cash flows	$ (31)	$ 13

At December 31, 2016, working capital (current assets minus current liabilities, excluding long-term debt due within one year) amounted to $1,333 million as of December 31, 2016, compared to $1,669 million at September 30, 2016. Ashland's working capital is affected by its use of the LIFO method of inventory valuation that valued inventories below their replacement costs by $28 million at December 31, 2016 and $29 million at September 30, 2016. Liquid assets (cash, cash equivalents and accounts receivable) amounted to 154% and 171% of current liabilities at December 31, 2016 and September 30, 2016, respectively.

The following summary reflects Ashland's cash and unused borrowing capacity as of December 31, 2016 and September 30, 2016.

(In millions)	December 31 2016	September 30 2016
Cash and cash equivalents	$ 704	$ 1,188
Unused borrowing capacity		
2015 Revolving credit facility	$ 742	$ 742
2016 Revolving credit facility (a)	428	435
2012 Accounts receivable securitization facility	75	80
2017 Accounts receivable securitization facility (a)	50	—

(a) The 2016 revolving credit facility and 2017 accounts receivable securitization facility were executed by Valvoline in connection with the separation process.

Total borrowing capacity remaining under Ashland's 2015 revolving credit facility was $742 million, due to a reduction of $58 million for letters of credit outstanding at December 31, 2016. At December 31, 2016, the total borrowing capacity remaining under Valvoline's 2016 revolving credit facility was $428 million due to a reduction of $22 million for letters of credit outstanding. In total, Ashland's available liquidity position (including Valvoline), which includes cash, the revolving credit facilities and the accounts receivable securitization facilities, was $1,999 million at December 31, 2016, compared to $2,445 million at September 30, 2016.

Capital resources

Debt

The following summary reflects Ashland's debt as of December 31, 2016 and September 30, 2016.

(In millions)	December 31 2016	September 30 2016
Short-term debt	$ 92	$ 170
Long-term debt (including current portion and debt issuance cost discounts) (a)	2,840	3,074
Total debt	$ 2,932	$ 3,244

(a) Includes $29 million of debt issuance cost discounts as of December 31, 2016 and September 30, 2016.

The current portion of long-term debt was $15 million and $19 million at December 31, 2016 and September 30, 2016, respectively. Debt as a percent of capital employed was 49% at December 31, 2016 and 51% at September 30, 2016. At December 31, 2016, Ashland’s total debt had an outstanding principal balance of $3,015 million, discounts of $54 million, and debt issuance costs of $29 million. The scheduled aggregate maturities of long-term debt by year (including the current portion and excluding debt issuance costs) are as follows: $11 million remaining in 2017, $686 million in 2018, $35 million in 2019, $30 million in 2020 and $210 million in 2021.

Ashland Financing Activities

6.50% junior subordinated notes due 2029

In December 2016, Hercules LLC (Hercules) (formerly Hercules Incorporated), an indirect wholly-owned subsidiary of Ashland, repurchased, through a cash tender offer (the Tender Offer), $182 million of the aggregate principal par value amount of its 6.50% junior subordinated notes due 2029 (2029 notes) for an aggregate purchase price of $177 million. As a result of the Tender Offer, the carrying value of the 2029 notes was reduced by $90 million and Ashland recognized a $92 million charge related to accelerated accretion of the recorded debt discount (compared to the total par value) and $5 million of a net gain related to the repayment of the debt. The charge and net gain are included in the net interest and other financing expense caption of the Statements of Consolidated Comprehensive Income for the three months ended December 31, 2016.

Open market repurchases of 4.750% notes due 2022 and 3.875% notes due 2018

During the first quarter of 2017, Ashland executed open market repurchases of its 4.750% notes due 2022 (2022 notes) and its 3.875% notes due 2018 (2018 notes). As a result of these repurchases, the carrying values of the 2022 notes and 2018 notes were reduced by $36 million and $29 million, respectively. Ashland recognized a $2 million charge related to premiums paid in the open market repurchases and 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 for the three months ended December 31, 2016.

Subsidiary senior unsecured term loan

During August 2016, a wholly owned foreign subsidiary of Ashland entered into a credit agreement which provided for an aggregate principal amount of $150 million in a senior unsecured term loan facility. This term loan was drawn in full as of September 30, 2016 and was fully repaid during the three months ended December 31, 2016.

Ashland credit ratings

Standard & Poor’s ratings are BB, while Moody’s Investor Services are Ba1. Moody’s Investor Services and Standard & Poor's outlooks remained at stable. Subsequent changes to these ratings may have an effect on Ashland’s borrowing rate or ability to access capital markets in the future.

Ashland 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 December 31, 2016, Ashland is in compliance with all debt agreement covenant restrictions under the 2015 Senior Credit Agreement.

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 46. 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 guarantees. 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 December 31, 2016, Ashland’s calculation of the consolidated leverage ratio was 3.1, which is below the maximum consolidated leverage ratio permitted under the 2015 Senior Credit Agreement of 3.75. At December 31, 2016, Ashland’s calculation of the consolidated interest coverage ratio was 4.4, which exceeds the minimum required ratio of 3.0. Any change in Covenant Adjusted EBITDA of $100 million would have an approximate 0.5x effect on the consolidated leverage ratio and a 0.8x effect on the consolidated interest coverage ratio. Any change in consolidated indebtedness of $100 million would affect the consolidated leverage ratio by approximately 0.2x.

Valvoline Financing Activities

Accounts receivable securitization

In November 2016, Valvoline entered into the 2017 accounts receivable securitization facility pursuant to (i) a Sale Agreement, between Valvoline and Lex and (ii) a Transfer and Administration Agreement, among Lex, Valvoline, as Master Servicer, a certain Conduit Investor, Uncommitted Investor, and Letter of Credit Issuer, certain Managing Agents, Administrators and Committed Investors, and the Agent.

Under the Sale Agreement, Valvoline will sell, on an ongoing basis, substantially all of its accounts receivable, certain related assets and the right to the collections on those accounts receivable to Lex. Under the terms of the Transfer and Administration Agreement, Lex may, from time to time, obtain up to $125 million (in the form of cash or letters of credit for the benefit of Valvoline) from Investors through the sale of an undivided interest in such accounts receivable, related assets and collections. The Transfer and Administration Agreement has a term of one year but is extendable at the discretion of the Investors. Valvoline accounts for the 2017 accounts receivable securitization facility as secured borrowings, and the receivables sold pursuant to the facility are included in Ashland's Condensed Consolidated Balance Sheet as accounts receivable. Valvoline classifies any borrowings under this facility as short-term debt within Ashland's Condensed Consolidated Balance Sheet.

During the first quarter of 2017, Valvoline borrowed $75 million under the 2017 accounts receivable securitization facility and used the net proceeds to repay an equal amount of the 2016 term loan facility. As a result, Valvoline recognized a $1 million charge related to 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 for the three months ended December 31, 2016.

Valvoline credit ratings

Valvoline Inc.'s rating by Standard & Poor’s remained at BB, while Moody’s Investor Services rating for Valvoline Finco Two remained as Ba2. Standard & Poor and Moody's Investor Services' outlook remained at stable. Subsequent changes to these ratings are possible and may have an effect on Valvoline’s borrowing rate or ability to access capital markets in the future.

Valvoline debt covenant restrictions

The Valvoline Credit Agreement contains usual and customary representations and warranties, and usual and customary affirmative and negative covenants, including limitations on liens, additional indebtedness, investments, restricted payments, asset sales, mergers, affiliate transactions and other customary limitations, as well as financial covenants (including maintenance of a maximum consolidated leverage ratio and a minimum consolidated interest coverage ratio) and other customary limitations. As of December 31, 2016, Valvoline Inc. was in compliance with all debt agreement covenant restrictions and financial covenants.

The Valvoline 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 Valvoline 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 maximum consolidated leverage ratio permitted under the Valvoline Credit Agreement is 4.5.

The Valvoline 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 Valvoline Credit Agreement during its entire duration is 3.0.

At December 31, 2016, Valvoline’s calculation of the consolidated leverage ratio was 1.2, which is below the maximum consolidated leverage ratio permitted under the Valvoline Credit Agreement of 4.5. At December 31, 2016, Valvoline’s calculation of the consolidated interest coverage ratio was 13.6, which exceeds the minimum required consolidated ratio of 3.0. Any change in Covenant Adjusted EBITDA of $100 million would have an approximate 0.2x effect on the consolidated leverage ratio and a 3.0x effect on the consolidated interest coverage ratio. Any change in consolidated indebtedness of $100 million would affect the consolidated leverage ratio by approximately 0.2x.

Additional capital resources

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, divestitures and acquisitions, pension funding requirements and tax payments and receipts.

Total equity

Total equity decreased $164 million since September 30, 2016 to $3,001 million at December 31, 2016. At December 31, 2016, total equity also includes an amount for noncontrolling interest, which reflects the outside stockholders’ interest in Valvoline Inc. At December 31, 2016, Ashland maintains an approximately 83% ownership interest in Valvoline Inc., with the remaining approximately 17% ownership of Valvoline Inc. is held by outside stockholders.

The decrease of $164 million was primarily due to $146 million related to deferred translation losses, regular cash dividends of $24 million, $2 million for dividend distributions to noncontrolling interest, $1 million for common shares issued under stock incentive and other plans, $1 million of a net loss attributable to Ashland, and $1 million related to pension and other postretirement obligations. These decreases were partially offset by $11 million of net income attributable to the noncontrolling interest in Valvoline Inc. as of December 31, 2016.

Stock repurchase program

In April 2015, Ashland's Board of Directors approved a $1 billion share repurchase authorization that will expire on December 31, 2017 (the 2015 stock repurchase program). This authorization allows for Ashland's 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. The following summarizes the stock repurchases under the 2015 stock repurchase program.

In November 2015, under the 2015 stock repurchase program, Ashland announced that it entered into an accelerated share repurchase agreement (2016 ASR Agreement) with Goldman, Sachs & Co. Under the 2016 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. In February 2016, Goldman, Sachs & Co. exercised their early termination option under the 2016 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 $99.01 per share. Based on this settlement price, the final number of shares repurchased by Ashland that were delivered by Goldman, Sachs & Co. under the 2016 ASR Agreement was 5.1 million shares. Ashland received the additional 1.2 million shares during the March 2016 quarter to settle the difference between the initial share delivery and the total number of shares repurchased. After the 2016 ASR Agreement, $500 million of share repurchase authorization remains under the 2015 stock repurchase program.

Cash dividends

In May 2015, the Board of Directors of Ashland announced a quarterly cash dividend increase to 39 cents per share to eligible shareholders of record. This amount was paid for quarterly dividends in the first quarter of fiscal 2017 and each quarter of fiscal 2016.

In November 2016, the Board of Directors of Valvoline Inc. announced a quarterly cash dividend of 4.9 cents per share to eligible shareholders of record. This was Valvoline Inc.'s first dividend declaration and was paid for quarterly dividends during the first quarter of fiscal 2017. Since Ashland owns approximately 83% of Valvoline Inc., the net cash outflow of $2 million was payments made to the remaining 17% of shareholders outstanding and is included within the Statements of Condensed Consolidated Cash Flows for the three months ended December 31, 2016.

Capital expenditures

Capital expenditures were $43 million for the three months ended December 31, 2016 and averaged $271 million during the last three fiscal years.

Contractual obligations and commitments

Ashland expects to incur certain costs as a result of the separation, including those that are contingent upon the completion of the separation. Ashland will recognize these costs when appropriate based on applicable U.S. GAAP requirements.

CRITICAL ACCOUNTING POLICIES

The preparation of Ashland's Condensed 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, other liabilities and receivables associated with asbestos litigation and environmental remediation. These accounting policies are discussed in detail in "Management's Discussion and Analysis – Critical Accounting Policies" in Ashland's Annual Report on Form 10-K for the fiscal year ended September 30, 2016. 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. No material changes have been made to the valuation techniques during the three months ended December 31, 2016.

OUTLOOK

For fiscal 2017, Ashland continues to expect Specialty Ingredients to report improved growth and profitability, as Adjusted EBITDA is still expected to be in the range of $480 million to $510 million. In addition, Specialty Ingredients is taking actions to compensate for the negative impact of rising raw material costs and foreign currency fluctuations through cost discipline, such as value-based pricing. For the upcoming second quarter of fiscal 2017, sales are expected to be in the range of $530 million to $545 million while Adjusted EBITDA margin is expected to be in the range of 24 percent to 25 percent.

For fiscal 2017, Ashland continues to expect Performance Materials to report Adjusted EBITDA in the range of $95 million to $105 million as the Intermediates/Solvents division continues to expect butanediol and related derivatives pricing to remain well below prior-year levels through the first three quarters of fiscal 2017. For the upcoming second quarter of fiscal 2017, Performance Materials expects sales to be in the range of $230 million to $250 million and Adjusted EBITDA margin to be in the range of 9.5 percent to 10.5 percent, which reflects the year-over-year decline in pricing for butanediol and related derivatives.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Ashland's market risk exposure at December 31, 2016 is generally consistent with the types and amounts of market risk exposures presented in Ashland's Annual Report on Form 10-K for the fiscal year ended September 30, 2016.

ITEM 4. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures - As of the end of the period covered by this quarterly report, Ashland, under the supervision and with the participation of its management, including Ashland's Chief Executive Officer and its Chief Financial Officer, evaluated the effectiveness of Ashland's disclosure controls and procedures pursuant to Rule 13a-15(b) and 15d-15(b) promulgated under the Securities Exchange Act of 1934, as amended. Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that the disclosure controls and procedures were effective as of December 31, 2016.

