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, 2017

OR

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

For the transition period from _________ to ___________

Commission file number 333-211719

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 ☐

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

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

Large Accelerated Filer ☑	Accelerated Filer ☐
Non-Accelerated Filer ☐	Smaller Reporting Company ☐
(Do not check if a smaller reporting company.)	Emerging Growth Company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

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

At December 31, 2017, there were 62,228,812 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 (LOSS)

	Three months ended December 31	
(In millions except per share data - unaudited)	2017	2016
Sales	$ 842	$ 704
Cost of sales	613	515
Gross profit	229	189
Selling, general and administrative expense	171	157
Research and development expense	21	20
Equity and other income	2	3
Operating income	39	15
Net interest and other financing expense	31	122
Other net periodic benefit income	—	2
Net loss on divestitures	1	1
Income (loss) from continuing operations before income taxes	7	(106)
Income tax expense (benefit) - Note I	14	(41)
Loss from continuing operations	(7)	(65)
Income from discontinued operations (net of tax) - Note D	3	75
Net income (loss)	(4)	10
Net income attributable to noncontrolling interest (a)	—	11
Net loss attributable to Ashland	$ (4)	$ (1)
PER SHARE DATA		
Basic earnings per share - Note L		
Loss from continuing operations	$ (0.12)	$ (1.05)
Income from discontinued operations attributable to Ashland	0.05	1.04
Net loss attributable to Ashland	$ (0.07)	$ (0.01)
Diluted earnings per share - Note L		
Loss from continuing operations	$ (0.12)	$ (1.05)
Income from discontinued operations attributable to Ashland	0.05	1.04
Net loss attributable to Ashland	$ (0.07)	$ (0.01)
COMPREHENSIVE INCOME (LOSS)		
Net income (loss)	$ (4)	$ 10
Other comprehensive income (loss), net of tax - Note M		
Unrealized translation gain (loss)	3	(146)
Net change in available-for-sale securities	8	—
Pension and postretirement obligation adjustment	—	(1)
Other comprehensive income (loss)	11	(147)
Comprehensive income (loss)	$ 7	$ (137)
Comprehensive income attributable to noncontrolling interest	—	10
Comprehensive income (loss) attributable to Ashland	$ 7	$ (147)

(a) For the three months ended December 31, 2016, this represents the income attributable to the previous noncontrolling interest in Valvoline Inc., whose results are now included within discontinued operations. See Note B for more information.

SEE NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS.

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

(In millions - unaudited)	December 31 2017	September 30 2017
ASSETS		
Current assets		
Cash and cash equivalents	$ 601	$ 566
Accounts receivable (a)	597	612
Inventories - Note F	674	634
Other assets	92	91
Total current assets	1,964	1,903
Noncurrent assets		
Property, plant and equipment		
Cost	3,795	3,762
Accumulated depreciation	1,850	1,792
Net property, plant and equipment	1,945	1,970
Goodwill - Note G	2,475	2,465
Intangibles - Note G	1,298	1,319
Restricted investments - Note E	315	302
Asbestos insurance receivable - Note K	205	209
Deferred and other income taxes	28	28
Other assets	425	422
Total noncurrent assets	6,691	6,715
Total assets	$ 8,655	$ 8,618
LIABILITIES AND EQUITY		
Current liabilities		
Short-term debt - Note H	$ 355	$ 235
Trade and other payables	382	409
Accrued expenses and other liabilities	266	324
Total current liabilities	1,003	968
Noncurrent liabilities		
Long-term debt - Note H	2,584	2,584
Asbestos litigation reserve - Note K	676	694
Deferred and other income taxes	390	375
Employee benefit obligations - Note J	194	191
Other liabilities	409	400
Total noncurrent liabilities	4,253	4,244
Commitments and contingencies - Note K		
Stockholders' equity	3,399	3,406
Total liabilities and stockholders' equity	$ 8,655	$ 8,618

(a) Accounts receivable includes an allowance for doubtful accounts of $9 million at December 31, 2017 and September 30, 2017.

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)	Total
BALANCE AT SEPTEMBER 30, 2017	$ 1	$ 931	$ 2,696	$ (222)	$ 3,406
Total comprehensive income (loss)					
Net loss			(4)		(4)
Other comprehensive income				11	11
Regular dividends, $0.225 per common share			(14)		(14)
Common shares issued under stock incentive and other plans (b)		—			—
BALANCE AT DECEMBER 31, 2017	$ 1	$ 931	$ 2,678	$ (211)	$ 3,399

(a) At December 31, 2017 and September 30, 2017, the after-tax accumulated other comprehensive loss attributable to Ashland of $211 million and $222 million, respectively, was comprised of net unrealized translation losses of $243 million and $246 million, respectively, net unrealized gains on available-for-sale securities of $29 million and $21 million, respectively, and unrecognized prior service credits as a result of certain employee benefit plan amendments of $3 million for each period.

(b) Common shares issued were 111,400 for the three months ended December 31, 2017.

SEE NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS.

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

(In millions - unaudited)	Three months ended December 31 2017	2016
CASH FLOWS PROVIDED (USED) BY OPERATING ACTIVITIES FROM CONTINUING OPERATIONS		
Net income (loss)	$ (4)	$ 10
Income from discontinued operations (net of tax)	(3)	(75)
Adjustments to reconcile income from continuing operations to cash flows from operating activities		
Depreciation and amortization	79	68
Original issue discount and debt issuance cost amortization	2	94
Deferred and other income taxes	8	2
Stock based compensation expense	7	5
Gain on early retirement of debt	—	(3)
Realized gain and investment income on available-for-sale securities	(3)	(3)
Net loss on divestitures	1	1
Pension contributions	(2)	(1)
Gain on post-employment plan remeasurement	—	(2)
Change in operating assets and liabilities (a)	(109)	(156)
Total cash flows used by operating activities from continuing operations	(24)	(60)
CASH FLOWS PROVIDED (USED) BY INVESTING ACTIVITIES FROM CONTINUING OPERATIONS		
Additions to property, plant and equipment	(24)	(33)
Proceeds from disposal of property, plant and equipment	1	—
Proceeds from sale of operations	1	—
Net purchase of funds restricted for specific transactions	(5)	(2)
Reimbursements from restricted investments	5	—
Proceeds from sales of available-for-sale securities	5	—
Purchases of available-for-sale securities	(5)	—
Proceeds from the settlement of derivative instruments	—	4
Payments for the settlement of derivative instruments	(2)	—
Total cash flows used by investing activities from continuing operations	(24)	(31)
CASH FLOWS PROVIDED (USED) BY FINANCING ACTIVITIES FROM CONTINUING OPERATIONS		
Repayment of long-term debt	(2)	(239)
Premium on long-term debt repayment	—	(5)
Proceeds (repayment) from short-term debt	120	(154)
Debt issuance costs	—	(4)
Cash dividends paid	(14)	(24)
Stock based compensation employee withholding taxes paid in cash	(5)	(8)
Total cash flows provided (used) by financing activities from continuing operations	99	(434)
CASH USED BY CONTINUING OPERATIONS	51	(525)
Cash provided (used) by discontinued operations		
Operating cash flows, net	(16)	70
Investing cash flows, net	—	(10)
Financing cash flows, net	—	(10)
Total cash provided (used) by discontinued operations	(16)	50
Effect of currency exchange rate changes on cash and cash equivalents	—	(9)
INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	35	(484)
CASH AND CASH EQUIVALENTS - BEGINNING OF PERIOD	566	1,017
Change in cash and cash equivalents held by Valvoline	—	(65)
CASH AND CASH EQUIVALENTS - END OF PERIOD	$ 601	$ 468

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

SEE NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS.

NOTE A – SIGNIFICANT ACCOUNTING POLICIES

Basis of presentation

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. Additionally, certain prior period data, primarily related to discontinued operations, have been reclassified in the Consolidated Financial Statements and accompanying notes to conform to the current period presentation, as further described in this section. 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, 2017. Results of operations for the period ended December 31, 2017 are not necessarily indicative of the expected results for the remaining quarters in the fiscal year.

On May 12, 2017, Ashland completed the distribution of its remaining 170 million shares of common stock of Valvoline Inc. which represented approximately 83% of the total outstanding shares of Valvoline Inc.'s common stock. This separation from Valvoline represented a strategic shift in Ashland's business and qualified as a discontinued operation. Accordingly, Valvoline's operating results and cash flows for the three months ended December 31, 2016 have been classified as discontinued operations within the Condensed Consolidated Financial Statements. See Note B for additional information on the separation of Valvoline Inc.

Subsequent to completing the separation from Valvoline Inc., Ashland's operations are managed within the following three reportable segments: Specialty Ingredients, Composites and Intermediates and Solvents.

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), 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, 2017. The following standards relevant to Ashland were either issued or adopted in the current period, or will become effective in a subsequent period.

In May 2014, the FASB issued accounting guidance outlining a single comprehensive five step model for entities to use in accounting for revenue arising from contracts with customers (ASC 606 Revenue from Contracts with Customers). The new guidance supersedes most current revenue recognition guidance, in an

NOTE A – SIGNIFICANT ACCOUNTING POLICIES (continued)

effort to converge the revenue recognition principles within U.S. GAAP. This new guidance also requires entities to disclose certain quantitative and qualitative information regarding the nature, amount, timing and uncertainty of qualifying revenue and cash flows arising from contracts with customers. Entities have the option of using a full retrospective or a modified retrospective approach to adopt the new guidance. Ashland has identified an implementation team that is currently evaluating the impact of the new standard on the Condensed Consolidated Financial Statements and the adoption method options available as well as the overall impact the new guidance will have on the organization. The assessment process consists of categorizing Ashland's revenue streams and reviewing the current internal accounting policies and practices to determine potential differences that would result from applying the requirements of the new standard to revenue contracts. Additional discussions and meetings with each revenue stream team have occurred to solicit input, identify potential impacts and appropriate changes to Ashland's business processes, systems and controls to support the revenue recognition and disclosure requirements under the new standard. Based on various preliminary assessments conducted to date, Ashland has identified agreements with distributors and customers that are subject to rebate and incentive programs that could contain elements of material rights and/or variable consideration. Ashland does not currently believe that these elements would result in a material change to how revenue would be recognized for these agreements. Ashland currently intends to adopt this standard using the modified retrospective approach and does not believe the impact will be material to the Condensed Consolidated Financial Statements but does expect there to be significant additional disclosures within the Notes to Condensed Consolidated Financial Statements. This guidance becomes effective for Ashland on October 1, 2018.

In March 2017, the FASB issued accounting guidance that will change how employers who sponsor defined benefit pension and/or postretirement benefit plans present the net periodic benefit cost in the Statement of Consolidated Comprehensive Income (Loss). This guidance requires employers to present the service cost component of net periodic benefit cost in the same caption within the Statement of Consolidated Comprehensive Income (Loss) as other employee compensation costs from services rendered during the period. All other components of the net periodic benefit cost will be presented separately outside of the operating income caption. This guidance must be applied retrospectively. Ashland elected to early adopt this guidance on October 1, 2017, which resulted in a reclassification of $2 million in income from the selling, general and administrative expense and cost of sales captions to the other net periodic benefit income caption in the Statement of Consolidated Comprehensive Income (Loss) for the three months ended December 31, 2016. The components of net periodic benefits income (costs) reclassified primarily relate to interest cost, expected return on assets, curtailments, settlements and actuarial gains and losses. Ashland did not have to adjust the classification of service cost since it previously was recorded within the caption required by the new guidance. See Note J for additional information on net periodic benefit costs.