Changes in Internal Control over Financial Reporting - During the three months ended December 31, 2016, there were no significant changes in Ashland's internal control over financial reporting, or in other factors, that occurred during the period covered by this quarterly report that have materially affected, or are reasonably likely to materially affect, Ashland's internal control over financial reporting.

PART II – OTHER INFORMATION

ITEM 1. 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 LLC (formerly Hercules Incorporated), an indirect 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.

For additional detailed information regarding liabilities arising from asbestos-related litigation, see Note K of Notes to Condensed Consolidated Financial Statements in this quarterly report on Form 10-Q.

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 December 31, 2016, 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 81 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 types of relief sought include 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 has released the FFS Record of Decision for the lower 8 miles and recently reached an agreement with Occidental to conduct and pay for the remedial design. The EPA has advised that it will be working to secure similar agreements with other PRPs. The release of the FFS Record of Decision did not have a material adverse impact on Ashland’s 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.

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

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 December 31, 2016. 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 December 31, 2016.

ITEM 1A. RISK FACTORS

During the period covered by this report, there were no material changes from the risk factors previously disclosed in Ashland’s Annual Report on Form 10-K for the fiscal year ended September 30, 2016.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

Share repurchase activity during the three months ended December 31, 2016 was as follows:

Issuer Purchases of Equity Securities

Q1 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)(1)
October 1, 2016 to October 31, 2016:					$ 500
Employee Tax Withholdings	60	(2)	$ 115.95	—	
November 1, 2016 to November 30, 2016:					500
Employee Tax Withholdings	20,893	(2)	108.68	—	
December 1, 2016 to December 31, 2016:					500
Employee Tax Withholdings	360	(2)	110.16	—	
Total	21,313			—	$ 500

(1) In April 2015, the Company's Board of Directors authorized a program to repurchase up to $1 billion of the Company's stock, with the authorization expiring December 31, 2017. The Company's share repurchase program does not obligate it to acquire any specific number of shares. Under the program, shares may be repurchased in privately negotiated and/or open market transactions, including under plans complying with Rule 10b5-1 of the Exchange Act. As of December 31, 2016, $500 million remains available for repurchase under this authorization.

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

ITEM 6. EXHIBITS

(a) Exhibits

10.1*	Amended and Restated Parent Undertaking, dated as of November 18, 2016, by Ashland LLC and Ashland Global Holdings Inc., as Guarantors, in favor of The Bank of Nova Scotia as Agent and the Secured Parties.
10.2*	Third Amendment dated as of November 18, 2016 to Sale Agreement dated as of August 31, 2012 among Ashland LLC, Ashland Specialty Ingredients G.P., each an Originator, and CVG Capital III LLC, as SPV.
10.3*	Thirteenth Amendment dated as of November 18, 2016 to the Transfer and Administration Agreement dated as of August 31, 2012 among Ashland LLC, as Master Servicer, CVG Capital III LLC, as SPV, 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.
10.4*	Amended and Restated Ashland Global Holdings Inc. Deferred Compensation Plan for Non-Employee Directors (2005) effective as of January 1, 2017.
10.5*	Guaranty Agreement dated as of November 16, 2016, (and effective as of October 19, 2016) between Ashland Global Holdings Inc., as Guarantor, and The Bank of Nova Scotia, as Administrative Agent.
10.6	Amended and Restated 2015 Ashland Global Holdings Inc. Incentive Plan (filed as Exhibit 10.21 to Ashland's Form 10-K filed on November 21, 2016 (SEC File No. 333-211719), and incorporated herein by reference).
12*	Computation of Ratio of Earnings to Fixed Charges.
31.1*	Certificate of William A. Wulfsohn, Chief Executive Officer of Ashland pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certificate of J. Kevin Willis, Chief Financial Officer of Ashland pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32*	Certificate 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.

*Filed herewith.

**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 the three months ended December 31, 2016 and December 31, 2015; (ii) Condensed Consolidated Balance Sheets at December 31, 2016 and September 30, 2016; (iii) Statements of Consolidated Equity at December 31, 2016; (iv) Statements of Condensed Consolidated Cash Flows for the three months ended December 31, 2016 and December 31, 2015; and (v) Notes to Condensed Consolidated Financial Statements.

SM Service mark, Ashland or its subsidiaries, registered in various countries.

™ Trademark, Ashland or its subsidiaries, registered in various countries.

SIGNATURE

Pursuant to the requirements 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 Global Holdings Inc.
	(Registrant)
January 27, 2017	/s/ J. Kevin Willis
	J. Kevin Willis
	Senior Vice President and Chief Financial Officer (on behalf of the Registrant and as principal financial officer)

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*Filed herewith.
**Submitted electronically with this report.

AMENDED AND RESTATED PARENT UNDERTAKING

This Amended and Restated Parent Undertaking ("Guaranty") is executed as of this 18th day of November, 2016 by Ashland LLC, a Kentucky limited liability company ("Ashland"), and Ashland Global Holdings Inc. ("Ashland Global", and together with Ashland, each with its successors and permitted assigns is a "Guarantor" and collectively the "Guarantors"), in favor of The Bank of Nova Scotia (the "Agent") and the Secured Parties (as defined in the Transfer and Administration Agreement described below), from time to time party to the Transaction Documents (collectively, the "Beneficiaries").

PRELIMINARY STATEMENTS

This Guaranty hereby amends and restated in its entirety, as of the date hereof, that certain Parent Undertaking, dated as of August 31, 2012, made by Ashland in favor of the Beneficiaries.

Ashland, Ashland Specialty Ingredients, G.P., a Delaware general partnership, and each other direct or indirect subsidiary of Ashland party thereto from time to time pursuant to a joinder agreement in form and substance satisfactory to the Agent (each an "Originator" and collectively, the "Originators"), CVG Capital III LLC (the "Seller"), the Agent and the various Investor Groups, Managing Agents and Administrators from time to time parties thereto have entered into a Transfer and Administration Agreement, dated as of August 31, 2012 (as amended, supplemented and modified from time to time, the "Transfer and Administration Agreement") pursuant to which the Seller will sell and assign to the Investors all of the Seller's right, title and interest in and to certain assets more specifically described therein.

In the Transfer and Administration Agreement, Ashland has agreed to act as servicer under the Transfer and Administration Agreement and in that capacity has agreed, among other things, to service certain assets as more specifically described therein.

Ashland is an indirect wholly-owned subsidiary of Ashland Global. The other Originators are direct or indirect wholly-owned subsidiaries of Ashland. The Seller is wholly-owned by the Originators.

The Originators and the Seller have entered into a sale agreement dated as of August 31, 2012 (as amended, supplemented and modified from time to time, the "Sale Agreement"). The Seller will purchase Receivables from the Originators under the Sale Agreement.

In consideration of the execution of the Transfer and Administration Agreement and the Sale Agreement and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged by each Guarantor, each Guarantor agrees as follows:

SECTION 1. Definitions. Unless otherwise defined in this Guaranty, all defined terms used in this Guaranty, including the Preliminary Statements hereof, shall have the meanings ascribed to such terms in the Transfer and Administration Agreement.

SECTION 2. Guaranty of Obligations. Each Guarantor, jointly and severally, hereby irrevocably, absolutely, and unconditionally guarantees to the Beneficiaries the full and timely performance by the Originators (in their respective capacities as Originators) of all of their respective obligations under the Transaction Documents including, without limitation, any agreement or obligation of any such Originator to pay any indemnity or any agreement or obligation of any such Originator to make any payment in respect of any applicable dilution adjustment or repurchase obligation under any such Transaction Document (all such terms, covenants, conditions, agreements, undertakings and obligations on the part of each Originator to be paid, performed or observed being collectively called the "Obligations"). Without limiting the generality of the foregoing, each Guarantor, jointly and severally, agrees that if any Originator shall fail in any manner whatsoever to perform or observe any of the Obligations when the same shall be required to be performed or observed under any applicable Transaction Document, then such Guarantor will itself duly and punctually perform or observe or cause to be performed or observed the Obligations. Notwithstanding anything contained in this Guaranty to the contrary, this Guaranty does not provide any guaranty with respect to (i) the bad debt or uncollectability of any Receivable, (ii) Obligations resulting from gross negligence or willful misconduct on the part of an indemnified Person, or (iii) with respect to Foreign Receivables, losses incurred due to the Seller's inability to receive Collections with respect to such Foreign Receivables arising directly as a result of any Originator's failure to perfect the Seller's security interest in jurisdictions outside the United States.

SECTION 3. Validity of Obligations; Irrevocability; Conditional Termination. Each Guarantor agrees that its obligations under this Guaranty shall be absolute and unconditional, irrespective of (i) the validity, enforceability, discharge or disaffirmance (by any Person, including a trustee in bankruptcy) of any of the Obligations, (ii) the absence of any attempt to enforce the Obligations against the Seller, the other Guarantor or the Originators, (iii) the waiver or consent by any Person with respect to any provision of any of the Transaction Documents, (iv) any change made in any term of any Transaction Documents (including, without limitation, any change in the time, manner or place of any payments provided for therein), (v) any law, regulation or order of any jurisdiction affecting any term of any Transaction Document, (vi) the validity, regularity or enforceability of any Transaction Document or (vii) any other circumstances which might otherwise constitute a legal or equitable discharge or defense of such Guarantor. Each Guarantor agrees that the Beneficiaries shall be under no obligation to marshal any assets in favor of or against or in payment of any or all of the Obligations. Each Guarantor further agrees that, to the extent that the Originators (in their respective capacities as Originators) or the Seller makes a payment or payments to any Beneficiary, or the Originators pay any Deemed Collections into a Blocked Account, to the Seller or to the Agent, which payment or payments or any part thereof are subsequently invalidated, declared to be fraudulent or preferential, set aside and/or required to be repaid to any Person, its estate, trustee, receiver or any other party, including, without limitation, either Guarantor, under any bankruptcy law, state or federal law, common law or equitable cause, then to the extent of such payment or repayment, (i) the Obligations constituting payments or any part thereof which have been paid, reduced or satisfied by such amount and (ii) this Guaranty, shall be reinstated and continued in full force and effect as of the date such initial payment, reduction or satisfaction occurred. Each Guarantor waives all set-offs and counterclaims and all presentments, demands for performance, notices of dishonor and notices of acceptance of this Guaranty, except as expressly provided for herein. Each Guarantor agrees that its obligations under this Guaranty shall be irrevocable.

SECTION 4. Waiver of Subrogation. Neither Guarantor shall exercise any rights (direct or indirect) of subrogation, contribution, reimbursement, indemnification, or other rights of payment or recovery from any Originator for any payments made by such Guarantor hereunder until such time as all of the Obligations have been performed in full or waived (the "Full Performance Date"), and each Guarantor hereby waives and releases, absolutely and unconditionally, its right to exercise against any Originator prior to the Full Performance Date any such rights of subrogation, contribution, reimbursement, indemnification and other rights of payment or recovery which such Guarantor may now have or hereafter acquire.

SECTION 5. Representations and Warranties. Each Guarantor hereby represents and warrants to each Beneficiary, as of the date hereof, as follows:

(a) Corporate Existence and Power. Such Guarantor, (a) (i) in the case of Ashland, is a limited liability company validly existing and in good standing under the laws of the Commonwealth of Kentucky or, (ii) in the case of Ashland Global, is a corporation validly existing and in good standing under the laws of the State of Delaware; (b) has all corporate power and all licenses, authorizations, consents and approvals of all Official Bodies required to carry on its business in each jurisdiction in which its business is now and proposed to be conducted (except where the failure to have any such licenses, authorizations, consents and approvals would not individually or in the aggregate reasonably be expected to have a Material Adverse Effect); and (c) is duly qualified to do business and is in good standing in every other jurisdiction in which the nature of its business requires it to be so qualified, except where the failure to be so qualified or in good standing would not reasonably be expected to have a Material Adverse Effect.

(b) Authorization; No Contravention. The execution, delivery and performance by such Guarantor of this Guaranty and the other Transaction Documents to which it is a party (i) are within its corporate powers, (ii) have been duly authorized by all necessary corporate action, (iii) require no action by or in respect of, or filing with, any Official Body or official thereof (except as contemplated by the Transfer and Administration Agreement, all of which have been (or as of the Closing Date will have been) duly made and in full force and effect), other than any such action or approval as may be required pursuant to the laws of any Official Body outside of the United States in connection with any Foreign Receivable, (iv) do not contravene or constitute a default under (A) its organizational documents, (B) any Law applicable to it, (C) any provision of any indenture, agreement or other instrument evidencing material Indebtedness to which it is a party or by which any of its property may be bound or (D) any order, writ, judgment, award, injunction, decree or other instrument binding on or affecting it or its property except, with respect to clauses (B), (C) and (D) above, to the extent the contravention or default under such Law, contractual restriction, order, writ, judgment, award, injunction, decree or other instrument would not reasonably be expected to have a Material Adverse Effect, or (v) result in the creation or imposition of any Adverse Claim upon or with respect to its property (except as contemplated by the Transaction Documents).

(c) Binding Effect. Each of this Guaranty and the other Transaction Documents to which such Guarantor is a party has been duly executed and delivered and constitutes its legal, valid and binding obligation, enforceable against it in accordance with its terms, subject to applicable bankruptcy, insolvency, moratorium or other similar laws affecting the rights of creditors generally (whether at law or equity).

(d) Action, Suits. It is not in violation of any order of any Official Body that would, individually or in the aggregate with all such other violations, reasonably be expected to have a Material Adverse Effect. Except as set forth in Schedule 4.1(g) to the Transfer and Administration Agreement, there are no actions, suits, litigation or proceedings pending or, to its knowledge, threatened in writing against or affecting it or any of its Affiliates or their respective properties, in or before any Official Body, as to which there is a reasonable possibility of an adverse determination and that, if adversely determined, would, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(e) Compliance with Applicable Laws; Licenses, etc. (i) Such Guarantor is in compliance with the requirements of all applicable laws, rules, regulations, and orders of all Official Bodies (including the Federal Consumer Credit Protection Act, as amended, Regulation Z of the Board of Governors of the Federal Reserve System, as amended, laws, rules and regulations relating to usury, truth in lending, fair credit billing, fair credit reporting, equal credit opportunity, fair debt collection practices and privacy and all other consumer laws, rules and regulations applicable to the Receivables), except to the extent any non-compliance, individually or in the aggregate, would not be reasonably likely to have a Material Adverse Effect; provided that no representation or warranty is made with respect to the laws, rules, regulations, and orders of Official Bodies outside of the United States with respect to Foreign Receivables.

(ii) Such Guarantor has not failed to obtain any licenses, permits, franchises or other governmental authorizations necessary to the ownership of its properties or to the conduct of its business (including, without limitation, any registration requirements or other actions as may be necessary in any applicable jurisdiction in connection with the ownership of the Contracts or the Receivables and other related assets), except to the extent any violation or failure to obtain would not be reasonably likely to have a Material Adverse Effect.

SECTION 6. Successors. The agreements herein set forth shall be mutually binding upon and inure to the mutual benefit of each Guarantor and the Beneficiaries and their respective successors, provided, however, that neither Guarantor shall assign its rights or appoint a successor under this Guaranty without the prior written consent of each of the Managing Agents.

SECTION 7. Waiver. Each Guarantor waives promptness, diligence, notice of acceptance, notice of default by the Originators (in their respective capacities as Originators), notice of the incurrence of any Obligation and any other notice with respect to any of the Obligations and this Guaranty, the Transfer and Administration Agreement and any other Transaction Document and any requirement that the Beneficiaries exhaust any right or take action against the Seller or the Originators, any other Person or any property.

SECTION 8. Costs, Expenses. The Guarantors shall pay all reasonable costs and expenses (including reasonable attorneys' fees and expenses for Mayer Brown LLP or any other single law firm) paid or incurred by any of the Beneficiaries in connection with the enforcement of this Guaranty and the prosecution or defense of any action by or against any of the Beneficiaries in connection with this Guaranty, whether involving either Guarantor or any other Person, including a trustee in bankruptcy; *provided*, *however*, that neither Guarantor shall have any such obligation in connection with any action brought by any Beneficiary or any other Person against such Guarantor to the extent that such Guarantor is the prevailing party in the judgment rendered in any such action. To the extent that performance of the Obligations by a Guarantor would include an obligation to pay or deposit any money, the applicable Guarantor shall pay interest on all amounts owing by it under this Guaranty from the date of demand therefor until such obligations are paid in full, at the per annum rate equal to the Default Rate.

SECTION 9. Governing Law and Jurisdiction. This Guaranty shall be governed by and construed in accordance with the laws of the State of New York as applied to contracts made and performed in that state. Each Guarantor hereby submits to the nonexclusive jurisdiction of the competent United States and state courts in New York City in relation to any legal action or proceedings arising out of this Guaranty.

SECTION 10. Waiver of Jury Trial. TO THE EXTENT PERMITTED BY APPLICABLE LAW, EACH GUARANTOR IRREVOCABLY WAIVES, AND, IN ACCEPTING THE BENEFITS OF THIS GUARANTY, EACH OF THE BENEFICIARIES IRREVOCABLY WAIVES, ALL RIGHT OF TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM ARISING OUT OF OR IN CONNECTION WITH THIS GUARANTY OR ANY MATTER ARISING HEREUNDER.

SECTION 11. Effect of Guaranty. This Guaranty amends and restates in its entirety, as of the date hereof, that certain Parent Undertaking, dated as of August 31, 2012 (as amended, supplemented or otherwise modified prior to the date hereof, the "Prior Guaranty"), between Ashland and the Agent. Upon the effectiveness of this Guaranty, the terms and provisions of the Prior Guaranty shall, subject to this paragraph, be superseded hereby in their entirety. Notwithstanding the amendment and restatement of the Prior Guaranty by this Guaranty, Ashland shall continue to be liable to the Agent for the Obligations (as defined in the Prior Guaranty), reasonable and documented fees and expenses which are accrued and unpaid under the Prior Guaranty as of the date hereof (collectively, the "Prior Guaranty Outstanding Amounts"). To the extent that any rights, benefits or provisions in favor of the Agent existed in the Prior Guaranty and continue to exist in this Guaranty, then such rights, benefits or provisions are acknowledged to be and to continue to be effective from and after the date of the Prior Guaranty or any applicable portion thereof. Ashland agrees and acknowledges that any and all rights, remedies and payment provisions under the Prior Guaranty shall continue and survive the execution and delivery of this Guaranty. Upon the effectiveness of this Guaranty, each reference to the Prior Guaranty in any other document, instrument or agreement shall mean and be a reference to this Guaranty. Nothing contained herein, unless expressly herein stated to the contrary, is intended to amend, modify or otherwise affect any other instrument, document or agreement executed and/or delivered in connection with the Prior Guaranty.

SECTION 12. Taxes. All payments made by either Guarantor under this Guaranty shall be made free and clear of, and without deduction or withholding for, or on account of, any Taxes. If any such Taxes are required to be withheld from any amounts payable to any Beneficiary hereunder, the amounts so payable to such Beneficiary shall be increased to the extent necessary to yield to such Beneficiary (after payment of all Taxes) a net amount equal to the amount that would have been payable hereunder had no such Taxes been applicable, provided that neither Guarantor shall be required to pay any additional amount in respect of Taxes pursuant to this Section 11 to any Beneficiary if the obligation to pay such additional amount would not have arisen but for a failure by such Beneficiary to comply with its obligations under Section 9.4 of the Transfer and Administration Agreement (other than by reason of a change in Law occurring after the date of the Transfer and Administration Agreement or the date upon which such Beneficiary became a party thereto, if later).

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, this Guaranty has been duly executed by each Guarantor as of the day first above written.

ASHLAND LLC,
as a Guarantor

By: /s/ Eric N. Boni
Name: Eric N. Boni
Title: Vice President and Treasurer

ASHLAND GLOBAL HOLDINGS INC.,
as a Guarantor

By: /s/ Eric N. Boni
Name: Eric N. Boni
Title: Vice President and Treasurer

[SIGNATURES CONTINUE ON FOLLOWING PAGE]

Acknowledged and accepted as
of the day first above written.

THE BANK OF NOVA SCOTIA,
as Agent

By: /s/ Diane Emanuel
Name: Diane Emanuel
Title: Managing Director

THIRD AMENDMENT
Dated as of November 18, 2016
to
SALE AGREEMENT
Dated as of August 31, 2012

This THIRD AMENDMENT (this "Amendment") dated as of November 18, 2016 is entered into among ASHLAND LLC f/k/a Ashland Inc., a Kentucky limited liability company ("Ashland"), and ASHLAND SPECIALTY INGREDIENTS G.P., a Delaware general partnership (each, an "Originator" and collectively, the "Originators"), and CVG CAPITAL III LLC, a Delaware limited liability company ("SPV").

RECITALS

WHEREAS, the parties hereto have entered into that certain Sale Agreement dated as of August 31, 2012 (as amended, supplemented or otherwise modified through the date hereof, the "Sale Agreement");

WHEREAS, concurrently herewith, the parties to the Second Tier Agreement (as defined in the Sale Agreement) are entering into that certain Thirteenth Amendment thereto (the "TAA Amendment"), pursuant to which, among other things, the Agent, the Managing Agents or the Investors (in each case, as such terms are used in the Sale Agreement) are consenting to this Amendment;

WHEREAS, on September 20, 2016, Ashland adopted that certain Plan of Conversion by which Ashland was converted from a Kentucky corporation to a Kentucky limited liability company and, in connection therewith, changed its name from Ashland Inc. to Ashland LLC (such events, the "Subject Events");

WHEREAS, the occurrence of the Subject Events resulted in a breach of Section 6.3(g) of the Agreement (such breach, but solely to the extent (x) occurring and cured prior to the date hereof and (y) resulting solely from the Subject Events (or an event of default under the Ashland Credit Agreement arising from the Subject Events) or any failure to give notice of the Subject Events and any breach of a representation, warranty, certification or statement regarding the absence of a Termination Event or Potential Termination Event, solely to the extent that such breach arose from the Subject Events, the "Resulting Event");

WHEREAS, the Originators (collectively, the "Originator Parties") have requested that the SPV waive the occurrence of the Resulting Event on the terms and subject to the conditions set forth herein; and

WHEREAS, the parties hereto desire to amend the Sale Agreement as set forth herein.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

SECTION 1. Definitions. All capitalized terms not otherwise defined herein are used as defined in the Transaction Documents.

SECTION 2. Amendments to the Sale Agreement. The Sale Agreement is hereby amended as follows:

2.1. The definition of "Ashland" set forth in Section 1.1 of the Agreement is hereby replaced in its entirety with the following:

2.2. "Ashland" means Ashland LLC, a Kentucky limited liability company.

2.3. Schedule I is amended as set forth on Annex 1 attached hereto.

SECTION 3. TAA Amendment. The parties hereto acknowledge, consent and agree to the terms of the TAA Amendment.

SECTION 4. Waiver; Limitations.

4.1. Limited Waiver. On the terms and subject to the conditions set forth herein, the SPV hereby waives the occurrence of the Resulting Event.

4.2. General Limitations. Notwithstanding anything to the contrary herein or in the Transaction Documents, by executing this Agreement, the SPV is not now waiving, nor has it agreed to waive in the future (i) the breach of any provision of the Transaction Documents (whether presently or subsequently existing or arising), other than as expressly set forth in clause (a) above, (ii) any breach under the Agreement (whether presently or subsequently existing or arising), other than as expressly set forth in clause (a) above or (iii) any rights, powers or remedies presently or subsequently available to the SPV or any other Person against the Originator Parties and/or any other Person under the Agreement, any of the other Transaction Documents, applicable law or otherwise, relating to any matter other than solely to the extent expressly waived herein, each of which rights, powers or remedies is hereby specifically and expressly reserved and continue.

SECTION 5. Representations and Warranties. Each Originator and the SPV, as to itself, hereby represents and warrants to each of the other parties hereto as follows:

5.1. the representations and warranties of such Person set forth in the Transaction Documents to which it is a party (as amended hereby) are true and correct as of the date hereof (except to the extent such representations and warranties relate solely to an earlier date and then as of such earlier date); and

5.2. this Amendment constitutes the legal, valid and binding obligations of such Person enforceable against such Person in accordance with their respective terms, subject to the effect of any applicable bankruptcy, insolvency, reorganization, moratorium or similar law affecting creditors' rights generally and to the effect of general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law).

SECTION 6. Reference to the Effect on the Transaction Documents.

6.1. On and after the effectiveness of this Amendment, each reference in the Sale Agreement to "this Agreement", "hereunder", "hereof" or words of like import referring to the Sale Agreement, and each reference in each of the other Transaction Documents to "the Sale Agreement", "thereunder", "thereof" or words of like import referring to the Sale Agreement, shall mean and be a reference to the Sale Agreement, as amended by this Amendment.

6.2. The Sale Agreement and each of the related documents, as specifically amended by this Amendment, is and shall continue to be in full force and effect and is hereby in all aspects ratified and confirmed. The covenants and other obligations of the SPV and each Originator (each in any capacity) shall continue under the Transaction Documents.

6.3. The execution, delivery and effectiveness of this Amendment shall not operate as a waiver of any right, power or remedy of Agent, any of the Investors or any Indemnified Party under the Sale Agreement or any other Transaction Document, nor constitute a waiver of any provision of the Sale Agreement or any other Transaction Document.

SECTION 7. Effectiveness. This Amendment shall become effective as of the date hereof upon:

(i) the Agent's receipt of counterparts hereto duly executed by each of the parties hereto; and

(ii) effectiveness of the TAA Amendment in accordance with its terms.

SECTION 8. Severability. If any one or more of the agreements, provisions or terms of this Amendment shall for any reason whatsoever be held invalid or unenforceable, then such agreements, provisions or terms shall be deemed severable from the remaining agreements, provisions and terms of this Amendment and shall in no way affect the validity or enforceability of the provisions of this Amendment or the Sale Agreement.

SECTION 9. Governing Law. **THIS AMENDMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE INTERNAL LAWS OF THE STATE OF NEW YORK (INCLUDING SECTIONS 5-1401-1 AND 5-1401-2 OF THE GENERAL OBLIGATIONS LAW, BUT WITHOUT REGARD TO ANY OTHER CONFLICTS OF LAW PROVISIONS THEREOF)**.

SECTION 10. Transaction Document. This Amendment shall be deemed to be a Transaction Document for all purposes of the Agreement and each other Transaction Document.

SECTION 11. Section Headings. The various headings of this Amendment are included for convenience only and shall not affect the meaning or interpretation of this Amendment, the Sale Agreement or any provision hereof or thereof.

SECTION 12. Counterparts. This Amendment may be executed in one or more counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same instrument. Delivery by facsimile or email of an executed signature page of this Amendment shall be effective as delivery of an executed counterpart hereof.

IN WITNESS WHEREOF, the parties have executed this Amendment as of the date first written above.