In March 2016, the FASB issued new accounting guidance for certain aspects of share-based payments to employees. This guidance requires all excess tax benefits and tax deficiencies related to share-based payments to be recognized as income tax expense in the Statements of Consolidated Comprehensive Income (Loss) instead of additional paid-in capital, and changes the classification of excess tax benefits from a financing activity to an operating activity within the Statements of Condensed Consolidated Cash Flows. This guidance also allows entities to make an accounting policy election to either estimate the number of awards that are expected to vest or account for forfeitures when they occur. In addition, this guidance increases the amount an employer can withhold to cover income taxes on awards and still qualify for equity classification and requires that cash paid by an employer when directly withholding shares for tax-withholding purposes be classified as a financing activity within the Statements of Condensed Consolidated Cash Flows. The guidance became effective for Ashland and was adopted on October 1, 2017. The guidance specifically related to the Statements of Consolidated Comprehensive Income (Loss) was adopted prospectively while the guidance related to the Statements of Condensed Consolidated Cash Flows was adopted retrospectively, as required by the guidance.

NOTE A – SIGNIFICANT ACCOUNTING POLICIES (continued)

Upon adoption, the overall impact on Ashland's Condensed Consolidated Financial Statements was not significant.

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. As discussed further within the Final Separation section of this Note, Ashland completed the distribution of its remaining shares in Valvoline Inc. on May 12, 2017. The new Ashland is a premier global leader in providing specialty chemical solutions to customers in a wide range of consumer and industrial markets. Key markets and applications include pharmaceutical, personal care, food and beverage, architectural coatings, adhesives, automotive, construction and energy.

After completing the IPO on September 28, 2016 and before the distribution of its remaining shares on May 12, 2017, Ashland owned 170 million shares of Valvoline Inc.'s common stock which represented approximately 83% of the total outstanding shares of Valvoline Inc.'s common stock. As a result, Ashland continued to consolidate Valvoline within the Condensed Consolidated Financial Statements up until the distribution of the remaining shares. The resulting outside stockholders' interests in Valvoline Inc., which was approximately 17%, was presented separately as a noncontrolling interest within Ashland's equity in the Condensed Consolidated Balance Sheets up until the distribution of the remaining shares. The amount of consolidated net income attributable to these minority holders is presented as a separate caption on the Statement of Consolidated Comprehensive Income (Loss) for the three months ended December 31, 2016.

Final Separation

Ashland completed the distribution of its remaining 170 million shares of common stock of Valvoline Inc. as a pro rata dividend on shares of Ashland common stock outstanding at the close of business on the record date of May 5, 2017. Based on the shares of Ashland common stock outstanding as of May 5, 2017, the record date for the distribution, each share of Ashland common stock received 2.745338 shares of Valvoline common stock in the distribution. The distribution was recorded at the carrying amount of Valvoline Inc.'s net assets which was a deficit of $187 million as of May 12, 2017, as follows:

NOTE B – VALVOLINE (continued)

(In millions)		May 12 2017
ASSETS		
Current assets		
Cash		179
Accounts receivable, net		385
Inventories		153
Other current assets		24
Total current assets		741
Noncurrent assets		
Net property, plant and equipment		357
Goodwill		329
Equity and other unconsolidated investments		31
Deferred income taxes		391
Other noncurrent assets		93
Total noncurrent assets		1,201
Total assets	$	1,942
LIABILITIES AND EQUITY		
Current liabilities		
Short-term debt		75
Current portion of long-term debt		16
Trade and other payables		353
Other current liabilities		34
Total current liabilities		478
Noncurrent liabilities		
Long-term debt		662
Employee benefit obligations		826
Other long-term liabilities		163
Total noncurrent liabilities		1,651
Total liabilities	$	2,129
Net deficit	$	(187)

A Tax Matters Agreement between Ashland and Valvoline Inc. governs the rights and obligations after the separation regarding certain income taxes and other taxes, including certain tax liabilities and benefits, attributes, returns and contests.

Discontinued Operations Assessment

Valvoline met the criteria to qualify as a discontinued operation and accordingly, its operating results and cash flows for the three months ended December 31, 2016 have been classified as discontinued operations within the Condensed Consolidated Financial Statements. See Note D for more information.

NOTE B – VALVOLINE (continued)

Costs of transaction

Ashland recognized separation costs of $6 million and $28 million for the three months ended December 31, 2017 and 2016, respectively. Of these amounts, $6 million of separation costs directly related to Valvoline and were included within the discontinued operations caption of the Statement of Consolidated Comprehensive Income (Loss) for the three months ended December 31, 2016. Otherwise, separation costs are recorded within the selling, general and administrative expense caption of the Statements of Consolidated Comprehensive Income (Loss).

NOTE C – ACQUISITIONS

Pharmachem

Background

On May 17, 2017, Ashland completed its acquisition of the stock of Pharmachem Laboratories, Inc. (Pharmachem), a leading provider of quality ingredients to the global health and wellness industries and high-value differentiated products to fragrance and flavor houses. With annual revenues of approximately $300 million and 14 manufacturing facilities in the United States and Mexico, New Jersey-based Pharmachem develops, manufactures and supplies custom and branded nutritional and fragrance products. Ashland has included Pharmachem within the Specialty Ingredients reporting segment.

Purchase price allocation

The acquisition was recorded by Ashland using the purchase method of accounting in accordance with applicable U.S. GAAP whereby the total purchase price was allocated to tangible and intangible assets and liabilities acquired based on respective fair values.

The all-cash purchase price of Pharmachem was $680 million which included working capital adjustments of approximately $20 million. The following table summarizes the current preliminary values of the assets acquired and liabilities assumed at the date of acquisition.

Preliminary purchase price allocation (in millions)	At May 17, 2017 As Adjusted
Assets:	
Accounts receivable	52
Inventory	74
Other current assets	4
Intangible assets	330
Goodwill	287
Property, plant and equipment	97
Other noncurrent assets	20
Liabilities:	
Accounts payable	(32)
Deferred tax - net	(138)
Other noncurrent liabilities	(14)
Total purchase price	$ 680

NOTE C – ACQUISITIONS (continued)

As of December 31, 2017, the purchase price allocation for the acquisition was preliminary. Adjustments to the current fair value estimates in the above table may occur as the process conducted for various valuations and assessments, including certain tangible and intangible assets, are finalized. Goodwill was calculated as the excess of the consideration transferred over the net assets recognized and represents the estimated future economic benefits arising from other assets acquired that could not be individually identified and separately recognized. The factors contributing to the recognition of goodwill were based on strategic benefits that are expected to be realized from the acquisition. None of the goodwill is expected to be deductible for income tax purposes.

Intangible assets identified

The purchase price allocation included $330 million of certain definite-lived intangible assets which are being amortized over the estimated useful life in proportion to the economic benefits consumed. The determination of the useful lives is based upon various industry studies, historical acquisition experience, economic factors, and future cash flows of the combined company. In addition, Ashland reviewed certain technological trends and also considered the relative stability in the current Pharmachem customer base.

The following details the total intangible assets identified as of May 17, 2017.

Intangible asset type (in millions)		Value	Weighted-average amortization period (years)
Trademarks and trade names	$	26	15
Intellectual property		68	22
Customer and supplier relationships		236	20
Total	$	330	

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.

As previously discussed in Notes A and B, Ashland completed the distribution of its remaining 170 million shares of common stock of Valvoline Inc. on May 12, 2017. Ashland determined that the Valvoline separation qualified as a discontinued operation, in accordance with U.S. GAAP, since it represents a strategic shift for Ashland and has a major effect on Ashland's operations and financial results. Accordingly, Valvoline's operating results and cash flows for the three months ended December 31, 2016 have been classified as discontinued operations within the Condensed Consolidated Financial Statements.

Components of amounts reflected in the Statements of Consolidated Comprehensive Income (Loss) related to discontinued operations are presented in the following table for the three months ended December 31, 2017 and 2016.

NOTE D – DISCONTINUED OPERATIONS (continued)

	Three months ended December 31	
(In millions)	2017	2016
Income from discontinued operations (net of tax)		
Valvoline	$ 3	$ 75
Total income from discontinued operations (net of tax)	$ 3	$ 75

The following table presents a reconciliation of the historically reported captions within Ashland's Statements of Consolidated Income (Loss) for the income from discontinued operations attributable to Valvoline for the three months ended December 31, 2016.

(In millions)	Three months ended December 31, 2016
Income from discontinued operations attributable to Valvoline	
Sales	$ 489
Cost of sales	(293)
Selling, general and administrative expense	(82)
Research and development expense	(3)
Equity and other income	9
Operating income of discontinued operations	120
Net interest and other financing expense	(10)
Pretax income of discontinued operations	110
Income tax expense	(35)
Income from discontinued operations	$ 75

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

NOTE E – FAIR VALUE MEASUREMENTS (continued)

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, 2017.

(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	$ 601	$ 601	$ 601	$ —	$ —
Restricted investments (a)	345	345	345	—	—
Deferred compensation investments (b)	160	160	—	160	—
Investments of captive insurance company (b)	3	3	3	—	—
Foreign currency derivatives	4	4	—	4	—
Total assets at fair value	$ 1,113	$ 1,113	$ 949	$ 164	$ —
Liabilities					
Foreign currency derivatives	$ 13	$ 13	$ —	$ 13	$ —

(a) Included in restricted investments is $30 million classified in the other current assets caption on 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, 2017.

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	$ 566	$ 566	$ 566	$ —	$ —
Restricted investments (a)	332	332	332	—	—
Deferred compensation investments (b)	158	158	—	158	—
Investments of captive insurance company (b)	3	3	3	—	—
Foreign currency derivatives	2	2	—	2	—
Total assets at fair value	$ 1,061	$ 1,061	$ 901	$ 160	$ —
Liabilities					
Foreign currency derivatives	$ 36	$ 36	$ —	$ 36	$ —

(a) Included in restricted investments is $30 million classified in the other current assets caption on the Condensed Consolidated Balance Sheets.
(b) Included in other noncurrent assets in the Condensed Consolidated Balance Sheets.

Restricted investments

During 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). Ashland placed $335 million of the settlement 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, 2017 and September 30, 2017.

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, 2017 and September 30, 2017:

NOTE E – FAIR VALUE MEASUREMENTS (continued)

(In millions)	December 31 2017	September 30 2017
Original cost	$ 335	$ 335
Accumulated adjustments, net (a)	(38)	(24)
Adjusted cost, beginning of year	297	311
Investment income (b)	2	9
Unrealized gain	45	35
Realized gain	1	2
Settlement funds	5	2
Disbursements	(5)	(27)
Fair value	$ 345	$ 332

(a) The accumulated adjustments include investment income, realized gains, 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 restricted investment available-for-sale securities as of December 31, 2017 and September 30, 2017:

(In millions)	Adjusted Cost	Gross Unrealized Gain	Gross Unrealized Loss	Fair Value
As of December 31, 2017				
Demand Deposit	$ 17	$ —	$ —	$ 17
Equity Mutual Fund	163	45	—	208
Corporate bond Mutual Fund	120	—	—	120
Fair value	$ 300	$ 45	$ —	$ 345
As of September 30, 2017				
Demand Deposit	$ 9	$ —	$ —	$ 9
Equity Mutual Fund	168	34	—	202
Corporate bond Mutual Fund	120	1	—	121
Fair value	$ 297	$ 35	$ —	$ 332

The unrealized gains and losses as of December 31, 2017 and September 30, 2017 were recognized within AOCI. Ashland invests in highly-rated investment grade mutual funds. No other-than-temporary impairment was recognized in AOCI during the three months ended December 31, 2017 and 2016.