CVG CAPITAL III LLC,
as SPV

By: /s/ Asad P. Lodhi
Name: Asad P. Lodhi
Title: President

[**SIGNATURES CONTINUE ON THE FOLLOWING PAGE**]

ASHLAND LLC,
individually and as Originator

By: /s/ Eric N. Boni
Name: Eric N. Boni
Title: Vice President and Treasurer

[**SIGNATURES CONTINUE ON THE FOLLOWING PAGE**]

ASHLAND SPECIALTY INGREDIENTS G.P., as Originator

By: /s/ Eric N. Boni
Name: Eric N. Boni
Title: Vice President-Finance

[**SIGNATURES CONTINUE ON THE FOLLOWING PAGE**]

Annex 1

Schedule I of the Sale Agreement is amended by adding the following information:

(3) Ashland:

Originator	Prior Names	Description	Date of Action	Remarks
Ashland LLC	Ashland Inc.	Converted from a Kentucky corporation to a Kentucky limited liability company	9/20/16	

THIRTEENTH AMENDMENT
Dated as of November 18, 2016
to the
TRANSFER AND ADMINISTRATION AGREEMENT
Dated as of August 31, 2012

This THIRTEENTH AMENDMENT AND WAIVER (this "Amendment") dated as of November 18, 2016 is entered into among ASHLAND LLC f/k/a Ashland Inc., a Kentucky limited liability company ("Ashland" or "Master Servicer"), CVG CAPITAL III LLC, a Delaware limited liability company ("SPV"), the Originators, the Investors, Letter of Credit Issuers, Managing Agents and Administrators party hereto, and THE BANK OF NOVA SCOTIA ("Agent" or "Scotiabank"), as agent for the Investors.

RECITALS

WHEREAS, the parties hereto have entered into that certain Transfer and Administration Agreement, dated as of August 31, 2012 (as amended, supplemented or otherwise modified through the date hereof, the "Agreement");

WHEREAS, concurrently herewith, Ashland, Ashland Global Holdings Inc. and the Agent are entering into that certain Amended & Restated Parent Undertaking (the "Amended & Restated Parent Undertaking");

WHEREAS, concurrently herewith, the parties to the First Tier Agreement (as defined in the Agreement) are entering into that certain Third Amendment thereto (the "First Tier Amendment");

WHEREAS, on September 20, 2016, Ashland adopted that certain Plan of Conversion by which Ashland was converted from a Kentucky corporation to a Kentucky limited liability company and, in connection therewith, changed its name from Ashland Inc. to Ashland LLC (such events, the "Subject Conversion Events");

WHEREAS, on September 21, 2016, Valvoline Inc. became the beneficial owner of 100% of the equity securities of Ashland, which equity securities were transferred by Valvoline Inc. to Ashland Chemco Inc. on September 26, 2016, and, upon such transfer, Ashland Chemco Inc. became the beneficial owner of 100% of the equity securities of Ashland and, on September 28, 2016, Ashland Global Holdings Inc. became the beneficial owner of 100% of the equity securities of Ashland Chemco Inc. (such events, collectively, the "Subject Control Events" and, together with the Subject Conversion Events, the "Subject Events");

WHEREAS, the occurrence of the Subject Events constitutes and/or resulted in certain Termination Events and Master Servicer Defaults under the Agreement (such Termination Events and Master Servicer Defaults, collectively, but solely to the extent (x) occurring and cured prior to the date hereof and (y) resulting solely from the Subject Events (or an event of default under the Ashland Credit Agreement arising from the Subject Events) or any failure to give notice of the Subject Events and any breach of a representation, warranty, certification or statement regarding the absence of a Termination Event or Potential Termination Event, solely to the extent that such breach arose from the Subject Events, the "Resulting Events");

WHEREAS, the Originators, SPV and the Master Servicer (collectively, the "Ashland Parties") have requested that the Investors, Letter of Credit Issuers, Managing Agents, Administrators and Agent (collectively, the "Waiving Parties") waive the occurrence of the Resulting Events on the terms and subject to the conditions set forth herein; and

WHEREAS, the parties hereto desire to amend the Agreement as set forth herein.

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

SECTION 1. Definitions.

All capitalized terms not otherwise defined herein are used as defined in the Transaction Documents.

SECTION 2. Amendments to the Agreement.

(a) The following new defined term is hereby added in appropriate alphabetical order to Section 1.1 of the Agreement:

"Ashland Global" means Ashland Global Holdings Inc., a Delaware corporation.

(b) The definition of "Ashland Credit Agreement" set forth in Section 1.1 of the Agreement is hereby replaced in its entirety with the following:

"Ashland Credit Agreement" means the Credit Agreement, dated as of June 23, 2015, among Ashland, as borrower, various financial institutions and The Bank of Nova Scotia, as lender, swing line lender, l/c issuer and as administrative agent.

(c) Clause (c) of the definition of "Change of Control" set forth in Section 1.1 of the Agreement is hereby replaced in its entirety with the following:

(c) an event or series of events by which:

(i) any "person" or "group" (as such terms are used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, but excluding any employee benefit plan of such person or its subsidiaries, and any person or entity acting in its capacity as trustee, agent or other fiduciary or administrator of any such plan) becomes the "beneficial owner" (as defined in Rules 13d-3 and 13d-5 under the Securities Exchange Act of 1934, except that a person or group shall be deemed to have "beneficial ownership" of all securities that such person or group has the right to acquire, whether such right is exercisable immediately or only after the passage of time (such right, an "option right")), directly or indirectly, of 35% or more of the equity securities of Ashland Global entitled to vote for members of the board of directors or equivalent governing body of Ashland Global on a fully-diluted basis (and taking into account all such securities that such "person" or "group" has the right to acquire pursuant to any option right); or

(ii) during any period of 12 consecutive months, a majority of the members of the board of directors or other equivalent governing body of Ashland Global cease to be composed of individuals (A) who were members of that board or equivalent governing body on the first day of such period, (B) whose election or nomination to that board or equivalent governing body was approved by individuals referred to in clause (A) above constituting at the time of such election or nomination at least a majority of that board or equivalent governing body or (iii) whose election or nomination to that board or other equivalent governing body was approved by individuals referred to in clauses (A) and (B) above constituting at the time of such election or nomination at least a majority of that board or equivalent governing body; or

(iii) a "change of control" or any comparable term under, and as defined in, the Ashland Credit Agreement or other Indebtedness exceeding $100,000,000 shall have occurred; or

(iv) Ashland ceases to be a wholly-owned, direct or indirect Subsidiary of Ashland Global.

(d) The definition of "Parent Undertaking" set forth in Section 1.1 of the Agreement is hereby replaced in its entirety with the following:

"Parent Undertaking" means the Amended and Restated Parent Undertaking, dated as of November 18, 2016, executed by Ashland and Ashland Global, jointly and severally, in favor of the Agent for the benefit of itself and the Secured Parties.

(e) Section 6.1(a) of the Agreement is hereby amended by replacing sub-clauses (i), (ii) and (iii) in their entirety with the following:

(i) Annual Reporting. First, within ninety (90) days after the close of Ashland Global's fiscal year commencing with the fiscal year ending September 30, 2016, audited financial statements, prepared by a nationally-recognized accounting firm in accordance with GAAP on a consolidated basis for Ashland Global and its consolidated Subsidiaries, in each case, including consolidated and consolidating balance sheets as of the end of such period, and related consolidated and consolidating statements of income or operations, shareholders' equity and cash flows, accompanied by an unqualified audit report and opinion of independent certified public accountants of nationally recognized standing reasonably acceptable to the Agent and each Managing Agent, which report and opinion shall be prepared in accordance with generally accepted auditing standards and shall not be subject to any "going concern" or similar qualification or exception or any qualification or exception as to the scope of such audit, and such financial statements shall be certified by the chief executive officer, chief financial officer, treasurer or controller of Ashland Global to the effect that such consolidating statements are fairly stated in all material respects when considered in relation to the consolidated statements of Ashland Global and its consolidated Subsidiaries and second, not later than December 31st of each calendar year commencing with the calendar year 2016, a report to the effect that Protiviti Inc. or any other audit firm reasonably acceptable to the Agent has applied certain agreed-upon procedures (which procedures shall be satisfactory to the Managing Agents and substantially in the form of those attached hereto as Schedule 6.1(a)), to certain documents and records relating to the Receivables under any Transaction Document, compared the information contained in the Master Servicer Reports delivered during the period covered by such report with such documents and records and that no matters came to the attention of such audit firm that caused them to believe that such servicing was not conducted in compliance with this Article VI, except for such exceptions as such audit firm shall believe to be immaterial and such other exceptions as shall be set forth in such statement. Within ninety (90) days after the close of the SPV's fiscal year, for the SPV, an unaudited consolidated and consolidating balance sheet of the SPV as at the end of such fiscal year, and the related unaudited consolidated and consolidating statements of income or operations, changes in shareholders' equity, and cash flows for such fiscal year and for the SPV's fiscal year then ended, setting forth in comparative form the figures for the previous fiscal year, all in reasonable detail, such consolidated statements to be certified by the chief executive officer, chief financial officer, treasurer or controller of Ashland Global (or a comparable person on behalf of the SPV) as fairly presenting the financial condition, results of operations, shareholders' equity and cash flows of the SPV in accordance with GAAP, subject only to normal year-end audit adjustments and the absence of footnotes and such consolidating statements to be certified by the chief executive officer, chief financial officer, treasurer or controller of Ashland Global (or a comparable person on behalf of the SPV) to the effect that such statements are fairly stated in all material respects when considered in relation to the consolidated financial statements of the SPV.

(ii) Quarterly Reporting. Within forty-five (45) days after the close of the first three quarterly periods of each of the SPV's and Ashland Global's fiscal years (commencing with the fiscal quarter ending December 31, 2016), for (A) the SPV and (B) for Ashland Global and its consolidated Subsidiaries, in each case, an unaudited consolidated and consolidating balance sheet of the SPV and Ashland Global (together with its consolidated Subsidiaries) as at the end of such fiscal quarter, and the related unaudited consolidated and consolidating statements of income or operations, changes in shareholders' equity, and cash flows for such fiscal quarter and for the portion of each of the SPV's and Ashland Global's fiscal year then ended, setting forth in each case in comparative form the figures for the corresponding fiscal quarter of the previous fiscal year and the corresponding portion of the previous fiscal year, all in reasonable detail, such consolidated statements to be certified by the chief executive officer, chief financial officer, treasurer or controller of Ashland Global (and a comparable person on behalf of the SPV) as fairly presenting the financial condition, results of operations, shareholders' equity and cash flows of the SPV and Ashland Global (together with its Subsidiaries) in accordance with GAAP, subject only to normal year-end audit adjustments and the absence of footnotes and such consolidating statements to be certified by the chief executive officer, chief financial officer, treasurer or controller of Ashland Global (and a comparable person on behalf of the SPV) to the effect that such statements are fairly stated in all material respects when considered in relation to the consolidated financial statements of the SPV and Ashland Global (together with its Subsidiaries).

(iii) Compliance Certificate. Not later than five (5) Business Days after the delivery of the financial statements referred to clauses (i) and (ii) immediately above, a compliance certificate signed by the SPV's and Ashland Global's, as applicable, chief financial officer certifying (in such person's corporate capacity and not individually), stating that (A) the attached financial statements have been prepared in accordance with GAAP and accurately reflect the financial condition of the SPV or Ashland Global and their respective consolidated Subsidiaries, as applicable (which in the case of quarterly financial statements shall be subject to normal year-end audit adjustments), (B) to the best of such Person's knowledge, no Termination Event or Potential Termination Event is continuing, or if any Termination Event or Potential Termination Event is continuing, stating the nature and status thereof and showing the computation of, and showing compliance with, each of the financial triggers set forth in Sections 7.5(e) and (f) and Sections 8.1(h), (i) and (j), and (C) each of the representations and warranties made by the SPV and Ashland, as applicable, in Article IV of this Agreement are true and correct in all material respects (except any representation or warranty qualified by materiality or by reference to a material adverse effect, which is true and correct in all respects).

SECTION 3. First Tier Amendment. The parties hereto acknowledge, consent and agree to the terms of the First Tier Amendment (including the waiver granted by the SPV thereunder of breaches arising from the Subject Conversion Events).

SECTION 4. Waiver; Limitations.

(a) Limited Waiver. On the terms and subject to the conditions set forth herein, each of the Waiving Parties hereby waives the occurrence of each of the Resulting Events.

(b) General Limitations. Notwithstanding anything to the contrary herein or in the Transaction Documents, by executing this Agreement, no Waiving Party is now waiving, nor has it agreed to waive in the future (i) the breach of any provision of the Transaction Documents (whether presently or subsequently existing or arising), other than as expressly set forth in clause (a) above, (ii) any Termination Events and Master Servicer Defaults under the Agreement (whether presently or subsequently existing or arising), other than as expressly set forth in clause (a) above or (iii) any rights, powers or remedies presently or subsequently available to any of the Waiving Parties or any other Person against the Ashland Parties and/or any other Person under the Agreement, any of the other Transaction Documents, applicable law or otherwise, relating to any matter other than solely to the extent expressly waived herein, each of which rights, powers or remedies is hereby specifically and expressly reserved and continue.

SECTION 5. Representations and Warranties. Each of Ashland, each Originator and the SPV, as to itself, hereby represents and warrants to each of the other parties hereto as follows:

(a) after giving effect to this Amendment and the transactions contemplated hereby, no Termination Event or Potential Termination Event shall exist;

(b) the representations and warranties of such Person set forth in the Transaction Documents to which it is a party (as amended hereby) are true and correct as of the date hereof (except to the extent such representations and warranties relate solely to an earlier date and then as of such earlier date); and

(c) this Amendment constitutes the legal, valid and binding obligations of such Person enforceable against such Person in accordance with their respective terms, subject to the effect of any applicable bankruptcy, insolvency, reorganization, moratorium or similar law affecting creditors' rights generally and to the effect of general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law).

SECTION 6. Effectiveness. This Amendment shall become effective as of the date first above written upon:

(a) receipt by the Agent of counterparts of this Amendment duly executed by each of the parties hereto;

(b) receipt by the Agent of counterparts of the First Tier Amendment duly executed by each of the parties thereto;

(c) receipt by the Agent of such officer certificates as it may reasonably request;

(d) receipt by the Agent of favorable opinions of counsel to the Seller and SPV with respect to enforceability, general corporate matters, no conflict with agreements and law and security interest matters; and

(e) effectiveness of the Amended & Restated Parent Undertaking in accordance with its terms.

SECTION 7. Reference to the Effect on the Transaction Documents.

(a) On and after the effectiveness of this Amendment, each reference in the Agreement to “this Agreement”, “hereunder”, “hereof” or words of like import referring to the Agreement, and each reference in each of the other Transaction Documents to “the Transfer and Administration Agreement” or “the TAA,” “thereunder”, “thereof” or words of like import referring to the Agreement, shall mean and be a reference to the Agreement, as amended by this Amendment.

(b) The Agreement and each of the related documents, as specifically amended by this Amendment, is and shall continue to be in full force and effect and is hereby in all aspects ratified and confirmed. The covenants and other obligations of the SPV, Master Servicer, and each Originator (each in any capacity) shall continue under the Transaction Documents.

(c) The execution, delivery and effectiveness of this Amendment shall not operate as a waiver of any right, power or remedy of Agent, any of the Investors or any Indemnified Party under the Agreement or any other Transaction Document, nor constitute a waiver of any provision of the Agreement or any other Transaction Document.

SECTION 8. Counterparts. This Amendment may be executed in one or more counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same instrument. Delivery by facsimile or email of an executed signature page of this Amendment shall be effective as delivery of an executed counterpart hereof.

SECTION 9. Governing Law. **THIS AMENDMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE INTERNAL LAWS OF THE STATE OF NEW YORK (INCLUDING SECTIONS 5-1401-1 AND 5-1401-2 OF THE GENERAL OBLIGATIONS LAW, BUT WITHOUT REGARD TO ANY OTHER CONFLICTS OF LAW PROVISIONS THEREOF)**.

SECTION 10. Transaction Document. This Amendment shall be deemed to be a Transaction Document for all purposes of the Agreement and each other Transaction Document.

SECTION 11. Severability. If any one or more of the agreements, provisions or terms of this Amendment shall for any reason whatsoever be held invalid or unenforceable, then such agreements, provisions or terms shall be deemed severable from the remaining agreements, provisions and terms of this Amendment and shall in no way affect the validity or enforceability of the provisions of this Amendment or the Agreement.

SECTION 12. Section Headings. The various headings of this Amendment are included for convenience only and shall not affect the meaning or interpretation of this Amendment, the Agreement or any provision hereof or thereof.

[Signature pages follow.]

IN WITNESS WHEREOF, the parties have executed this Amendment as of the date first written above.

ASHLAND LLC

By: /s/ Eric N. Boni
Name: Eric N. Boni
Title: Vice President and Treasurer

ASHLAND SPECIALTY INGREDIENTS G.P.

By: /s/ Eric N. Boni
Name: Eric N. Boni
Title: Vice President-Finance

[**SIGNATURES CONTINUE ON THE FOLLOWING PAGE**]

CVG CAPITAL III LLC

By: /s/ Asad P. Lodhi

Name: Asad P. Lodhi

Title: President

[**SIGNATURES CONTINUE ON THE FOLLOWING PAGE**]

LIBERTY STREET FUNDING LLC, as a Conduit Investor and an Uncommitted Investor

By: /s/ Bernard J. Angelo
Name: Bernard J. Angelo
Title: Vice President

[**SIGNATURES CONTINUE ON THE FOLLOWING PAGE**]

ATLANTIC ASSET SECURITIZATION LLC, as a Conduit Investor and an Uncommitted Investor

By: /s/ Kostantina Kourmpetis
Name: Kostantina Kourmpetis
Title: Managing Director

By: /s/ Sam Pilcer
Name: Sam Pilcer
Title: Managing Director

[**SIGNATURES CONTINUE ON THE FOLLOWING PAGE**]

THE BANK OF NOVA SCOTIA, as Agent, a Letter of Credit Issuer, a Committed Investor, a Managing Agent and an Administrator

By: /s/ Diane Emanuel
Name: Diane Emanuel
Title: Managing Director

[**SIGNATURES CONTINUE ON THE FOLLOWING PAGE**]

CREDIT AGRICOLE CORPORATE AND INVESTMENT BANK, as a Committed Investor, a Managing Agent and an Administrator

By: /s/ Kostantina Kourmpetis
Name: Kostantina Kourmpetis
Title: Managing Director

By: /s/ Sam Pilcer
Name: Sam Pilcer
Title: Managing Director

ASHLAND GLOBAL HOLDINGS INC.
DEFERRED COMPENSATION PLAN FOR NON-EMPLOYEE DIRECTORS

(Amended and Restated as of January 1, 2017)

The Ashland Inc. Deferred Compensation Plan for Non-Employee Directors (2005) was approved by the Board of Directors of Ashland Inc. on November 4, 2004 to be effective January 1, 2005, and thereafter amended with changes effective January 26, 2007, and January 1, 2008.

The Plan is an unfunded plan maintained for the purpose of providing deferred compensation for the Directors and, as such, is not an "employee benefit plan" within the meaning of the Employee Retirement Income Security Act of 1974, as amended.

Effective as of January 1, 2017, the Plan is amended and restated as follows:

ARTICLE I. GENERAL PROVISIONS

1. PURPOSE

The purpose of the Plan is to provide each Director with an opportunity to defer some or all of the Director's Fees as a means of saving for retirement or other purposes. In addition, the Plan provides Directors with the ability to increase their proprietary interest in the Company's long-term prospects by permitting Directors to receive all or a portion of their Fees in Common Stock. The obligations of the Company hereunder constitute a mere promise to make the payments provided for in this Plan. No Director, his or her spouse or the estate of either of them shall have, by reason of this Plan, any right, title or interest of any kind in or to any property of the Company. To the extent any Participant has a right to receive payments from the Company under this Plan, such right shall be no greater than the right of any unsecured general creditor of the Company.

2.DEFINITIONS

The following definitions shall be applicable throughout the Plan:

(a) "**Accounting Date**" means the Business Day on which a calculation concerning a Participant's Account is performed, or as otherwise defined by the Committee.

(b) "**Account**" means, collectively, a Deferred Fee Account, Stock Account, and Restricted Stock Account. The Account is maintained solely as a bookkeeping entry by the Company to evidence an unfunded, unsecured payment obligation of the Company to a Participant.

(c) "**Beneficiary**" means the Participant's estate.

(d) "**Board**" means the Board of Directors of the Company.

(e) “**Business Day**” means a day on which the New York Stock Exchange is open for trading activity.

(f) “**Change in Control**” “ shall be deemed to have occurred if:

1. there shall be consummated (A) any consolidation or merger of the Company (a “**Business Combination**”), other than a consolidation or merger of the Company into or with a direct or indirect wholly-owned subsidiary, as a result of which the shareholders of the Company own (directly or indirectly), immediately after the Business Combination, less than fifty percent (50%) of the then outstanding shares of common stock that are entitled to vote generally for the election of directors of the corporation resulting from such Business Combination, or pursuant to which shares of the Company’s Common Stock would be converted into cash, securities or other property, other than a Business Combination in which the holders of the Company’s Common Stock immediately prior to the Business Combination have substantially the same proportionate ownership of common stock of the surviving corporation immediately after the Business Combination, or (B) any sale, lease, exchange or transfer (in one transaction or a series of related transactions) of all or substantially all the assets of the Company, provided, however, that no sale, lease, exchange or other transfer of all or substantially all the assets of the Company shall be deemed to occur unless assets constituting at least eighty percent (80%) of the total assets of the Company are transferred pursuant to such sale, lease, exchange or other transfer;

2. the shareholders of the Company shall approve any plan or proposal for the liquidation or dissolution of the Company;

3. any Person shall become the Beneficial Owner of securities of the Company representing twenty percent (20%) or more of the combined voting power of the Company’s then outstanding securities ordinarily (and apart from rights accruing in special circumstances) having the right to vote in the election of directors, as a result of a tender or exchange offer, open market purchases, privately-negotiated purchases or otherwise, without the approval of the Board; or

4. at any time during a period of two (2) consecutive years, individuals who at the beginning of such period constituted the Board shall cease for any reason to constitute at least a majority thereof, unless the election or the nomination for election by the Company’s shareholders of each new director during such two- (2-) year period was approved by a vote of at least two-thirds (2/3) of the directors then still in office who were directors at the beginning of such two- (2-) year period.

Notwithstanding the foregoing, a “Change in Control” shall not be deemed to have occurred by virtue of (1) the consummation of any transaction or series of integrated transactions immediately following which the record holders of the Common Stock of the Company immediately prior to such transaction or series of transactions continue to have substantially the same proportionate ownership in an entity which owns all or substantially all of the assets of the Company immediately following such transaction or series of transactions, (2) the repurchase by the Company of outstanding shares of Common Stock or other securities pursuant to a tender or exchange offer or (3) the Valvoline Spin-Off.

(g) "**Code**" means the Internal Revenue Code of 1986, as amended from time to time.

(h) "**Committee**" means the Governance and Nominating Committee of the Board or its designee.

(i) "**Common Stock**" means the common stock, $.01 par value, of the Company.

(j) "**Common Stock Fund**" means that hypothetical investment option, approved by the Committee, in which a Participant's Account may be deemed to be invested and may earn income based on a hypothetical investment in Common Stock.

(k) "**Company**" means Ashland Inc. prior to the date of conversion of Ashland Inc. into Ashland LLC, and Ashland Global Holdings Inc. on and after the date of conversion of Ashland Inc. into Ashland LLC, or any successor thereto.

(l) "**Corporate Human Resources**" means the Corporate Human Resources Department of the Company.

(m) "**Credit Date**" means the date on which any Fees would otherwise have been paid to the Participant if such Fees were not Deferred Fees.

(n) "**Deferred Fee Account**" means the portion of a Participant's Account that is separately accounted for and to which Deferred Fees are credited.

(o) "**Deferred Fees**" mean the Fees elected by the Participant to be deferred pursuant to a Fee Deferral Election, and which are credited to the Participant's Deferred Fee Account and, if applicable to the Participant, the Participant's Stock Account.

(p) "**Director**" means any non-employee director of the Board.

(q) "**Disability**" means that a Participant is unable to engage in any substantial gainful activity because of a medically determinable physical or mental impairment that is expected to result in death or last for a continuous period of twelve (12) or more months. Corporate Human Resources or its delegate shall determine whether a Participant has incurred a Disability.

(r) "**Election**" means a Participant's delivery of a notice of election to defer payment of all or a portion of his or her Fees under the terms of the Plan. The Committee or the Company may prescribe other means of making and delivering an Election. An Election shall also include instructions specifying the time and form of payment of a Participant's Deferred Fees and Restricted

Stock Units and/or Account under the Plan. Such Elections shall comply with Code section 409A to the extent applicable and be irrevocable except as otherwise provided in the Plan.

(s) "**Exchange Act**" means the Securities Exchange Act of 1934, as amended.

(t) "**Fair Market Value**" means the price of a share of Common Stock, as reported on the Composite Tape for New York Stock Exchange on the date and at the time designated by the Company.

(u) "**Fees**" mean a Director's annual cash retainer and, as applicable, other additional annual cash retainers earned by a Director for service as a member of the Board during all or part of a calendar year (but excluding Restricted Stock Units).

(v) "**Fee Deferral Election**" means an Election by a Participant to defer Fees pursuant to Article III, Section 3 of the Plan.

(w) "**Participant**" means a Director, regardless of whether the Director elects to defer the payment of any Fees pursuant to a Fee Deferral Election.

(x) "**Payment Commencement Date**" means the date payment(s) of amounts credited to a Participant's Account begin pursuant to Article III, Section 5.

(y) "**Personal Representative**" means the person or persons who, upon the disability or incompetence of a Participant, have acquired on behalf of the Participant, by legal proceeding or otherwise, the right to receive the payments specified in this Plan.

(z) "**Plan**" means this Ashland Global Holdings Inc. Deferred Compensation Plan for Non-Employee Directors (formerly named the Ashland Inc. Deferred Compensation Plan for Non-Employee Directors) as it now exists or may be hereafter amended.

(aa) "**Restricted Stock Account**" means the portion of a Participant's Account that is separately accounted for and to which Restricted Stock Units are credited pursuant to Article III, Section 1.

(bb) "**Restricted Stock Unit(s)**" means the Participant's annual award of deferred Company restricted stock units for service as a Director.

(cc) "**Secretary of the Treasury**" or "**Treasury**" means the United States Department of Treasury.

(dd) "**Stock Account**" means the portion of a Participant's Account that is separately accounted for and to which Deferred Fees are credited with Stock Units attributable to the Participant's hypothetical investment in the Common Stock Fund.

(ee) "**Stock Unit(s)**" means the hypothetical Common Stock share equivalents credited to a Participant's Stock Account pursuant to Article III, Section 1.

(ff) "**Termination**" means retirement from the Board or termination of service as a Director for any other reason that constitutes a "separation from service" within the meaning of Code section 409A and the Treasury regulations and other guidance promulgated thereunder.

(gg) "**Unforeseeable Emergency**" means a severe financial hardship of a Participant (that cannot be alleviated by compensation or reimbursement received insurance companies or otherwise as provided in Treasury Regulation Section 1.409A-3(i)(3)) because of (i) an illness or accident of the Participant, the Participant's spouse or dependent (as defined in Code section 152(a)); (ii) a loss of the Participant's property due to casualty; or (iii) such other similar extraordinary unforeseeable circumstances because of events beyond the control of the Participant. Corporate Human Resources or its delegate shall determine whether a Participant has incurred an Unforeseeable Emergency.