The following table presents the investment income and disbursements related to the investments within the portfolio for the three months ended December 31, 2017 and 2016.

(In millions)	Three months ended December 31 2017	2016
Investment income	$ 2	$ 3
Realized gains	1	—
Disbursements	(5)	—

NOTE E – FAIR VALUE MEASUREMENTS (continued)

Deferred compensation investments

Deferred compensation investments consist of Level 2 measurements within the fair value hierarchy which 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 (Loss).

Foreign currency derivatives

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 on 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 net gains and/or losses recognized during the three months ended December 31, 2017 and 2016 within the Statements of Consolidated Comprehensive Income (Loss).

	Three months ended December 31	
(In millions)	2017	2016
Foreign currency derivative loss	$ (11)	$ (8)

The following table summarizes the fair values of the outstanding foreign currency derivatives as of December 31, 2017 and September 30, 2017 included in accounts receivable and accrued expenses and other liabilities of the Condensed Consolidated Balance Sheets.

(In millions)	December 31 2017	September 30 2017
Foreign currency derivative assets	$ 4	$ 2
Notional contract values	425	79
Foreign currency derivative liabilities	$ 13	$ 36
Notional contract values	810	1,601

Other financial instruments

At December 31, 2017 and September 30, 2017, Ashland's long-term debt (including the current portion and excluding debt issuance cost discounts) had a carrying value of $2,614 million and 2,615 million, respectively, compared to a fair value of $2,755 million and $2,768 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 inventories 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.

(In millions)	December 31 2017	September 30 2017
Finished products	$ 421	$ 390
Raw materials, supplies and work in process	256	245
LIFO reserves	(3)	(1)
	$ 674	$ 634

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, 2017 assessment, Ashland determined that its reporting units for the allocation of goodwill are its three reportable segments: Specialty Ingredients, Composites and Intermediates and Solvents. At that time, Ashland determined no additional impairment existed.

The following is a progression of goodwill by reportable segment for the three months ended December 31, 2017.

(In millions)	Specialty Ingredients	Composites	Intermediates and Solvents (a)	Total
Balance as of September 30, 2017	$ 2,315	$ 150	$ —	$ 2,465
Currency translation adjustment	10	—	—	10
Balance as of December 31, 2017	$ 2,325	$ 150	$ —	$ 2,475

(a) As of December 31, 2017, there was accumulated impairment of $171 million related to the Intermediates and Solvents reportable segment.

Other intangible assets

Intangible assets principally consist of trademarks and trade names, intellectual property and customer and supplier 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 25 years, and customer and supplier 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, 2017 and September 30, 2017.

NOTE G – GOODWILL AND OTHER INTANGIBLES (continued)

	December 31, 2017		
(In millions)	Gross carrying amount	Accumulated amortization	Net carrying amount
Definite-lived intangible assets			
Trademarks and trade names	$ 67	$ (22)	$ 45
Intellectual property	758	(340)	418
Customer and supplier relationships	780	(246)	534
Total definite-lived intangible assets	1,605	(608)	997
Indefinite-lived intangible assets			
Trademarks and trade names	301	—	301
Total intangible assets	$ 1,906	$ (608)	$ 1,298

	September 30, 2017		
(In millions)	Gross carrying amount	Accumulated amortization	Net carrying amount
Definite-lived intangible assets			
Trademarks and trade names	$ 67	$ (22)	$ 45
Intellectual property	757	(326)	431
Customer and supplier relationships	777	(235)	542
Total definite-lived intangible assets	1,601	(583)	1,018
Indefinite-lived intangible assets			
Trademarks and trade names	301	—	301
Total intangible assets	$ 1,902	$ (583)	$ 1,319

Amortization expense recognized on intangible assets was $24 million and $19 million for the three months ended December 31, 2017 and 2016, respectively, and is included in the selling, general and administrative expense caption of the Statements of Consolidated Comprehensive Income (Loss). Estimated amortization expense for future periods is $94 million in 2018 (includes three months actual and nine months estimated), $90 million in 2019, $89 million in 2020, $89 million in 2021 and $87 million in 2022. 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 2017	September 30 2017
4.750% notes, due 2022	$ 1,082	$ 1,082
Term Loan B, due 2024	597	599
6.875% notes, due 2043	376	376
Revolving Credit Facility	285	173
Term Loan A, due 2022	250	250
Term Loan A, due 2020	250	250
Accounts receivable securitization	64	56
6.50% junior subordinated notes, due 2029	51	51
Medium-term notes, due 2019, interest of 9.4% at December 31, 2017	5	5
Other (a)	(21)	(23)
Total debt	2,939	2,819
Short-term debt (includes current portion of long-term debt)	(355)	(235)
Long-term debt (less current portion and debt issuance cost discounts)	$ 2,584	$ 2,584

(a) Other includes $24 million and $25 million of debt issuance cost discounts as of December 31, 2017 and September 30, 2017, respectively.

The scheduled aggregate maturities of long-term debt by year (including the current portion and excluding debt issuance costs) are as follows: $5 million remaining in 2018, $11 million in 2019, $269 million in 2020, $56 million in 2021 and $1,279 million in 2022.

Ashland Financing Activities

2017 Credit Agreement

On May 17, 2017, in conjunction with the closing of the Pharmachem acquisition, Ashland entered into a secured credit agreement (the 2017 Credit Agreement) with a group of lenders. The 2017 Credit Agreement provided for (i) a $250 million three-year term loan A facility (the Three-Year TLA Facility), (ii) a $250 million five-year term loan A facility (the Five-Year TLA Facility and together with the Three-Year TLA Facility, the TLA Facilities) and (iii) a $680 million five-year revolving credit facility (including a $125 million letter of credit sublimit) (the 2017 Revolving Credit Facility). Proceeds of borrowings under the TLA Facilities were used solely to finance the acquisition of Pharmachem, while the proceeds of the 2017 Revolving Credit Facility were used to finance, in part, the acquisition of Pharmachem, to refinance the 2015 Senior Credit Agreement and for general corporate purposes. On May 19, 2017, Ashland entered into Amendment No. 1 to the 2017 Credit Agreement, which increased the aggregate commitments under the 2017 Revolving Credit Facility from $680 million to $800 million.

At Ashland's option, loans issued under the 2017 Credit Agreement bear interest at either LIBOR or an alternate base rate, in each case plus the applicable interest rate margin. Loans bear interest at LIBOR plus 1.75% per annum, in the case of LIBOR borrowings, or at the alternate base rate plus 0.75%, in the alternative, through and including the date of delivery of a quarterly compliance certificate and thereafter the interest rate will fluctuate between LIBOR plus 1.375% per annum and LIBOR plus 2.500% per annum (or between the alternate base rate plus 0.375% per annum and the alternate base rate plus 1.500% per annum), based upon Ashland's secured facilities ratings or the consolidated net leverage ratio (as defined in the 2017 Credit Agreement) (whichever yields a lower applicable interest rate margin) at such time. In addition, Ashland was required to pay fees of 0.25% per annum on the daily unused amount of the 2017 Revolving Credit Facility through and including the date of delivery of a compliance certificate, and thereafter the fee rate will fluctuate between 0.175% and 0.40% per annum, based upon Ashland's secured facilities rating or the consolidated net leverage ratio (whichever yields a lower applicable rate). The TLA Facilities may be prepaid at any time without

NOTE H – DEBT (continued)

premium. The Three-Year TLA Facility will not amortize and will be due on May 17, 2020. The Five-Year TLA Facility will not amortize in each of the first, second and third years and will amortize at a rate of 20% per annum in each of the fourth and fifth years (payable in equal quarterly installments), with the outstanding balance of the Five-Year TLA Facility to be paid on May 17, 2022.

On June 14, 2017, Ashland entered into Amendment No. 2 to the 2017 Credit Agreement, which provided for a new $600 million seven-year senior secured term loan B facility (the 2017 TLB Facility). At Ashland's option, loans issued under the 2017 TLB Facility bear interest at either (x) LIBOR plus 2.00% per annum or (y) an alternate base rate plus 1.00% per annum. The 2017 TLB Facility may be prepaid at any time. The 2017 TLB Facility amortizes at a rate of 1.00% per annum (payable in equal quarterly installments) with the outstanding balance to be paid on May 17, 2024.

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 (Loss) 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 three months ended December 31, 2016, 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 (Loss) for the three months ended December 31, 2016.

Remaining borrowing capacity

The borrowing capacity remaining under the 2017 Revolving Credit Facility was $467 million due to an outstanding balance of $285 million, as well as a reduction of $48 million for letters of credit outstanding at December 31, 2017. Ashland's total borrowing capacity at December 31, 2017 was $498 million, which included $31 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, 2017, Ashland is in compliance with all debt agreement covenant restrictions.

The maximum consolidated net leverage ratio permitted under Ashland's most recent credit agreement (the 2017 Credit Agreement) is 4.5. At December 31, 2017, Ashland's calculation of the consolidated net leverage ratio was 3.9.

NOTE H – DEBT (continued)

The minimum required consolidated interest coverage ratio under the 2017 Credit Agreement during its entire duration is 3.0. At December 31, 2017, Ashland's calculation of the interest coverage ratio was 4.6.

NOTE I – INCOME TAXES

Tax Law Changes

The Tax Cuts and Jobs Act (Tax Act) was enacted on December 22, 2017. The Tax Act reduces the U.S. federal corporate tax rate from 35% to 21%, requires companies to pay a one-time transition tax on earnings of certain foreign subsidiaries that were previously tax deferred and creates new taxes on certain foreign sourced earnings. At December 31, 2017, Ashland has not completed the internal accounting assessment for the tax effects of enactment of the Tax Act; however, Ashland determined a reasonable estimate of the effects on our existing deferred tax balances and the one-time transition tax. Ashland recognized a provisional amount for the three months ended December 31, 2017, which is included as a component of income tax expense from continuing operations. Ashland recorded net unfavorable tax adjustments of $16 million primarily related to deferred tax rate changes and a one-time transition tax assessed on foreign cash and unremitted earnings.

Provisional amounts - Deferred and other income tax assets and liabilities

Ashland remeasured certain deferred tax assets and liabilities based on the rates at which they are expected to reverse in the future, which is generally 21%. However, Ashland is still analyzing certain aspects of the Tax Act and refining certain calculations, which could potentially affect the measurement of these balances or potentially give rise to new deferred tax amounts. The provisional amount recorded related to the remeasurement of the deferred tax balance was a favorable tax adjustment of $126 million.

Provisional amounts - Foreign tax effects

The one-time transition tax is based on Ashland's total post-1986 earnings and profits (E&P) of foreign subsidiaries that were previously deferred from U.S. income taxes. Ashland recorded a provisional amount for this one-time transition tax liability of $142 million. Ashland has not yet completed its calculation of the total post-1986 E&P for these foreign subsidiaries. In addition, the transition tax is based in part on the amount of those earnings held in cash and other specified assets. This amount may change when Ashland finalizes the calculation of post-1986 foreign E&P previously deferred from U.S. federal taxation and finalize the amounts held in cash or other specified assets. No additional income taxes have been provided for any remaining undistributed foreign earnings not subject to the transition tax, or any additional outside basis difference inherent in these entities, as these amounts continue to be indefinitely reinvested in foreign operations. Ashland determined that the amount of unrecognized deferred tax liability related to any remaining undistributed foreign earnings not subject to the transition tax and additional outside basis difference in these entities (i.e., basis difference in excess of that subject to the one-time transition tax) is not practicable at this time.