(hh) "**Valvoline Spin-Off**" means the transaction or series of transactions initially approved by the board of directors of Ashland Inc. on September 16, 2015, intended to separate the Valvoline business from Ashland Inc.'s specialty chemical business and create two independent, publicly-traded companies.

3.SHARES; ADJUSTMENTS IN EVENT OF CHANGES IN CAPITALIZATION

(a) *Shares Authorized for Issuance*. There shall be reserved for issuance under the Plan five hundred thousand (500,000) shares of Common Stock, subject to adjustment pursuant to subsection (b) below. Such shares shall be authorized but unissued shares of Common Stock.

(b) *Adjustments in Certain Events*. In the event of any change in the outstanding Common Stock of the Company by reason of any stock split, stock dividend, recapitalization, merger, consolidation, reorganization, combination, or exchange of shares, split-up, split-off, spin-off, liquidation or other similar change in capitalization, or any distribution to common shareholders other than ordinary cash dividends, the number or kind of shares that may be issued under the Plan shall be automatically adjusted so that the proportionate interest of the Directors shall be maintained as before the occurrence of such event. Effective as of the Separation Date, all Ashland Stock Units and Ashland Restricted Stock Units credited to an Ashland Participant's Transferred Account shall be converted into (and thereafter constitute the hypothetical investments of the Ashland Participant's Transferred Account) Stock Units and Restricted Stock Units. Such adjustments shall be conclusive and binding for all purposes of the Plan.

4.ELIGIBILITY

Each Director shall be eligible to, and shall participate in the Plan.

5.ADMINISTRATION

Full power and authority to construe, interpret and administer the Plan shall be vested in the Company and the Committee or one or more of their delegates. This power and authority includes, but is not limited to, establishing deferral terms and conditions and adopting modifications and amendments to procedures as may be deemed necessary or appropriate. This power and authority also includes, without limitation, the ability to construe and interpret provisions of the Plan, make determinations regarding law and fact, reconcile any inconsistencies between provisions in the Plan or between provisions of the Plan and any other statement concerning the Plan, whether oral or written, supply any omissions to the Plan or any document associated with the Plan, and to correct any defect in the Plan or in any document associated with the Plan. Decisions of the Company and the Committee (or their delegates) shall be final, conclusive and binding upon all parties. Day-to-day administration of the Plan shall be the responsibility of Corporate Human Resources. The administration of and all interpretations under the Plan shall be made consistent with all applicable law.

ARTICLE II. FEES IN COMMON STOCK PROVISION

Each Participant may make an Election to receive all or a portion of his or her Fees in shares of Common Stock (in lieu of cash) or make a Fee Deferral Election to defer Fees pursuant to Article III, Section 3. A Participant who elects to receive Fees in shares of Common Stock shall receive such shares at the end of each quarter beginning in the quarter the Election is effective. The number of shares of Common Stock so issued shall be equal to the amount of Fees which otherwise would have been payable in cash during the quarter divided by the Fair Market Value. Only whole number of shares of Common Stock will be issued, with any fractional shares to be paid in cash.

ARTICLE III. DEFERRED COMPENSATION

1.PARTICIPANT'S ACCOUNT

(a) *Deferred Fee Account*. For each Participant who makes a Fee Deferral Election, there shall be established a Deferred Fee Account to which there shall be credited any Deferred Fees as of each Credit Date. The Deferred Fee Account shall be credited (or debited) on each Accounting Date with hypothetical income (or hypothetical loss) based upon the Deferred Fee Account's hypothetical investment in any one or more of the hypothetical investment options available under the Plan, as prescribed by the Committee or the Company and as elected by the Participant under the terms of Article III, Section 3. The crediting or debiting on each Accounting Date of such hypothetical income (or hypothetical loss) shall be made for the respective amounts that were subject to each Fee Deferral Election under Article III, Section 3.

(b) *Stock Account and Stock Units*. To the extent a Participant selects a Common Stock Fund as a hypothetical investment of the Participant's Deferred Fee Account, such shall be accounted for in the Stock Account (instead of the Deferred Fee Account) of the Participant, and shall be credited on each Accounting Date with Stock Units equal to the number of shares of Common Stock (including fractions of a share) that could have been purchased with the amount of such Deferred Fees at the Fair Market Value on the Accounting Date. As of the date of any dividend distribution date for the Common Stock, the Participant's Stock Account shall be credited with additional Stock Units equal to the number of shares of Common Stock (including fractions of a share) that could have been purchased, at the Fair Market Value on such date, with the amount which would have been paid as dividends on that number of shares (including fractions of a share) of Common Stock which is equal to the number of Stock Units then credited to the Participant's Stock Account with respect to a particular Fee Deferral Election under Article III, Section 3.

(c) *Restricted Stock Account and Restricted Stock Units*. Each Participant shall have his or her Restricted Stock Account credited on an Accounting Date with the number of Restricted Stock Units approved for such allocation equal to the number of shares of Common Stock (including fractions of a share) that could have been purchased with the dollar amount of the approved grant for this purpose at the Fair Market Value on the Accounting Date. The Restricted Stock Units so credited shall be separately maintained and accounted for in a Restricted Stock Account for the Participant. Amounts credited to the Restricted Stock Account shall be forfeitable until the one (1) year anniversary of the date on which such amounts were so credited; provided, however, if the Participant does not seek re-election as a Director, such forfeitable amounts shall become non-forfeitable on the date of the Board meeting that immediately precedes such one (1) year anniversary so long as the Participant is a Director on the day before such Board meeting. As of the date of any dividend distribution date for the Common Stock, the Participant's Restricted Stock Account shall be credited with additional Restricted Stock Units equal to the number of shares of Common Stock (including fractions of a share) that could have been purchased, at the Fair Market Value on such date, with the amount which would have been paid as dividends on that number of shares (including fractions of a share) of Common Stock which is equal to the number of Restricted Stock Units then credited to the Participant's Restricted Stock Account. The additional Restricted Stock Units so allocated shall remain forfeitable until the date on which the Restricted Stock Units with respect to which the additional Restricted Stock Units were credited become non-forfeitable. On the date of a Participant's Termination prior to a Change in Control (other than in the circumstance described in the proviso in the third sentence of this paragraph (c)), all Restricted Stock Units (including fractional Restricted Stock Units) that have not become non-forfeitable shall be forfeited; provided, however, that the date of a Participant's Termination on or after a Change in Control, all Restricted Stock Units (including fractional Restricted Stock Units) shall become nonforfeitable.

2.<u>EARLY PAYMENT/DISTRIBUTION</u>

(a) *Unforeseeable Emergency*. A Participant or a Participant's Personal Representative may submit an application for a payment/distribution from the Participant's Account (including the non-forfeitable portion of the Restricted Stock Account) because of an Unforeseeable Emergency. The amount of the payment/distribution shall not exceed the amount necessary to satisfy the needs of the Unforeseeable Emergency. Such payment/distribution shall include an amount to pay taxes reasonably anticipated as a result of the payment/distribution. The amount allowed as a payment/distribution under this Article III, Section 2(a) shall take into account the extent to which the Unforeseeable Emergency may be relieved through reimbursement or compensation from insurance or liquidation of the Participant's assets (but only to the extent such liquidation would itself not cause a severe financial hardship). The payment/distribution shall be made in a single sum and paid as soon as practicable (but not later than sixty (60) days) after the application for the payment/distribution on account of the Unforeseeable Emergency is approved. The provisions of this Article III, Section 2(a) shall be interpreted and administered in accordance with applicable guidance that may be issued by the Treasury.

(b) *Disability*. A Participant or a Participant's legal representative may submit an application for a total payment/distribution from the Participant's Account (including the non-forfeitable portion of the Participant's Restricted Stock Account) because of the Participant's Disability. The payment/distribution shall be made in a single lump sum and paid as soon as practicable (but not later than sixty (60) days) after the application is approved.

(c) *Prohibition on Acceleration*. Except as otherwise provided in the Plan and except as may be allowed in guidance from the Secretary of the Treasury, payments/distributions from a Participant's Account may not be made earlier than the time such amounts would otherwise be paid/distributed pursuant to the terms of the Plan. Notwithstanding anything herein to the contrary, acceleration of payments/distributions may be made in the discretion of the Company for any permitted purpose under Treas. Reg. section 1.409A-3(j)(4)(ii)-(xiv).

3.<u>ELECTIONS</u>

(a) *General*. Any Participant wishing to defer Fees under the Plan may elect to do so by completing and delivering a Fee Deferral Election on a form (which may be an online election form) prescribed by Corporate Human Resources (i) electing the time and form of payment/distribution (lump sum or installments not exceeding fifteen (15) years at a specified time or under a fixed schedule not exceeding fifteen (15) years) of such Deferred Fees, and (ii) designating the manner in which such Deferred Fees are to be deemed invested in accordance with Article III, Section 1. The timing of the filing of the appropriate Fee Deferred Election form shall be determined by the Company or the Committee. An effective Fee Deferral Election to defer Fees may not be revoked or modified except as otherwise determined by the Company or the Committee in a manner consistent with applicable law (including, without limitation, Code section 409A) or as stated herein.

(b) *Permissible Fee Deferral Election*. A Participant's initial Fee Deferral Election to defer Fees may only be made in the taxable year before the Fees are earned, with one exception. The exception applies to a Participant during his or her first year of eligibility to participate in the Plan. In that event such a Participant may, if so offered by the Company or the Committee, elect to defer Fees for services performed after the Fee Deferral Election, provided that the Fee Deferral Election is made within thirty (30) days of the date the Participant first becomes eligible to participate in the Plan. A Participant's Fee Deferral Election under this Article III, Section 3(b) shall specify the amount or percentage of Fees deferred and the time and form of payment/distribution (lump sum installments not exceeding fifteen (15) years at a specified time or under a fixed schedule not exceeding fifteen (15) years) from among those described in Article III, Section 4 of the Plan. Each Fee Deferral Election to defer Fees may be treated as a separate election regarding the time and form of distribution, if so determined at the time of a particular election by the Company.

(c) *Hypothetical Investment Alternatives*. Subject to the following, a Participant may select, and elect to change an existing selection as to the hypothetical investment alternatives in effect with respect to amounts credited to the Participant's Account (in increments prescribed by the Committee or the Company) as often, and with such restrictions, as determined by the Committee or by the Company. Notwithstanding the foregoing, the following rules shall apply to investments of Stock Units and Restricted Stock Units:

1. *Stock Units*. Stock Units credited to a Participant’s Stock Account cannot be transferred to another hypothetical investment alternative under the Plan.

2. *Restricted Stock Units*. Restricted Stock Units credited on an annual basis to a Participant’s Restricted Stock Account cannot be transferred to another hypothetical investment alternative under the Plan; provided, however, that if the Participant makes an election prior to a grant of Restricted Stock Units, then upon the Participant satisfying the Board’s Common Stock ownership guidelines, up to fifty percent (50%) of such Participant’s Restricted Stock Units that become non-forfeitable ,as credited to such Participant’s Restricted Stock Account, may be transferred to another hypothetical investment alternative under the Plan.

4.<u>PAYMENT/DISTRIBUTION</u>

(a) *Account*. In accordance with a Participant’s Election and as prescribed by the Committee or the Company, (i) Deferred Fees credited to a Participant’s Deferred Fee Account and Stock Account, and (ii) the non-forfeitable portion of the Participant’s Restricted Stock Account, shall be paid/distributed (in cash or shares of Common Stock (or a combination of both) as determined by the Company or the Committee pursuant to the Participant’s Fee Deferral Election (applicable to Deferred Fees) and Election (applicable to the Participant’s Restricted Stock Account); provided that if no such Fee Deferral Election or Election is made by a Participant such amounts shall be paid in a lump sum within sixty (60) days following Termination (provided that if such sixty (60) day period begins in one calendar year and ends in the next calendar year, the Participant shall have no right, directly or indirectly, to designate the calendar year of payment). In accordance with a Participant’s Fee Deferral Election under Article III, Section 3, but subject to Sections 2 and 6 of Article III, amounts subject to such Fee Deferral Election in the Deferred Fee Account and Stock Account and subject to such Election in the Restricted Stock Account shall be paid/distributed --

1. Upon a Participant’s Termination, including death, as either a lump sum or in installments not exceeding fifteen (15) years; or

2. At a specified time or under a fixed schedule not exceeding fifteen (15) years.

(b) *Medium of Distribution and Default Method*. A Participant’s Account shall be paid/distributed in cash or shares of Common Stock (or a combination of both) as determined by the Committee or the Company. Notwithstanding anything in the foregoing to the contrary, all of a Participant’s Stock Units and Restricted Stock Units that are subject to the restrictions on hypothetical investment transfer described in Article III, Section 3(c) shall be paid/distributed to the Participant (or, in the event of the Participant’s death, the Participant’s Beneficiary(ies) or estate) in whole shares of Common Stock, with any remainder distributed in cash. The amounts so paid/distributed shall be paid paid/distributed first under the timing of distributions that applies to the portion of the Participant’s Account being paid/distributed.

(c) *Election to Delay the Time or Change the Form of Payment/Distribution*. A Participant may make an Election to delay the time of a payment or change the form of a payment, or may elect to do both, with respect to an amount that would be payable pursuant to a Fee Deferral Election or other Election (except in the event of a payment/distribution on account of the Participant's death) if all of the following Code section 409A requirements are met:

1. Such a subsequent Election may not take effect until at least twelve (12) months after it is made;

2. Any delay to the payment/distribution that would take effect because of the subsequent Election is at least to a date five (5) years after the date the payment/distribution otherwise would have begun; and

3. In the case of a payment/distribution that would be made under paragraph (a)2. of this Section 4, such a subsequent Election may not be made less than twelve (12) months before the date of the first scheduled payment.