Current fiscal year

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 rate was 200% for the three months ended December 31, 2017 and was primarily impacted by income mix and net unfavorable tax discrete adjustments of $16 million related to the Tax Act.

Prior fiscal year

The overall effective tax benefit rate was 39% for the three months ended December 31, 2016 and was primarily impacted by income mix.

NOTE I – INCOME TAXES (continued)

Unrecognized tax benefits

Changes in unrecognized tax benefits are summarized as follows for the three months ended December 31, 2017.

(In millions)		
Balance at October 1, 2017	$	194
Increases related to positions taken on items from prior years		2
Increases related to positions taken in the current year		3
Balance at December 31, 2017	$	199

From a combination of statute expirations and audit settlements in the next twelve months, Ashland expects a decrease in the amount accrued for uncertain tax positions of between $22 million and $32 million for continuing operations. 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, 2017, Ashland contributed $2 million to its non-U.S. pension plans and zero to its U.S. pension plans. Ashland expects to make additional contributions of approximately $5 million to its non-U.S. plans and $1 million to its U.S. plans during the remainder of 2018.

Plan 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 $2 million recorded within the other net period benefit cost (income) caption on the Statement of Consolidated Comprehensive Income (Loss) for the three months ended December 31, 2016.

NOTE J – EMPLOYEE BENEFIT PLANS (continued)

Components of net periodic benefit costs (income)

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

(In millions)	Pension benefits 2017	Pension benefits 2016	Other postretirement benefits 2017	Other postretirement benefits 2016
Three months ended December 31				
Service cost (a)	$ 2	$ 2	$ 1	$ —
Interest cost (b)	3	2	—	1
Expected return on plan assets (b)	(3)	(3)	—	—
Actuarial gain (b)	—	—	—	(2)
Total net periodic benefit costs (income)	$ 2	$ 1	$ 1	$ (1)

(a) Service cost was not impacted by new accounting guidance adopted in the current quarter and is therefore still classified within the selling, general and administrative expense and cost of sales captions on the Statements of Consolidated Comprehensive Income (Loss). See Note A for additional information.

(b) These components are now classified within the other net periodic benefit income caption on the Statements of Consolidated Comprehensive Income (Loss) due to the adoption of new accounting guidance in the current quarter. See Note A for additional information.

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 other net periodic benefit income caption on the Statements of Consolidated Comprehensive Income (Loss).

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.

NOTE K – LITIGATION, CLAIMS AND CONTINGENCIES (continued)

	Three months ended December 31		Years ended September 30		
(In thousands)	2017	2016	2017	2016	2015
Open claims - beginning of period	54	57	57	60	65
New claims filed	1	—	2	2	2
Claims settled	—	—	(1)	—	—
Claims dismissed	(1)	(1)	(4)	(5)	(7)
Open claims - end of period	54	56	54	57	60

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 2017 quarter, it was determined that the liability for Ashland asbestos-related claims should be increased by $36 million. Total reserves for asbestos claims were $409 million at December 31, 2017 compared to $419 million at September 30, 2017.

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)	2017	2016	2017	2016	2015
Asbestos reserve - beginning of period	$ 419	$ 415	$ 415	$ 409	$ 438
Reserve adjustment	—	—	36	37	—
Amounts paid	(10)	(9)	(32)	(31)	(29)
Asbestos reserve - end of period (a)	$ 409	$ 406	$ 419	$ 415	$ 409

(a) Included $34 million classified in accrued expenses and other liabilities on the Condensed Consolidated Balance Sheets as of December 31, 2017 and September 30, 2017.

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, 2017, Ashland's receivable for recoveries of litigation defense and claim settlement costs from insurers amounted to $151 million (excluding the Hercules receivable for asbestos claims) compared to $155 million at September 30, 2017. During the June 2017 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 $15 million increase in the receivable for probable insurance recoveries.

NOTE K – LITIGATION, CLAIMS AND CONTINGENCIES (continued)

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

	Three months ended December 31		Years ended September 30		
(In millions)	2017	2016	2017	2016	2015
Insurance receivable - beginning of period	$ 155	$ 151	$ 151	$ 150	$ 402
Receivable adjustment	—	—	15	16	(3)
Insurance settlement	—	—	(5)	(4)	(227)
Amounts collected	(4)	(2)	(6)	(11)	(22)
Insurance receivable - end of period (a)	$ 151	$ 149	$ 155	$ 151	$ 150

(a) Included $14 million classified in accounts receivable on the Condensed Consolidated Balance Sheets as of December 31, 2017 and September 30, 2017.

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)	2017	2016	2017	2016	2015
Open claims - beginning of period	12	15	15	20	21
New claims filed	—	—	1	1	1
Claims dismissed	—	—	(4)	(6)	(2)
Open claims - end of period	12	15	12	15	20

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 2017 quarter, it was determined that the liability for Hercules asbestos-related claims should be increased by $16 million. Total reserves for asbestos claims were $315 million at December 31, 2017 compared to $323 million at September 30, 2017.

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

NOTE K – LITIGATION, CLAIMS AND CONTINGENCIES (continued)

	Three months ended December 31		Years ended September 30		
(In millions)	2017	2016	2017	2016	2015
Asbestos reserve - beginning of period	$ 323	$ 321	$ 321	$ 311	$ 329
Reserve adjustment	—	—	16	25	4
Amounts paid	(8)	(3)	(14)	(15)	(22)
Asbestos reserve - end of period (a)	$ 315	$ 318	$ 323	$ 321	$ 311

(a) Included $14 million classified in accrued expenses and other liabilities on the Condensed Consolidated Balance Sheets as of December 31, 2017 and September 30, 2017.

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, 2017 and September 30, 2017, the receivables from insurers amounted to $68 million. During the June 2017 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 $5 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)	2017	2016	2017	2016	2015
Insurance receivable - beginning of period	$ 68	$ 63	$ 63	$ 56	$ 77
Receivable adjustment	—	—	5	7	1
Insurance settlement	—	—	—	—	(22)
Insurance receivable - end of period	$ 68	$ 63	$ 68	$ 63	$ 56

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

NOTE K – LITIGATION, CLAIMS AND CONTINGENCIES (continued)

possible that total future litigation defense and claim settlement costs on an inflated and undiscounted basis could range as high as approximately $660 million for the Ashland asbestos-related litigation (current reserve of $409 million) and approximately $510 million for the Hercules asbestos-related litigation (current reserve of $315 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.

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, 2017, such locations included 82 waste treatment or disposal sites where Ashland has been identified as a potentially responsible party under Superfund or similar state laws, 118 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 36 are being actively remediated.

Ashland's reserves for environmental remediation and related environmental litigation amounted to $168 million at December 31, 2017 compared to $163 million at September 30, 2017, of which $125 million at December 31, 2017 and $121 million at September 30, 2017 were classified in other noncurrent liabilities on the Condensed Consolidated Balance Sheets. The remaining reserves were classified in accrued expenses and other 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, 2017 and 2016.

	Three months ended December 31	
(In millions)	2017	2016
Reserve - beginning of period	$ 163	$ 177
Disbursements	(8)	(7)
Revised obligation estimates and accretion	13	4
Reserve - end of period	$ 168	$ 174

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, 2017 and September 30, 2017, Ashland's recorded receivable for these probable insurance recoveries was $14 million and $15 million, respectively, of which $13 million and $14 million at December 31, 2017 and September 30, 2017, respectively, were classified in other noncurrent assets on the Condensed Consolidated Balance Sheets.

NOTE K – LITIGATION, CLAIMS AND CONTINGENCIES (continued)

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, 2017 and 2016.

	Three months ended December 31	
(In millions)	2017	2016
Environmental expense	$ 12	$ 4
Accretion	1	—
Legal expense	1	2
Total expense	14	6
Insurance receivable (a)	—	—
Total expense, net of receivable activity	$ 14	$ 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 $412 million. The largest reserve for any site is approximately 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, 2017 and September 30, 2017. 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, 2017.

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 0.7 million and 0.9 million at December 31, 2017 and 2016, 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)	2017	2016
Numerator		
Numerator for basic and diluted EPS – Loss from continuing operations	$ (7)	$ (65)
Denominator		
Denominator for basic EPS – Weighted-average common shares outstanding	62	62
Share-based awards convertible to common shares (a)	—	—
Denominator for diluted EPS – Adjusted weighted-average shares and assumed conversions	62	62
EPS from continuing operations attributable to Ashland		
Basic	$ (0.12)	$ (1.05)
Diluted	(0.12)	(1.05)

(a) As a result of the loss from continuing operations attributable to Ashland during the three months ended December 31, 2017 and 2016, the effect of the share-based awards convertible to common shares would be antidilutive. In accordance with U.S. GAAP, 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 was set to 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.

During 2017, Ashland's Board of Directors extended the 2015 stock repurchase program indefinitely. As of December 31, 2017, $500 million of share repurchase authorization remains under the 2015 stock repurchase program.

Stockholder dividends

In May 2017, subsequent to the final distribution of Valvoline Inc.'s common stock, the Board of Directors of Ashland announced a quarterly cash dividend of 22.5 cents per share to eligible shareholders at record which was paid for quarterly dividends in the first quarter of fiscal 2018 and the third and fourth quarters of fiscal 2017. This represented a reduction from the previous quarterly dividend of 39 cents per share which was paid for quarterly dividends in the first and second quarters of fiscal 2017.

Accumulated other comprehensive income (loss)

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

NOTE M – EQUITY ITEMS (continued)

	2017			2016		
(In millions)	Before tax	Tax (expense) benefit	Net of tax	Before tax	Tax (expense) benefit	Net of tax
Three months ended December 31						
Other comprehensive income (loss)						
Unrealized translation gain (loss)	$ 3	$ —	$ 3	$ (150)	$ 4	$ (146)
Pension and postretirement obligation adjustment:						
Amortization of unrecognized prior service credits included in net income (a)	—	—	—	(3)	2	(1)
Net change in available-for-sale securities:						
Unrealized gains during period	11	(2)	9	—	—	—
Reclassification adjustment for realized gains included in net income	(1)	—	(1)	—	—	—
Total other comprehensive income (loss)	$ 13	$ (2)	$ 11	$ (153)	$ 6	$ (147)

(a) For the three months ended December 31, 2016, the amortization of unrecognized prior service credits was related to pension and other postretirement benefit plans that transferred to Valvoline and was classified in the discontinued operations caption on the Statements of Consolidated Comprehensive Income (Loss).

NOTE N – STOCK INCENTIVE PLANS

Ashland has stock incentive plans under which key employees or directors are granted stock appreciation rights (SARs), performance awards or nonvested stock awards. Each program is typically a long-term incentive plan designed to link employee compensation with increased shareholder value or reward superior performance and encourage continued employment with Ashland. Ashland recognizes compensation expense for the grant date fair value of stock-based awards over the applicable vesting period.

The components of Ashland's pretax stock-based compensation expense included in continuing operations are as follows:

	Three months ended December 31	
(In millions)	2017 (a)	2016 (b)
SARs	$ 1	$ 1
Nonvested stock awards	6	4
Performance awards	4	2
	$ 11	$ 7

(a) The three months ended December 31, 2017 included $2 million of expense related to cash-settled nonvested restricted stock awards and $2 million of expense related to cash-settled performance units.
(b) The three months ended December 31, 2016 included $1 million of expense related to cash-settled nonvested restricted stock awards and $1 million of expense related to cash-settled performance units.

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 the three months ended December 31, 2017 and 2016 were 470 thousand and 422 thousand, respectively. As of December 31, 2017, there was $13 million

NOTE N – STOCK INCENTIVE PLANS (continued)

of total unrecognized compensation costs related to SARs. That cost is expected to be recognized over a weighted-average period of 2.4 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. 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.

Stock-settled nonvested stock awards

Nonvested stock awards granted in the form of shares were 142 thousand and 81 thousand for the three months ended December 31, 2017 and 2016, respectively. As of December 31, 2017, there was $12 million of total unrecognized compensation costs related to these nonvested stock awards. That cost is expected to be recognized over a weighted-average period of 2.0 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, 2017, 220 thousand 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 $2 million and $1 million during the three months ended December 31, 2017 and 2016, respectively.

Executive performance incentive and retention program

During 2016, certain executives were granted 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, 2017, there were 60 thousand shares outstanding in connection with these awards, which includes forfeitures and the cumulative value of forfeitable dividends. The expense recognition for these awards commenced upon completing the full separation of Valvoline which occurred on May 12, 2017, as discussed further in Note B, and resulted in $2 million of expense for the three months ended December 31, 2017. As of December 31, 2017, there was $8 million of total unrecognized compensation costs related to these awards.

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.

NOTE N – STOCK INCENTIVE PLANS (continued)

For awards granted in fiscal 2016, 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 fiscal 2017 and 2018, the performance measure used to determine the actual number of performance shares/units issuable upon vesting is the financial performance of Ashland 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 shares/units issuable upon vesting can be potentially increased or decreased based on a TSR performance modifier relative to peers of Ashland. For awards granted in fiscal 2017, each performance unit will be settled in cash based on the fair value of Ashland common stock. For awards granted in fiscal 2018, each performance share/unit is convertible to one share of Ashland Common Stock.

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, 2017 and 2016 were 101 thousand and 56 thousand, respectively. As of December 31, 2017, there was $17 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.

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 on the Statements of Consolidated Comprehensive Income (Loss) that is 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.

Change in Reportable Segments

Subsequent to completing the separation from Valvoline Inc. on May 12, 2017, Ashland's operations are managed by the chief operating decision maker within the following three reportable segments: Specialty Ingredients, Composites and Intermediates and Solvents. As a result, the financial information for the new reportable segments (Composites and Intermediates and Solvents) has been disclosed for all periods presented. Prior to the separation from Valvoline Inc., Composites and Intermediates and Solvents were reporting units included within the previous Ashland Performance Materials reportable segment.

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' end markets 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; makers of nutraceuticals and supplements; manufacturers of paint, coatings and construction materials; packaging and converting; and oilfield service companies. On May 17, 2017, Ashland completed its acquisition of the stock of Pharmachem, a leading provider of quality ingredients to

NOTE O – REPORTABLE SEGMENT INFORMATION (continued)

the global health and wellness industries and high-value differentiated products to fragrance and flavor houses. With 14 manufacturing facilities in the United States and Mexico, New Jersey-based Pharmachem develops, manufactures and supplies custom and branded nutritional and fragrance products. See Note C for more information.

Composites is a global leader in unsaturated polyester resins, vinyl ester resins and gelcoats. The Composites business manufactures and sells a broad range of general-purpose and high-performance grades of unsaturated polyester and vinyl ester resins, gelcoats and low-profile additives for the reinforced plastics industry. The products in the Composites business provide an array of functional properties including corrosion resistance, fire retardance, ultraviolet resistance, water and chemical resistance, high mechanical strength, impact and scratch resistance and high strength-to-weight ratios. Key end markets include transportation, construction, marine and infrastructure. In addition, the business manufactures and sells molten maleic anhydride for the manufacture of a variety of products such as unsaturated polyester resins, copolymers, lubricating oil additives, alkenyl succinic anhydrides, malic acid, fumaric acid and numerous derivative chemicals. Key markets include composites, personal care, dispersants and paper sizing.

Intermediates and Solvents is a leading producer of 1,4 butanediol (BDO) and related derivatives, including tetrahydrofuran and n-methylpyrrolidone. These products are used as chemical intermediates in the production of engineering polymers and polyurethanes, and as specialty process solvents in a wide array of applications including electronics, pharmaceuticals, water filtration membranes and more. Butanediol is also supplied to Ashland's Specialty Ingredients business for use as a raw material.

Unallocated and Other generally includes items such as 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.

Reportable segment results

Results of Ashland's reportable segments are presented based on its management and internal accounting structure. The structure is 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 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 within the other net periodic benefit income caption on the Statements of Consolidated Comprehensive Income (Loss). 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. Significant revisions to Ashland's methodologies are adjusted for all segments on a retrospective basis.

The following table presents various financial information for each reportable segment for the three months ended December 31, 2017 and 2016.

NOTE O – REPORTABLE SEGMENT INFORMATION (continued)

	Three months ended December 31	
(In millions - unaudited)	2017	2016
SALES		
Specialty Ingredients	$ 550	$ 482
Composites	218	165
Intermediates and Solvents	74	57
	$ 842	$ 704
OPERATING INCOME (LOSS)		
Specialty Ingredients	$ 42	$ 40
Composites	18	15
Intermediates and Solvents	8	(7)
Unallocated and other	(29)	(33)
	$ 39	$ 15

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. In addition, Ashland may from time to time make forward-looking statements in its annual reports, 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, 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 impact of acquisitions and/or divestitures Ashland has made or may make, including the acquisition of Pharmachem (including the possibility that Ashland may not realize the anticipated benefits from such transactions); 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 potential that Ashland does not realize all of the expected benefits of the separation of its Valvoline business; the potential that the Tax Cuts and Jobs Act enacted on December 22, 2017 will have a negative impact on Ashland's financial results, and severe weather, natural disasters, cyber events and legal proceedings and claims (including product recalls, 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, which is available on Ashland's website at http://investor.ashland.com or on the SEC's website at http://www.sec.gov. 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.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

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.

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, construction, energy, food and beverage, personal care and pharmaceutical. With approximately 6,500 employees worldwide, Ashland serves customers in more than 100 countries.

Ashland's sales generated outside of North America were 60% for both the three months ended December 31, 2017 and 2016. 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	2017	2016
North America (a)	40%	40%
Europe	34%	31%
Asia Pacific	18%	20%
Latin America & other	8%	9%
	100%	100%

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

Reportable segments

Subsequent to completing the separation from Valvoline Inc., Ashland's businesses are managed within the following three reportable segments: Specialty Ingredients, Composites and Intermediates and Solvents. For further descriptions of each reportable segment, see "Results of Operations – Reportable Segment Review" beginning on page 45.

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	2017	2016
Specialty Ingredients	65%	69%
Composites	26%	23%
Intermediates and Solvents	9%	8%
	100%	100%

KEY DEVELOPMENTS

Business results

Ashland's net loss was $4 million in the current quarter compared to net income of $10 million in the prior year quarter. Ashland's Adjusted EBITDA increased by 25% to $136 million (see U.S. GAAP reconciliation on page 41). The increase in Adjusted EBITDA was primarily due to growth in the Intermediates and Solvents and Specialty Ingredients reportable segments, which reported increases to Adjusted EBITDA of $16 million and $10 million, respectively. The significant improvement in the performance of Intermediates and Solvents was primarily driven by improved product pricing and reduced costs in the current quarter compared to the prior year quarter. Excluding the acquisition of Pharmachem, the increase in profitability for Specialty Ingredients compared to the prior year quarter was primarily driven by improvements in volume and mix and favorable foreign currency exchange.

Tax law changes

The Tax Cuts and Jobs Act (Tax Act) was enacted on December 22, 2017. The Tax Act reduces the U.S. federal corporate tax rate from 35% to 21%, requires companies to pay a one-time transition tax on earnings of certain foreign subsidiaries that were previously tax deferred and creates new taxes on certain foreign sourced earnings. At December 31, 2017, Ashland has not completed the internal accounting assessment for the tax effects of enactment of the Tax Act; however, Ashland determined a reasonable estimate of the effects on our existing deferred tax balances and the one-time transition tax. Ashland recognized a provisional amount for the three months ended December 31, 2017, which is included as a component of income tax expense from continuing operations. Ashland recorded net unfavorable tax adjustments of $16 million primarily related to deferred tax rate changes and a one-time transition tax assessed on foreign cash and unremitted earnings.

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 (loss), 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, which can include pro forma adjustments, divided by sales.
- Adjusted diluted earnings per share (EPS) - income (loss) from continuing operations, adjusted for key items, net of tax, divided by the average outstanding diluted shares for the applicable period.
- 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 assists 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 Adjusted diluted EPS metric enables Ashland to demonstrate what effect key items have on an earnings per diluted share basis by taking income (loss) from continuing operations, adjusted for key items after tax that have been identified in the Adjusted EBITDA table, and dividing by the average outstanding diluted shares for the applicable period. Ashland's management believes this presentation is helpful to illustrate how the key items have impacted this metric during the applicable period.

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, 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.

Although Ashland provides forward-looking guidance for Adjusted EBITDA, Adjusted diluted EPS and free cash flow, Ashland is not reaffirming or providing forward-looking guidance for U.S. GAAP-reported financial measures or a reconciliation of forward-looking non-GAAP financial measures to the most directly comparable U.S. GAAP measure because it is unable to predict with reasonable certainty the ultimate outcome of certain significant items that affect these metrics such as domestic and international economic, political, legislative, regulatory and legal actions. In addition, certain 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 and are difficult to predict with certainty.

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 2017 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 41 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 Note M of the Notes to Consolidated Financial Statements within the 2017 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, 2017 and 2016 included the following:

- Ashland's net loss attributable to Ashland amounted to $4 million and $1 million for the three months ended December 31, 2017 and 2016, respectively, or a loss of $0.07 and $0.01 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. before the final separation occurred on May 12, 2017.
- Discontinued operations, which are reported net of taxes, resulted in income of $3 million and $75 million during the three months ended December 31, 2017 and 2016, respectively. The activity within discontinued operations for the three months ended December 31, 2016 includes the operating results of Valvoline Inc.
- Loss from continuing operations, which excludes results from discontinued operations, amounted to $7 million and $65 million for the three months ended December 31, 2017 and 2016, respectively.
- The effective income tax rate was 200% and 39% for the three months ended December 31, 2017 and 2016, and was impacted by certain discrete items in both the current and prior year quarters. The current quarter rate was primarily impacted by income mix and net unfavorable tax discrete adjustments of $16 million related to the Tax Act.
- Ashland incurred pretax net interest and other financing expense of $31 million and $122 million for the three months ended December 31, 2017 and 2016, respectively. The prior year quarter was impacted by $92 million of net charges associated with debt financing activity.
- Operating income was $39 million and $15 million for the three months ended December 31, 2017 and 2016, 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 $39 million and $15 million for the three months ended December 31, 2017 and 2016, respectively. The current and prior year quarters' operating income included certain key items that were excluded to arrive at Adjusted EBITDA. These key items are summarized as follows:

- $11 million of environmental charges during the three months ended December 31, 2017;

- Separation, restructuring and other costs and accelerated depreciation include the following:
  - $6 million and $22 million of costs related to the separation of Valvoline during the three months ended December 31, 2017 and 2016, respectively;
  - $4 million of accelerated depreciation related to the planned closure of an office building during the three months ended December 31, 2017;
  - $2 million of accelerated depreciation for the termination of a contract at a manufacturing facility during the three months ended December 31, 2017;
  - $1 million of severance and other restructuring charges for the closure of a manufacturing plant during the three months ended December 31, 2017; and
  - $1 million of integration costs related to the acquisition of Pharmachem for the three months ended December 31, 2017;
- Remeasurement gain of $2 million associated with the discontinuation of certain post-employment health and life insurance benefits during the three months ended December 31, 2016; and
- a $5 million charge for a legal reserve during the three months ended December 31, 2016.