5.<u>PAYMENT COMMENCEMENT DATE</u>

Payments of amounts deferred by Participants pursuant to valid Fee Deferral Elections and Elections shall commence in accord with such Fee Deferral Elections and Elections. If a Participant dies prior to the first deferred payment specified in a Fee Deferral Election and Election, payments shall commence to the Participant's Beneficiary on the first payment/distribution date so specified.

6.<u>CHANGE IN CONTROL</u>

In the event of a Change in Control, the Company shall reimburse a Participant for the legal fees and expenses incurred if the Participant is required to seek to obtain or enforce any right to payment/distribution. In the event that it is determined that such Participant is properly entitled to a cash or other payment/distribution hereunder, such Participant shall also be entitled to interest thereon payable in an amount equivalent to the Prime Rate of Interest quoted by Citibank, N.A. as its prime commercial lending rate on the subject date from the date such payment/distribution should have been made to and including the date it is made. Notwithstanding any provision of this Plan to the contrary, this Article III, Section 6 and the definition of "Change in Control" in Article I may not be amended after a Change in Control occurs without the written consent of a majority in number of Participants.

<u>ARTICLE IV. MISCELLANEOUS PROVISIONS</u>

1.<u>BENEFICIARY</u>

If the Participant dies before receiving payment of all amounts due hereunder, remaining unpaid amounts shall be paid in one lump sum to the estate of such Participant which shall be the Participant's "Beneficiary" under this Plan.

2.<u>INALIENABILITY; UNFUNDED PLAN</u>

The interests of a Participant and his or her Beneficiary under the Plan may not in any way be voluntarily or involuntarily transferred, alienated or assigned by a Participant or a Participant's Beneficiary, nor be subject to attachment, execution, garnishment or other such equitable or legal process.

The Plan at all times shall be unfunded; and no provision shall be made at any time with respect to segregating assets of any Participant for the payment of any amounts hereunder. The Plan constitutes a mere promise of the Company to make payments to Participants (and, to the extent applicable, Participants' Beneficiaries) in the future. Participants and their Beneficiaries have rights only as unsecured general creditors of the Company.

3.<u>GOVERNING LAW</u>

The provisions of this Plan shall be interpreted and construed in accordance with the laws of the Commonwealth of Kentucky.

4.<u>AMENDMENT AND TERMINATION</u>

The Committee may amend, alter or terminate this Plan at any time; provided, however, that the Committee may not, without approval by the Board:

1. materially increase the number of securities that may be issued under the Plan (except as provided in Article I, Section 3),

2. materially modify the requirements as to eligibility for participation in the Plan, or

3. otherwise materially increase the benefits accruing to Participants under the Plan.

5.<u>COMPLIANCE WITH RULE 16b-3</u>

It is the intention of the Company that the Plan comply in all respects with Rule 16b-3 promulgated under Section 16(b) of the Exchange Act and that Participants remain non-employee Directors for purposes of administering other employee benefit plans of the Company and having such other plans be exempt from Section 16(b) of the Exchange Act. Therefore, if any Plan provision is found not to be in compliance with Rule 16b-3 or if any Plan provision would disqualify Participants from remaining non-employee Directors, that provision shall be deemed amended so that the Plan does so comply and the Participants remain non-employee Directors, to the extent permitted by law and deemed advisable by the Committee, and in all events the Plan shall be construed in favor of its meeting the requirements of Rule 16b-3.

6.<u>COMPLIANCE WITH 409A</u>

It is the intention of the Company and the Committee that the Plan be administered in compliance with Code section 409A and the applicable guidance issued thereunder by the Secretary of the Treasury. Any provision that is found to be inconsistent with Code section 409A or the applicable guidance issued thereunder by the Secretary of the Treasury shall be reformed and applied by the Company in a manner consistent with applicable law, as determined by the Company.

No representation is made to any Participant with respect to the tax or securities aspects or implications of the Plan; and Participants should consult with their own tax, financial and legal advisors with respect to their participation in the Plan. Neither the Company, nor any member of the Board or the Committee shall have any liability to any person in the event Code section 409A applies to any Account or payment under the Plan in a manner that results in adverse tax consequences for the Participant or any of his or her Beneficiary.

7. **EFFECTIVE DATE**

The Plan was approved by the Governance and Nominating Committee of the Board of Directors of Ashland Global Holdings Inc. and established by the Company to be effective as of January 1, 2017.

GUARANTY

GUARANTY AGREEMENT (as amended, amended and restated, supplemented or otherwise modified from time to time in accordance with the provisions hereof, this "Agreement") dated as of November 16, 2016, (and effective as of October 19, 2016) between Ashland Global Holdings Inc., a Delaware corporation (the "Guarantor"), and The Bank of Nova Scotia, as administrative agent (in such capacity, the "Administrative Agent").

Reference is made to that certain Credit Agreement dated as of June 23, 2015 (as amended by Amendment No. 1 dated as of July 8, 2016, as further amended by Amendment No. 2 dated as of August 15, 2016, and as further amended, amended and restated, supplemented or otherwise modified from time to time, the "Credit Agreement"), among Ashland LLC (formerly Ashland Inc.), a Kentucky limited liability company (the "Borrower"), each lender from time to time party thereto (collectively, the "Lenders" and individually, a "Lender"), The Bank of Nova Scotia, as Administrative Agent, Swing Line Lender and an L/C Issuer and Citibank, N.A., as Syndication Agent. Capitalized terms used and not defined herein (including, without limitation, the term "Obligations," as used in Section 1 and elsewhere herein) are used with the meanings assigned to such terms in the Credit Agreement. Pursuant to clause (vi) of Section 7.15 of the Credit Agreement, the Guarantor is required to execute this Agreement.

The Lenders have agreed to make Loans to the Borrower, and the L/C Issuers have agreed to issue Letters of Credit for the account of the Borrower and its Subsidiaries, in each case pursuant to, and upon the terms and subject to the conditions specified in, the Credit Agreement. The Guarantor is an Affiliate of the Borrower and acknowledges that it has derived and will derive substantial benefit from the making of the Loans by the Lenders to the Borrower and the issuance of the Letters of Credit by the L/C Issuers for the account of the Borrower and its Subsidiaries. As consideration therefor and in order to induce the Lenders to make Loans and the L/C Issuers to issue Letters of Credit, the Guarantor is willing to execute this Agreement.

Accordingly, the parties hereto agree as follows:

SECTION 1. ***Guarantee.*** The Guarantor unconditionally guarantees, as a primary obligor and not merely as a surety, the due and punctual payment of the Obligations. To the fullest extent permitted by applicable Law, the Guarantor waives notice of, or any requirement for further assent to, any agreements or arrangements whatsoever made by the Administrative Agent, any Lender or any L/C Issuer with any other Person pertaining to the Obligations, including agreements and arrangements for payment, extension, renewal, subordination, composition, arrangement, discharge or release of the whole or any part of the Obligations, or for the discharge or surrender of any or all security, or for the compromise, whether by way of acceptance of part payment or otherwise, of the Obligations, and, to the fullest extent permitted by applicable Law, the same shall in no way impair the Guarantor's liability hereunder.

SECTION 2. ***Obligations Not Waived.*** To the fullest extent permitted by applicable Law, the Guarantor waives presentment to, demand of payment from and protest to the Borrower or any other Person of any of the Obligations, and also waives notice of acceptance of its guarantee, notice of protest for nonpayment and all other formalities. To the fullest extent permitted by applicable Law, the guarantee of the Guarantor hereunder shall not be affected by (a) any extension, renewal or increase of or in any of the Obligations; (b) any rescission, waiver, amendment or modification of, or any release from, any of the terms or provisions of this Agreement, the Credit Agreement, any other Loan Document, any guarantee or any other agreement or instrument, including with respect to the Guarantor under the Loan Documents; or (c) the failure or delay of the Administrative Agent, any Lender or L/C Issuer to exercise any right or remedy against the Borrower.

SECTION 3. ***Guarantee of Payment.*** The Guarantor further agrees that its guarantee constitutes a guarantee of payment when due and not of collection and, to the fullest extent permitted by applicable Law, waives any right to require that any resort be had by the Administrative Agent or any Lender or L/C Issuer to any of the security held for payment of the Obligations or to any balance of any deposit account or credit on the books of the Administrative Agent or any Lender or L/C Issuer in favor of the Borrower or any other Person.

SECTION 4. ***No Discharge or Diminishment of Guaranty.*** To the fullest extent permitted by applicable Law and except as otherwise expressly provided in this Agreement, the Obligations of the Guarantor hereunder shall not be subject to any reduction, limitation, impairment or termination for any reason (other than the payment in full in cash of the Obligations (other than contingent indemnification obligations that are not yet due and payable)), including any claim of waiver, release, surrender, alteration or compromise of any of the Obligations, and shall not be subject to any defense (other than a defense of payment) or setoff, counterclaim, recoupment or termination whatsoever by reason of the invalidity, illegality or unenforceability of the Obligations or otherwise. Without limiting the generality of the foregoing, the obligations of the Guarantor hereunder shall, to the fullest extent permitted by applicable Law, not be discharged or impaired or otherwise affected by the failure of the Administrative Agent or any Lender or L/C Issuer to assert any claim or demand or to enforce any remedy under the Credit Agreement, any other Loan Document, any guarantee or any other agreement or instrument, by any amendment, waiver or modification of any provision of the Credit Agreement or any other Loan Document or other agreement or instrument, by any default, failure or delay, willful or otherwise, in the performance of the Obligations, or by any other act, omission or delay to do any other act that may or might in any manner or to any extent vary the risk of the Guarantor or that would otherwise operate as a discharge of the Guarantor as a matter of law or equity (other than the payment in full in cash of all the Obligations (other than contingent indemnification obligations that are not yet due and payable)) or which would impair or eliminate any right of the Guarantor to subrogation.

SECTION 5. ***Defenses Waived.*** To the fullest extent permitted by applicable Law, the Guarantor waives (i) any defense based on or arising out of the unenforceability of the Obligations or any part thereof from any cause or the cessation from any cause of the liability (other than the payment in full in cash of the Obligations (other than contingent liabilities that are not yet due and payable)) of the Borrower or any other Person in respect of the Obligations and (ii) any law or regulation of any jurisdiction or any other event affecting any term of a guaranteed obligation. Subject to the terms of the other Loan Documents, the Administrative Agent and any Lender or L/C Issuer may, at their election, foreclose on any security held by one or more of them by one or more judicial or nonjudicial sales, accept an assignment of any such security in lieu of foreclosure, compromise or adjust any part of the Obligations, make any other accommodation with the Borrower or exercise any other right or remedy available to them against the Borrower, without affecting or impairing in any way the liability of the Guarantor hereunder except to the extent the Obligations (other than contingent indemnification obligations that are not yet due and payable) have been paid in full in cash. Pursuant to and to the fullest extent permitted by applicable Law, the Guarantor waives any defense arising out of any such election even though such election operates, pursuant to applicable Law, to impair or to extinguish any right of reimbursement or subrogation or other right or remedy of the Guarantor against the Borrower or any security.

SECTION 6. ***Agreement to Pay; Subordination.*** In furtherance of the foregoing and not in limitation of any other right that the Administrative Agent or any Lender or L/C Issuer has at law or in equity against the Guarantor by virtue hereof, upon the failure of the Borrower to pay any Obligation when and as the same shall become due, whether at maturity, by acceleration, after notice of prepayment or otherwise, the Guarantor hereby promises to and will forthwith pay, or cause to be paid, to the Administrative Agent or such other Lender or L/C Issuer as designated thereby in cash an amount equal to the unpaid principal amount of such Obligations then due, together with accrued and unpaid interest and fees on such Obligations. Upon payment by the Guarantor of any sums to the Administrative Agent or any Lender or L/C Issuer as provided above, all rights of the Guarantor against the Borrower arising as a result thereof by way of right of subrogation, contribution, reimbursement, indemnity or otherwise shall in all respects be subordinate and junior in right of payment to the prior payment in full in cash of all the Obligations (other than contingent liabilities that are not yet due and payable). In addition, any Indebtedness of the Borrower or any Subsidiary now or hereafter held by the Guarantor that is required by the Credit Agreement to be subordinated to the Obligations is hereby subordinated in right of payment to the prior payment in full of the Obligations (other than contingent liabilities that are not yet due and payable). If any amount shall be paid to the Guarantor on account of (i) such subrogation, contribution, reimbursement, indemnity or similar right or (ii) any such Indebtedness, in each case, at any time when any Obligation then due and owing has not been paid, such amount shall be held in trust for the benefit of the Lenders and L/C Issuers and shall forthwith be paid to the Administrative Agent to be credited against the payment of the Obligations, whether matured or unmatured, in accordance with the terms of the Loan Documents.

SECTION 7. ***General Limitation on Guaranty Obligations*****.** In any action or proceeding involving any state corporate law, or any state, Federal or foreign bankruptcy, insolvency, reorganization, fraudulent transfer, fraudulent conveyance or other law affecting the rights of creditors generally, if the obligations of the Guarantor under this Agreement would otherwise be held or determined to be void, voidable, invalid or unenforceable, or subordinated to the claims of any other creditors, on account of the amount of its liability under this Agreement, then, notwithstanding any other provision herein or in any other Loan Document to the contrary, the amount of such liability shall, without any further action by the Guarantor, any creditor or any other Person, be automatically limited and reduced to the highest amount that is valid and enforceable and not subordinated to the claims of other creditors as determined in such action or proceeding. The provision of this Section 7 shall in no respect limit the obligations and liabilities of the Guarantor to the Administrative Agent, any Lender or L/C Issuer, and the Guarantor shall remain liable to the

Administrative Agent, any Lender or L/C Issuer for the full amount guaranteed by the Guarantor hereunder (in each case, except as expressly provided in the first sentence of this Section 7).