Operating income for the three months ended December 31, 2017 and 2016 included depreciation and amortization of $73 million and $68 million, respectively (which excluded accelerated depreciation of $6 million for the three months ended December 31, 2017).

EBITDA and Adjusted EBITDA

EBITDA totaled $114 million and $159 million for the three months ended December 31, 2017 and 2016, 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 previous noncontrolling interest in Valvoline Inc.

(In millions)	Three months ended December 31 2017	2016
Net income (loss)	$ (4)	$ 10
Income tax expense (benefit)	14	(41)
Net interest and other financing expense	31	122
Depreciation and amortization (a)	73	68
EBITDA	114	159
Income from discontinued operations (net of tax)	(3)	(75)
Environmental reserve adjustments	11	—
Separation, restructuring and other costs	8	22
Accelerated depreciation	6	—
Legal reserve	—	5
Gain on post-employment plan remeasurement	—	(2)
Adjusted EBITDA (b)	$ 136	$ 109

(a) Excludes $6 million of accelerated depreciation for the three months ended December 31, 2017.

Diluted EPS and Adjusted Diluted EPS

The following table reflects the U.S. GAAP calculation for the income (loss) from continuing operations adjusted for the cumulative diluted EPS effect for key items after tax that have been identified in the Adjusted EBITDA table in the previous section. The Adjusted diluted EPS for the income (loss) from continuing operations in the following table has been prepared to illustrate the ongoing effects of Ashland's operations since management believes the use of non-GAAP measures on a consolidated and reportable segment basis assists investors in understanding the ongoing operating performance by presenting the financial results between periods on a more comparable basis.

	Three months ended December 31 2017	2016
Diluted EPS from continuing operations (as reported)	$ (0.12)	$ (1.05)
Key items	0.54	1.19
Adjusted diluted EPS from continuing operations (non-GAAP)	$ 0.42	$ 0.14

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, 2017 and 2016.

(In millions)	Three months ended December 31 2017	2016	Change
Sales	$ 842	$ 704	$ 138

The following table provides a reconciliation of the change in sales between the three months ended December 31, 2017 and 2016.

(In millions)		Three months ended December 31, 2017
Acquisitions and divestitures	$	63
Pricing		30
Currency exchange		20
Volume		18
Product mix		7
Change in sales	$	138

Sales for the current quarter increased $138 million compared to the prior year quarter. The acquisition of Pharmachem within the Specialty Ingredients reportable segment increased sales by $58 million, or 8%, while the net impact of other acquisitions and divestitures increased sales by $5 million. Improvements in pricing increased sales by $30 million, or 4%, while favorable foreign currency exchange increased sales by $20 million, or 3%. Higher volumes and changes in product mix increased sales by $18 million and $7 million, respectively.

	Three months ended December 31					
(In millions)		2017		2016		Change
Cost of sales	$	613	$	515	$	98
Gross profit as a percent of sales		27.2%		26.8%		

Fluctuations in cost of sales are driven primarily by raw material prices, volume and changes in product mix, currency exchange, acquisitions and divestitures 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, 2017 and 2016.

(In millions)		Three months ended December 31, 2017
Changes in:		
Acquisitions and divestitures	$	50
Production costs		20
Currency exchange		15
Volume		8
Product mix		4
Severance and other restructuring costs		1
Change in cost of sales	$	98

Cost of sales for the current quarter increased $98 million compared to the prior year quarter. The Pharmachem acquisition increased cost of sales by $44 million, or 9%, while the net impact of other acquisitions and divestitures increased cost of sales by $6 million. Unfavorable production costs and foreign currency exchange increased cost of sales by $20 million, or 4%, and $15 million, or 3%, respectively. Higher volumes and changes in product mix increased cost of sales by $8 million and $4 million, respectively, while the current quarter also included $1 million of severance and other restructuring charges related to a plant closure.

	Three months ended December 31					
(In millions)		2017		2016		Change
Selling, general and administrative expense	$	171	$	157	$	14
As a percent of sales		20.3%		22.3%		

Selling, general and administrative expense for the current quarter increased $14 million compared to the prior year quarter with expenses as a percent of sales decreasing 2.0 percentage points. Key drivers of the fluctuation in selling, general and administrative expense compared to the prior year quarter were:

- $10 million of incremental costs related to Pharmachem's operations and $1 million of Pharmachem integration costs during the current quarter;
- $14 million and $6 million in net environmental-related expenses during the current and prior year quarters, respectively;
- an increase of $7 million due to higher employee-related costs in the current quarter;
- an increase of $5 million due to unfavorable foreign currency exchange in the current quarter;
- $4 million of accelerated depreciation related to the planned closure of an office building during the current quarter;
- $6 million of costs related to the separation of Valvoline during the current quarter compared to $22 million in the prior year quarter; and
- a $5 million charge for a legal reserve during the prior year quarter.

	Three months ended December 31		
(In millions)	2017	2016	Change
Research and development expense	$ 21	$ 20	$ 1

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

	Three months ended December 31		
(In millions)	2017	2016	Change
Equity and other income			
Equity income (a)	$ —	$ —	$ —
Other income	2	3	(1)
	$ 2	$ 3	$ (1)

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

Equity and other income remained relatively consistent with the prior year quarter.

	Three months ended December 31		
(In millions)	2017	2016	Change
Net interest and other financing expense (income)			
Interest expense	$ 34	$ 126	$ (92)
Interest income	(1)	(1)	—
Available-for-sale securities income	(3)	(3)	—
Other financing costs	1	—	1
	$ 31	$ 122	$ (91)

Net interest and other financing expense decreased $91 million during the current quarter compared to the prior year quarter. The current quarter decrease in interest expense was primarily due to the prior year quarter including $92 million of accelerated accretion related to the December 2016 tender offer of the 2029 notes. Available-for-sale securities income of $3 million during both the current and the prior year quarters represents investment income and realized gains related to restricted investments discussed in Note E of the Notes to Condensed Consolidated Financial Statements.

	Three months ended December 31		
(In millions)	2017	2016	Change
Other net periodic benefit income	$ —	$ 2	$ (2)

The income in the prior year quarter primarily related to a $2 million gain on the remeasurement of certain post-employment health and life insurance benefit plans that were discontinued.

	Three months ended December 31		
(In millions)	2017	2016	Change
Net loss on divestitures	$ 1	$ 1	$ —

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

	Three months ended December 31		
(In millions)	2017	2016	Change
Income tax expense (benefit)	$ 14	$ (41)	$ 55
Effective tax rate	200%	39%	

The overall effective tax expense rate was 200% for the three months ended December 31, 2017 and was primarily impacted by the current quarter income mix and net unfavorable tax discrete adjustments of $16 million related to the enactment of the Tax Act. These net unfavorable adjustments primarily included deferred tax rate changes and a one-time transition tax assessed on foreign cash and unremitted earnings.

The overall effective tax benefit rate was 39% for the three months ended December 31, 2016 and was primarily impacted by income mix.

	Three months ended December 31		
(In millions)	2017	2016	Change
Income from discontinued operations (net of tax)			
Valvoline	$ 3	$ 75	$ (72)

As a result of the full separation of Valvoline Inc. on May 12, 2017, the operating results related to Valvoline Inc., including the operating results of the former Valvoline reportable segment, have been reflected as discontinued operations (net of tax) within the Statement of Consolidated Comprehensive Income (Loss). The activity within the current quarter represents subsequent adjustments that were made in conjunction with the Tax Matters Agreement. See Note B for more information on the Tax Matters Agreement. During the prior year quarter, Valvoline's sales and pre-tax operating income included in discontinued operations were $489 million and $120 million, respectively.

	Three months ended December 31		
(In millions)	2017	2016	Change
Net income attributable to noncontrolling interest	$ —	$ 11	$ (11)

Since Ashland's ownership interest in Valvoline Inc. was approximately 83% until the final separation on May 12, 2017, 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 (Loss) 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, 2017 and 2016.

	Three months ended December 31		
(In millions)	2017	2016	Change
Other comprehensive income (loss) (net of taxes)			
Unrealized translation gain (loss)	$ 3	$ (146)	$ 149
Net change in available-for-sale securities	8	—	8
Pension and postretirement obligation adjustment	—	(1)	1
	$ 11	$ (147)	$ 158

Total other comprehensive income, net of tax, for the current quarter increased $158 million compared to the prior year quarter as a result of the following components:

- For the three months ended December 31, 2017, the change in unrealized gain (loss) from foreign currency translation adjustments was a gain of $3 million compared to a loss of $146 million for the three months ended December 31, 2016. The fluctuations in unrealized translation gains and losses are primarily due to translating foreign subsidiary financial statements from local currencies to U.S. Dollars.
- Gains on available-for-sale securities related to restricted investments amounted to $8 million, net of tax, during the three months ended December 31, 2017.
- Pension and postretirement obligation adjustment was $1 million for the three months ended December 31, 2016. This amount related to amortization of unrecognized prior services credits for pension and other postretirement benefit plans and was reclassified into net income during the prior year quarter.

RESULTS OF OPERATIONS – REPORTABLE SEGMENT REVIEW

Subsequent to completing the separation from Valvoline Inc. on May 12, 2017, Ashland's operations are managed within the following three reportable segments: Specialty Ingredients, Composites and Intermediates and Solvents.

Results of Ashland's reportable segments are presented based on its management and internal accounting structure. The structure is 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 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 within the other net periodic benefit income caption on the Statements of Consolidated Comprehensive Income (Loss). 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. Significant revisions to Ashland's methodologies are adjusted for all segments on a retrospective 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 caption to the Statements of Consolidated Comprehensive Income.

The following table discloses sales, operating income, depreciation and amortization and statistical operating information by reportable segment for the three months ended December 31, 2017 and 2016.

	Three months ended December 31	
(In millions)	2017	2016
Sales		
Specialty Ingredients	$ 550	$ 482
Composites	218	165
Intermediates and Solvents	74	57
	$ 842	$ 704
Operating income (loss)		
Specialty Ingredients	$ 42	$ 40
Composites	18	15
Intermediates and Solvents	8	(7)
Unallocated and other	(29)	(33)
	$ 39	$ 15
Depreciation and amortization		
Specialty Ingredients	$ 62	$ 55
Composites	5	6
Intermediates and Solvents	8	7
Unallocated and other	4	—
	$ 79	$ 68
Operating information		
Specialty Ingredients		
Sales per shipping day	$ 9.0	$ 7.9
Metric tons sold (thousands)	73.0	72.6
Gross profit as a percent of sales (a)	31.5%	32.0 %
Composites		
Sales per shipping day	$ 3.6	$ 2.7
Metric tons sold (thousands)	91.2	78.4
Gross profit as a percent of sales (a)	18.4%	21.1 %
Intermediates and Solvents		
Sales per shipping day	$ 1.2	$ 0.9
Metric tons sold (thousands)	32.7	32.2
Gross profit as a percent of sales (a)	21.3%	(0.9)%

(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, 2017 and 2016 were as follows. Ashland includes only U.S. and Canada in its North American designation.

	Three months ended December 31, 2017		
Sales by Geography	Specialty Ingredients	Composites	Intermediates and Solvents
North America	41%	45%	21%
Europe	30%	34%	59%
Asia Pacific	19%	14%	17%
Latin America & other	10%	7%	3%
	100%	100%	100%

	Three months ended December 31, 2016		
Sales by Geography	Specialty Ingredients	Composites	Intermediates and Solvents
North America	39%	48%	23%
Europe	29%	28%	57%
Asia Pacific	22%	16%	17%
Latin America & other	10%	8%	3%
	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' end markets 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; makers of nutraceuticals and supplements; manufacturers of paint, coatings and construction materials; packaging and converting; and oilfield service companies.

On May 17, 2017, Ashland completed its acquisition of the stock of Pharmachem, a leading provider of quality ingredients to the global health and wellness industries and high-value differentiated products to fragrance and flavor houses. With annual revenues of approximately $300 million and 14 manufacturing facilities in the United States and Mexico, New Jersey-based Pharmachem develops, manufactures and supplies custom and branded nutritional and fragrance products. See Note C within the Notes to Condensed Consolidated Financial Statements for more information.

Additionally, Ashland completed the transfer of its ownership interest in a consolidated joint venture during the third quarter of fiscal 2017.

December 2017 quarter compared to December 2016 quarter

Specialty Ingredients' sales increased $68 million to $550 million in the current quarter. The acquisition of Pharmachem increased sales by $58 million, or 12%. Favorable foreign currency exchange increased sales by $10 million, while volume and mix combined to increase sales by $9 million. In addition, improved product pricing increased sales by $2 million. These increases were partially offset by a decrease of $11 million from divestitures which was primarily related to the transfer of ownership interest in a consolidated joint venture.

Gross profit during the current quarter increased $19 million compared to the prior year quarter. The acquisition of Pharmachem increased gross profit by $14 million while improved volume and mix combined to increase gross profit by $9 million. Favorable foreign currency exchange increased gross profit by $4 million. These increases were partially offset by the net impact of pricing and costs which decreased gross profit by $6 million and the joint venture divestiture which decreased gross profit by $2 million. In total, gross profit margin during the current quarter decreased 0.5 percentage points as compared to the prior year quarter to 31.5%.

Selling, general and administrative expenses (which include research and development expenses throughout the reportable segment discussion and analysis) increased $15 million in the current quarter as compared to the prior year quarter largely due to incremental costs of $10 million related to Pharmachem's operations. The remaining increase in selling, general and administrative expenses was primarily due to higher employee-related costs and unfavorable foreign currency exchange. Equity and other income decreased $2 million compared to the prior year quarter.

Operating income totaled $42 million for the current quarter compared to $40 million in the prior year quarter. Current quarter EBITDA increased $7 million to $102 million, while Adjusted EBITDA increased $10 million to $105 million. Adjusted EBITDA margin decreased 0.6 percentage points in the current quarter to 19.1%.

EBITDA and Adjusted EBITDA reconciliation

The following EBITDA presentation for the three months ended December 31, 2017 and 2016 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 key items within the current quarter relate to $2 million of accelerated depreciation for the termination of a contract at a manufacturing facility and $1 million of severance and other restructuring charges for the closure of a manufacturing plant. There were no unusual or key items that affected comparability for EBITDA during the prior year quarter.

	Three months ended December 31	
(In millions)	2017	2016
Operating income	$ 42	$ 40
Depreciation and amortization (a)	60	55
EBITDA	102	95
Accelerated depreciation	2	—
Severance and other restructuring costs	1	—
Adjusted EBITDA	$ 105	$ 95

(a) Excludes $2 million of accelerated depreciation for the three months ended December 31, 2017.

Composites

Composites is a global leader in unsaturated polyester resins, vinyl ester resins and gelcoats. The Composites business manufactures and sells a broad range of general-purpose and high-performance grades of unsaturated polyester and vinyl ester resins, gelcoats and low-profile additives for the reinforced plastics industry. The products in the Composites business provide an array of functional properties including corrosion resistance, fire retardance, ultraviolet resistance, water and chemical resistance, high mechanical strength, impact and scratch resistance and high strength-to-weight ratios. Key end markets include transportation, construction, marine and infrastructure. In addition, the business manufactures and sells molten maleic anhydride for the manufacture of a variety of products such as unsaturated polyester resins, copolymers, lubricating oil additives, alkenyl succinic anhydrides, malic acid, fumaric acid and numerous derivative chemicals. Key markets include composites, personal care, dispersants and paper sizing.

December 2017 quarter compared to December 2016 quarter

Composites' sales increased $53 million to $218 million in the current quarter. Improved product pricing increased sales by $19 million, or 12%. The acquisition of an unsaturated polyester resins manufacturing facility in the third of quarter of fiscal 2017 increased sales by $16 million, or 10%. Improved volume and mix increased sales by $12 million, or 7%, as metric tons sold increased to 91.2 thousand in the current quarter, while favorable foreign currency exchange increased sales by $6 million, or 4%.

Gross profit increased $5 million in the current quarter compared to the prior year quarter. Changes in volume and mix combined to increase gross profit by $3 million, while the facility acquisition and favorable foreign currency exchange each increased gross profit by $1 million. The net effects of pricing and raw material increases did not impact gross profit in the current quarter. In total, gross profit margin decreased 2.7 percentage points as compared to the prior year quarter to 18.4%.

Selling, general and administrative expenses during the current quarter increased $3 million compared to the prior year quarter primarily due to higher employee-related costs and unfavorable foreign currency exchange. Equity and other income increased $1 million compared to the prior year quarter.

Operating income totaled $18 million in the current quarter compared to $15 million in the prior year quarter. EBITDA increased $2 million to $23 million in the current quarter, while EBITDA margin decreased 2.1 percentage points in the current quarter to 10.6%.

EBITDA and Adjusted EBITDA reconciliation

The following EBITDA presentation for the three months ended December 31, 2017 and 2016 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 Composites. 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)	2017	2016
Operating income	$ 18	$ 15
Depreciation and amortization	5	6
EBITDA	$ 23	$ 21

Intermediates and Solvents

Intermediates and Solvents is a leading producer of 1,4 butanediol (BDO) and related derivatives, including tetrahydrofuran and n-methylpyrrolidone. These products are used as chemical intermediates in the production of engineering polymers and polyurethanes, and as specialty process solvents in a wide array of applications including electronics, pharmaceuticals, water filtration membranes and more. Butanediol is also supplied to Ashland's Specialty Ingredients business for use as a raw material.

December 2017 quarter compared to December 2016 quarter

Intermediates and Solvents' sales increased $17 million to $74 million in the current quarter. Higher product pricing increased sales by $9 million while higher volumes and favorable foreign currency exchange each increased sales by $4 million.

Gross profit increased $16 million during the current quarter compared to the prior year quarter. Lower facility turn around costs in the current quarter resulted in an $8 million increase in gross profit as a result of a significant planned plant shutdown that occurred in the prior year quarter. The net impact of pricing and costs increased gross profit by $7 million primarily due to improvements in product pricing. Higher volumes contributed to a $1 million increase in gross profit. In total, gross profit margin increased 22.2 percentage points as compared to the prior year quarter to 21.3%.

Selling, general and administrative expenses increased by $1 million compared to the prior year quarter.

Operating income totaled $8 million in the current quarter as compared to a loss of $7 million in the prior year quarter. EBITDA and EBITDA margin in the current quarter increased to $16 million and 21.6%, respectively.

EBITDA and Adjusted EBITDA reconciliation

The following EBITDA presentation for the three months ended December 31, 2017 and 2016 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 Intermediates and Solvents. 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)	2017	2016
Operating income (loss)	$ 8	$ (7)
Depreciation and amortization	8	7
EBITDA	$ 16	$ —

Unallocated and other

The following table summarizes the key components of the Unallocated and other segment's operating loss for the three months ended December 31, 2017 and 2016.

	Three months ended December 31	
(In millions)	2017	2016
Restructuring activities (includes separation, severance, integration and stranded divestiture costs)	$ 14	$ 24
Environmental expense for divested businesses	13	4
Legal reserve	—	5
Other expense	2	—
Total expense	$ 29	$ 33

December 2017 quarter compared to December 2016 quarter

Unallocated and other recorded expense of $29 million and $33 million for the three months ended December 31, 2017 and 2016, respectively. The unallocated items for the current and prior year quarters included charges for restructuring activities of $14 million and $24 million, respectively. Restructuring activities included $6 million and $22 million of costs related to the separation of Valvoline and stranded divestiture costs of $3 million and $2 million during the current and prior year quarters, respectively. The current quarter also included $4 million of accelerated depreciation related to the planned closure of an office building and $1 million of integration charges related to the acquisition of Pharmachem.

The remaining unallocated items during the current quarter primarily included $13 million for environmental-related expenses while the remaining items during the prior year quarter primarily included $5 million of expense for a legal reserve and $4 million for environmental reserve adjustments.

FINANCIAL POSITION

Liquidity

Ashland had $601 million in cash and cash equivalents as of December 31, 2017, of which $581 million was held by foreign subsidiaries and had no significant limitations that would prohibit remitting the funds to satisfy corporate obligations. In certain circumstances, if such amounts were repatriated to the United States, additional taxes might 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 taxes would need to be accrued. However, due to the recent Tax Act, Ashland will be reassessing this position in future quarters.

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, 2017 and 2016.

	Three months ended December 31	
(In millions)	2017	2016
Cash provided (used) by:		
Operating activities from continuing operations	$ (24)	$ (60)
Investing activities from continuing operations	(24)	(31)
Financing activities from continuing operations	99	(434)
Discontinued operations	(16)	50
Effect of currency exchange rate changes on cash and cash equivalents	—	(9)
Net increase (decrease) in cash and cash equivalents	$ 35	$ (484)

Operating activities

The following discloses the cash flows associated with Ashland's operating activities for the three months ended December 31, 2017 and 2016.

(In millions)	Three months ended December 31 2017	2016
Cash flows provided (used) by operating activities from continuing operations		
Net income (loss)	$ (4)	$ 10
Income from discontinued operations (net of tax)	(3)	(75)
Adjustments to reconcile income from continuing operations to cash flows from operating activities		
Depreciation and amortization	79	68
Original issue discount and debt issuance cost amortization	2	94
Deferred income taxes	8	2
Stock based compensation expense	7	5
Gain on early retirement of debt	—	(3)
Realized gain and investment income on available-for-sale securities	(3)	(3)
Net loss on divestitures	1	1
Pension contributions	(2)	(1)
Gain on post-employment plan remeasurement	—	(2)
Change in operating assets and liabilities (a)	(109)	(156)
Total cash flows used by operating activities from continuing operations	$ (24)	$ (60)

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

Cash flows used from operating activities from continuing operations, a major source of Ashland's liquidity, amounted to cash inflows of $24 million and $60 million in the current and prior year quarters, respectively.