SECTION 8. ***Information.*** The Guarantor assumes all responsibility for being and keeping itself informed of the Borrower's financial condition and assets, all other circumstances bearing upon the risk of nonpayment of the Obligations and the nature, scope and extent of the risks that the Guarantor assumes and incurs hereunder and agrees that neither the Administrative Agent, nor any Lender, nor any L/C Issuer, will have any duty to advise the Guarantor of information known to it or any of them regarding such circumstances or risks.

SECTION 9. ***Covenant; Representations and Warranties*****.** The Guarantor agrees and covenants to, and to cause each of its Subsidiaries, to take, or refrain from taking, each action that is necessary to be taken or not taken, so that no breach of the agreements and covenants contained in the Credit Agreement pertaining to actions to be taken, or not taken, by the Guarantor or any of its Subsidiaries will result. The Guarantor represents and warrants that all representations and warranties relating to it and its Subsidiaries contained in the Credit Agreement are true and correct, *provided* that each reference in any such representation and warranty to the knowledge of the Borrower shall, for the purposes of this Section 9, be deemed to be a reference to the Guarantor's knowledge.

SECTION 10. ***Termination.*** This Agreement and the Guarantees made hereunder shall terminate on the earlier of (A) the date on which the Guarantor ceases to provide any Guarantee of Indebtedness or other obligations of the Borrower or its Subsidiaries (in which case this Agreement shall terminate automatically without any action by any Person) or (B) the date when (i) the principal of and premium, if any, and interest (including interest accruing during the pendency of any bankruptcy, insolvency, receivership or other similar proceeding, regardless of whether allowed or allowable in such proceeding) on all Loans; (ii) each payment required to be made under the Credit Agreement in respect of any Letter of Credit; and (iii) all other Obligations then due and owing, have in each case been paid in full (other than contingent indemnification obligations that are not yet due and payable) and the Lenders have no further commitment to lend under the Credit Agreement, the L/C Obligations have been reduced to zero (other than with respect to Letters of Credit as to which other arrangements satisfactory to the Administrative Agent and the applicable L/C Issuers shall have been made) and the L/C Issuers have no further obligation to issue Letters of Credit under the Credit Agreement; *provided* that, unless an event described in clause (A) of this Section 10 has occurred, any such Guarantee shall continue to be effective or be reinstated, as the case may be, if at any time any payment, or any part thereof, on any Obligation is rescinded or must otherwise be restored by the Administrative Agent, any Lender or L/C Issuer upon the bankruptcy or reorganization of the Borrower, the Guarantor or otherwise.

SECTION 11. ***Binding Effect; Several Agreement; Assignments; Releases.*** Whenever in this Agreement any of the parties hereto is referred to, such reference shall be deemed to include the successors and assigns of such party; and all covenants, promises and agreements by or on behalf of the Guarantor that are contained in this Agreement shall bind and inure to the benefit of each party hereto and their respective successors and assigns. This Agreement shall become effective as to the Guarantor when a counterpart hereof executed on behalf of the Guarantor shall have been delivered to the Administrative Agent and a counterpart hereof shall have been executed on behalf of the Administrative Agent, and thereafter shall be binding upon the Guarantor and the Administrative Agent and their respective successors and assigns, and shall inure to the benefit of the Guarantor, the Administrative Agent, each Lender, each L/C Issuer, and their respective successors and assigns, except that neither the Borrower, nor the Guarantor shall have the right to assign its rights or obligations hereunder or any interest herein (and any such attempted assignment shall be void) without the prior written consent of the Required Lenders. The Guarantor shall automatically be released from its obligations hereunder (including its Guarantee hereunder) upon the occurrence of an event described in clause (A) or clause (B) of Section 10 above.

SECTION 12. ***Waivers; Amendment*****.** (a) No failure or delay of the Administrative Agent in exercising any power or right hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such right or power, or any abandonment or discontinuance of steps to enforce such a right or power, preclude any other or further exercise thereof or the exercise of any other right or power. The rights and remedies of the Administrative Agent hereunder and of each Lender and each L/C Issuer under the other Loan Documents are cumulative and are not exclusive of any rights or remedies that they would otherwise have. No waiver of any provision of this Agreement or consent to any departure by the Guarantor therefrom shall in any event be effective unless the same shall be permitted by paragraph (b) below, and then such waiver or consent shall be effective only in the specific instance and for the purpose for which given. No notice or demand on the Guarantor in any case shall entitle the Guarantor to any other or further notice or demand in similar or other circumstances.

(b) Neither this Agreement nor any provision hereof may be waived, amended or modified except pursuant to a written agreement entered into between the Guarantor and the Administrative Agent (with the consent of the Lenders or the Required Lenders if required under the Credit Agreement).

SECTION 13. ***GOVERNING LAW*****. THIS AGREEMENT SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK, WITHOUT REGARD TO CONFLICTS OF LAWS PRINCIPLES THAT WOULD REQUIRE THE APPLICATION OF THE LAWS OF ANOTHER JURISDICTION.**

SECTION 14. ***Notices.*** All communications and notices hereunder shall be in writing and given as provided in <u>Section 10.02</u> of the Credit Agreement. All communications and notices hereunder to the Guarantor shall be given to it in care of the Borrower at its address set forth in <u>Schedule 10.02</u> to the Credit Agreement.

SECTION 15. ***Survival of Agreement; Severability*****.** (a) All covenants, agreements, representations and warranties made by the Guarantor herein, and as of the date hereof, and in the certificates or other instruments prepared or delivered in connection with or pursuant to this Agreement or any other Loan Document shall be considered to have been relied upon by the Administrative Agent, each Lender, and each L/C Issuer and shall survive the making by the Lenders of the Loans and the issuance of the Letters of Credit by the L/C Issuers regardless of any investigation made by the Administrative Agent, each Lender and each L/C Issuer or on their behalf, and shall continue in full force and effect as long as the principal of or any accrued interest on any Loan or any other fee or amount payable under this Agreement or any other Loan Document is outstanding and unpaid or the Commitments have not been terminated.

(b) In the event that any one or more of the provisions contained in this Agreement or in any other Loan Document should be held invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein and therein shall not in any way be affected or impaired thereby (it being understood that the invalidity of a particular provision in a particular jurisdiction shall not in and of itself affect the validity of such provision in any other jurisdiction). The parties shall endeavor in good-faith negotiations to replace the invalid, illegal or unenforceable provisions with valid provisions the economic effect of which comes as close as possible to that of the invalid, illegal or unenforceable provisions.

SECTION 16. ***Counterparts; Integration; Effectiveness.*** This Agreement constitutes the entire agreement and understanding among the parties hereto and supersedes any and all prior agreements and understandings, oral or written, relating to the subject matter hereof and thereof. This Agreement may be executed in counterparts, each of which shall constitute an original, but all of which when taken together shall constitute a single contract, and shall become effective as provided in Section 11 hereof. Delivery of an executed signature page to this Agreement by facsimile or other electronic transmission shall be as effective as delivery of a manually executed counterpart of this Agreement.

SECTION 17. ***Rules of Interpretation.*** The rules of interpretation specified in Section 1.02 of the Credit Agreement shall be applicable to this Agreement.

SECTION 18. ***Jurisdiction; Consent to Service of Process.*** (a) Each party hereto hereby irrevocably and unconditionally submits, for itself and its property, to the exclusive jurisdiction of any New York State court or Federal court of the United States of America sitting in New York City, and any appellate court from any thereof, in any action or proceeding arising out of or relating to this Agreement or the other Loan Documents, or for recognition or enforcement of any judgment, and each of the parties hereto hereby irrevocably and unconditionally agrees that all claims in respect of any such action or proceeding may be heard and determined in such New York State court or, to the extent permitted by applicable Law, in such Federal court. Each of the parties hereto agrees that a final judgment in any such action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by applicable Law. Nothing in this Agreement shall affect any right that the Administrative Agent or any Lender or L/C Issuer may otherwise have to bring any action or proceeding relating to this Agreement or the other Loan Documents against the Guarantor or its properties in the courts of any jurisdiction.

(b) Each party hereto hereby irrevocably and unconditionally waives, to the fullest extent it may legally and effectively do so, any objection that it may now or hereafter have to the laying of venue of any suit, action or proceeding arising out of or relating to this Agreement or the other Loan Documents in any New York State or Federal court. Each of the parties hereto hereby irrevocably waives, to the fullest extent permitted by applicable Law, the defense of an inconvenient forum to the maintenance of such action or proceeding in any such court.

(c) Each party to this Agreement irrevocably consents to service of process in the manner provided for notices in Section 14 hereof.

(d) Nothing in this Agreement will affect the right of any party to this Agreement to serve process in any other manner permitted by applicable Law.

SECTION 19. *Waiver of Jury Trial*. EACH PARTY HERETO HEREBY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LITIGATION DIRECTLY OR INDIRECTLY ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS AGREEMENT OR THE OTHER LOAN DOCUMENTS. EACH PARTY HERETO (A) CERTIFIES THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER AND (B) ACKNOWLEDGES THAT IT AND THE OTHER PARTIES HERETO HAVE BEEN INDUCED TO ENTER INTO THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS, AS APPLICABLE, BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION 19.

SECTION 20. *Right of Setoff.* If an Event of Default shall have occurred and be continuing, the Administrative Agent, each Lender and each L/C Issuer is hereby authorized at any time and from time to time, to the fullest extent permitted by Law, to set off and apply any and all deposits (general or special, time or demand, provisional or final) at any time held and other Indebtedness at any time owing by the Administrative Agent, any Lender or any L/C Issuer to or for the credit or the account of the Guarantor against any or all the obligations of the Guarantor now or hereafter existing under this Agreement and the other Loan Documents held by the Administrative Agent, any Lender or any L/C Issuer, as applicable, irrespective of whether or not the Administrative Agent or any Lender or L/C Issuer shall have made any demand under this Agreement or any other Loan Document and although such obligations may be unmatured. The rights of the Administrative Agent, any Lender or L/C Issuer under this Section 20 are in addition to other rights and remedies (including other rights of setoff) which the Administrative Agent, any Lender or L/C Issuer may have.

SECTION 22. *Taxes.* The Guarantor shall gross up for and shall indemnify the Administrative Agent, each Lender and each L/C Issuer against Indemnified Taxes and Other Taxes to the extent set forth in Sections 3.01 and 3.07 of the Credit Agreement.

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IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement as of the day and year first above written.

ASHLAND GLOBAL HOLDINGS INC.,
as Guarantor

By: /s/ Eric N. Boni
Name: Eric N. Boni
Title: Vice President and Treasurer

THE BANK OF NOVA SCOTIA,
as Administrative Agent

By: /s/ Clement Yu
Name: Clement Yu
Title: Director

EXHIBIT 12

ASHLAND GLOBAL HOLDINGS INC.
COMPUTATION OF RATIO OF EARNINGS TO FIXED CHARGES
(In millions)

	Years ended September 30					Three months ended December 31	
	2016	2015	2014	2013	2012	2016	2015
EARNINGS							
Income from continuing operations	$ 3	$ 191	$ 72	$ 553	$ 14	$ 10	$ 91
Income tax expense (benefit)	133	(22)	(188)	196	(57)	(6)	20
Interest expense	167	148	149	208	197	40	39
Interest portion of rental expense	22	20	29	25	28	6	5
Amortization of deferred debt expense	23	18	14	65	54	95	3
Distributions in excess of (less than) earnings of unconsolidated affiliates	5	7	(11)	(15)	(32)	(4)	1
	$ 353	$ 362	$ 65	$ 1,032	$ 204	$ 141	$ 159
FIXED CHARGES							
Interest expense	$ 167	$ 148	$ 149	$ 208	$ 197	$ 40	$ 39
Interest portion of rental expense	22	20	29	25	28	6	5
Amortization of deferred debt expense	23	18	14	65	54	95	3
Capitalized interest	1	2	1	1	1	—	—
	$ 213	$ 188	$ 193	$ 299	$ 280	$ 141	$ 47
RATIO OF EARNINGS TO FIXED CHARGES	1.66	1.93	(B)	3.45	(A)	1.00	3.38

(A) Deficiency Ratio - The Ratio of Earnings to Fixed Charges was less than 1x. To achieve a ratio of 1x, additional total earnings of $76 million would have been required for the year ended September 30, 2012.

(B) Deficiency Ratio - The Ratio of Earnings to Fixed Charges was less than 1x. To achieve a ratio of 1x, additional total earnings of $128 million would have been required for the year ended September 30, 2014.

EXHIBIT 31.1

CERTIFICATIONS

I, William A. Wulfsohn, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Ashland Global Holdings Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the Audit Committee of the registrant's Board of Directors (or persons performing the equivalent functions):

    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: January 27, 2017

/s/ William A. Wulfsohn

William A. Wulfsohn
Chairman and Chief Executive Officer
(Principal Executive Officer)

EXHIBIT 31.2

CERTIFICATIONS

I, J. Kevin Willis, certify that:

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

Date: January 27, 2017

/s/ J. Kevin Willis

J. Kevin Willis
Chief Financial Officer
(Principal Financial Officer)

EXHIBIT 32

ASHLAND GLOBAL HOLDINGS INC.

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

In connection with the Quarterly Report of Ashland Global Holdings Inc. (the “Company”) on Form 10-Q for the period ended December 31, 2016, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), each of the undersigned, William A. Wulfsohn, Chief Executive Officer of the Company, and J. Kevin Willis, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

/s/ William A. Wulfsohn

William A. Wulfsohn
Chief Executive Officer
January 27, 2017

/s/ J. Kevin Willis

J. Kevin Willis
Chief Financial Officer
January 27, 2017