Operating Activities - Operating Assets and Liabilities

The cash results during each quarter are primarily driven by net income (loss), excluding discontinued operation results, adjusted for certain non-cash items including depreciation and amortization (including original issue discount and debt issuance cost amortization), 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 $96 million and $71 million for the three months ended December 31, 2017 and 2016, respectively, and were driven by the following:

- Accounts receivable - There were cash inflows of $15 million and $9 million during the current and prior year quarters, respectively, which were primarily due to collections in excess of sales during the first quarter of each fiscal year.
- Inventory - The current quarter had a cash outflow of $39 million compared to a cash inflow of $15 million during the prior year quarter, which were primarily due to sales volumes and inventory management strategies.
- Trade and other payables - There were cash outflows of $72 million and $95 million during the current and prior year quarters, respectively, which were primarily driven by seasonal fluctuations in trade payables and incentive compensation payouts from the prior year paid during the first quarter of each fiscal year. Additionally, the prior year quarter included the payment of certain Valvoline separation costs that were incurred in the preceding fiscal year.

The remaining outflows within changes in operating assets and liabilities of $13 million and $85 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 Activities - Summary

Operating cash flows for the current quarter included a loss from continuing operations of $7 million, noncash adjustments of $79 million for depreciation and amortization and $2 million for debt issuance cost amortization.

Operating cash flows for the prior year quarter included a loss from continuing operations of $65 million and noncash adjustments of $68 million for depreciation and amortization and $94 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.

Investing activities

The following discloses the cash flows associated with Ashland's investing activities for the three months ended December 31, 2017 and 2016.

	Three months ended December 31	
(In millions)	2017	2016
Cash flows provided (used) by investing activities from continuing operations		
Additions to property, plant and equipment	$ (24)	$ (33)
Proceeds from disposal of property, plant and equipment	1	—
Proceeds from sale of operations	1	—
Net purchase of funds restricted for specific transactions	(5)	(2)
Reimbursements from restricted investments	5	—
Proceeds from sales of available-for-sale securities	5	—
Purchases of available-for-sale securities	(5)	—
Proceeds from the settlement of derivative instruments	—	4
Payments for the settlement of derivative instruments	(2)	—
Total cash flows used by investing activities from continuing operations	$ (24)	$ (31)

Cash used by investing activities was $24 million and $31 million for the current and prior year quarters, respectively. The significant cash investing activities for the current quarter primarily related to cash outflows of $24 million for property additions compared to $33 million in the prior year quarter.

Financing activities

The following discloses the cash flows associated with Ashland's financing activities for the three months ended December 31, 2017 and 2016.

(In millions)	Three months ended December 31 2017	2016
Cash flows provided (used) by financing activities from continuing operations		
Repayment of long-term debt	$ (2)	$ (239)
Premium on long-term debt repayment	—	(5)
Proceeds (repayment) from short-term debt	120	(154)
Debt issuance costs	—	(4)
Cash dividends paid	(14)	(24)
Stock based compensation employee withholding taxes paid in cash	(5)	(8)
Total cash flows provided (used) by financing activities from continuing operations	$ 99	$ (434)

Cash flows generated by financing activities was $99 million for the current quarter as compared to cash used of $434 million for the prior year quarter.

Significant cash financing activities for the current quarter included short-term debt net cash inflows of $120 million related to debt outstanding on the 2017 Revolving Credit Facility and the accounts receivable securitization. The current quarter included cash dividends paid of $0.225 per share, for a total of $14 million.

Significant cash financing activities for the prior year quarter included cash outflows of $239 million related to the repayments of a portion of the 2029 notes, 2022 notes and 2018 notes. Additionally, the prior year quarter included short-term debt net repayments of $154 million, which was primarily related to the $150 million full repayment of a term loan held by a foreign subsidiary. The prior year quarter included cash dividends paid of $0.39 per share, for a total of $24 million.

The following discloses the cash flows associated with Ashland's discontinued operations for the three months ended December 31, 2017 and 2016.

(In millions)	Three months ended December 31 2017	2016
Cash used by discontinued operations		
Operating cash flows	$ (16)	$ 70
Investing cash flows	—	(10)
Financing cash flows	—	(10)
Total cash provided (used) by discontinued operations	$ (16)	$ 50

Cash flows for discontinued operations in the current quarter primarily related to previously divested businesses, including net payments of asbestos and environmental liabilities.

Cash flows for discontinued operations in the prior year quarter primarily relate to net cash inflows of $62 million related to the activity of Valvoline Inc. The remaining cash flows in the prior year quarter related 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 2017		2016	
Cash flows provided by operating activities from continuing operations	$	(24)	$	(60)
Adjustments:				
Additions to property, plant and equipment		(24)		(33)
Free cash flows (a)	$	(48)	$	(93)

(a) Includes $23 million and $29 million of restructuring payments for the three months ended December 31, 2017 and 2016, respectively.

At December 31, 2017, working capital (current assets minus current liabilities, excluding long-term debt due within one year) amounted to $967 million, compared to $941 million at September 30, 2017. Liquid assets (cash, cash equivalents and accounts receivable) amounted to 119% and 122% of current liabilities at December 31, 2017 and September 30, 2017, respectively.

The following summary reflects Ashland's cash and unused borrowing capacity as of December 31, 2017 and September 30, 2017.

(In millions)	December 31 2017		September 30 2017	
Cash and cash equivalents	$	601	$	566
Unused borrowing capacity				
2017 Revolving Credit Facility	$	467	$	579
Accounts receivable securitization facility		31		35

The borrowing capacity remaining under the 2017 Revolving Credit Facility was $467 million due to an outstanding balance of $285 million, as well as a reduction of $48 million for letters of credit outstanding at December 31, 2017. In total, Ashland's available liquidity position, which includes cash, the revolving credit facility and the accounts receivable securitization facility, was $1,099 million at December 31, 2017, compared to $1,180 million at September 30, 2017.

Capital resources

Debt

The following summary reflects Ashland's debt as of December 31, 2017 and September 30, 2017.

(In millions)	December 31 2017		September 30 2017	
Short-term debt (includes current portion of long-term debt)	$	355	$	235
Long-term debt (including current portion and debt issuance cost discounts) (a)		2,584		2,584
Total debt	$	2,939	$	2,819

(a) Includes $24 million and $25 million of debt issuance cost discounts as of December 31, 2017 and September 30, 2017, respectively.

The current portion of long-term debt was $6 million at December 31, 2017. Debt as a percent of capital employed was 46% at December 31, 2017 and 45% at September 30, 2017. At December 31, 2017, Ashland's total debt had an outstanding principal balance of $3,015 million, discounts of $52 million, and debt issuance costs of $24 million. The scheduled aggregate maturities of long-term debt by year (including the current portion and excluding debt issuance costs) are as follows: $5 million remaining in 2018, $11 million in 2019, $269 million in 2020, $56 million in 2021 and $1,279 million in 2022.

Financing Activities

2017 Credit Agreement

On May 17, 2017, in conjunction with the closing of the Pharmachem acquisition, Ashland entered into a secured credit agreement (the 2017 Credit Agreement) with a group of lenders. The 2017 Credit Agreement provided for (i) a $250 million three-year term loan A facility (the Three-Year TLA Facility), (ii) a $250 million five-year term loan A facility (the Five-Year TLA Facility and together with the Three-Year TLA Facility, the TLA Facilities) and (iii) a $680 million five-year revolving credit facility (including a $125 million letter of credit sublimit) (the 2017 Revolving Credit Facility). Proceeds of borrowings under the TLA Facilities were used solely to finance the acquisition of Pharmachem, while the proceeds of the 2017 Revolving Credit Facility were used to finance, in part, the acquisition of Pharmachem, to refinance the 2015 Senior Credit Agreement and for general corporate purposes. On May 19, 2017, Ashland entered into Amendment No. 1 to the 2017 Credit Agreement, which increased the aggregate commitments under the 2017 Revolving Credit Facility from $680 million to $800 million.

At Ashland's option, loans issued under the 2017 Credit Agreement bear interest at either LIBOR or an alternate base rate, in each case plus the applicable interest rate margin. Loans bear interest at LIBOR plus 1.75% per annum, in the case of LIBOR borrowings, or at the alternate base rate plus 0.75%, in the alternative, through and including the date of delivery of a quarterly compliance certificate and thereafter the interest rate will fluctuate between LIBOR plus 1.375% per annum and LIBOR plus 2.500% per annum (or between the alternate base rate plus 0.375% per annum and the alternate base rate plus 1.500% per annum), based upon Ashland's secured facilities ratings or the consolidated net leverage ratio (as defined in the 2017 Credit Agreement) (whichever yields a lower applicable interest rate margin) at such time. In addition, Ashland was required to pay fees of 0.25% per annum on the daily unused amount of the 2017 Revolving Credit Facility through and including the date of delivery of a compliance certificate, and thereafter the fee rate will fluctuate between 0.175% and 0.40% per annum, based upon Ashland's secured facilities rating or the consolidated net leverage ratio (whichever yields a lower applicable rate). The TLA Facilities may be prepaid at any time without premium. The Three-Year TLA Facility will not amortize and will be due on May 17, 2020. The Five-Year TLA Facility will not amortize in each of the first, second and third years and will amortize at a rate of 20% per annum in each of the fourth and fifth years (payable in equal quarterly installments), with the outstanding balance of the Five-Year TLA Facility to be paid on May 17, 2022.

On June 14, 2017, Ashland entered into Amendment No. 2 to the 2017 Credit Agreement, which provided for a new $600 million seven-year senior secured term loan B facility (the 2017 TLB Facility). At Ashland's option, loans issued under the 2017 TLB Facility bear interest at either (x) LIBOR plus 2.00% per annum or (y) an alternate base rate plus 1.00% per annum. The 2017 TLB Facility may be prepaid at any time. The 2017 TLB Facility amortizes at a rate of 1.00% per annum (payable in equal quarterly installments) with the outstanding balance to be paid on May 17, 2024.

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 (Loss) 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 three months ended December 31, 2016, 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 (Loss) for the three months ended December 31, 2016.

Ashland credit ratings

Ashland's corporate credit rating with Standard & Poor's is BB, while Moody's Investor Services is Ba2. Moody's Investor Services and Standard & Poor's outlooks both 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

Ashland's most recent credit agreement (the 2017 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, 2017, Ashland is in compliance with all debt agreement covenant restrictions under the 2017 Credit Agreement.

The maximum consolidated net leverage ratio permitted under the 2017 Credit Agreement is 4.5. The 2017 Credit Agreement defines the consolidated net 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 2017 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 and proposed or actual acquisitions and divestitures, 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 on page 41. 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 minimum required consolidated interest coverage ratio under the 2017 Credit Agreement is 3.0. The 2017 Credit Agreement defines the consolidated interest coverage ratio as the ratio of Covenant Adjusted EBITDA to consolidated interest charges for any measurement period.

At December 31, 2017, Ashland's calculation of the consolidated net leverage ratio was 3.9, which is below the maximum consolidated ratio permitted under the 2017 Credit Agreement of 4.5. At December 31, 2017, Ashland's calculation of the consolidated interest coverage ratio was 4.6, which exceeds the minimum required consolidated ratio of 3.0.

The average change in Covenant Adjusted EBITDA of $100 million would have an approximate 0.7x effect on the consolidated net leverage ratio and a 0.8x effect on the consolidated interest coverage ratio. The average 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, capital expenditures, working capital needs and tax payments and receipts.

Total equity

Total equity decreased $7 million since September 30, 2017 to $3,399 million at December 31, 2017. The decrease of $7 million was due to cash dividends of $14 million and a net loss of $4 million, partially offset by an $8 million net increase in available-for-sale securities and $3 million related to deferred translation gains.

Stock repurchase program

In April 2015, Ashland's Board of Directors approved a $1 billion share repurchase authorization that was set to 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.

During 2017, Ashland's Board of Directors extended the 2015 stock repurchase program indefinitely. As of December 31, 2017, $500 million of share repurchase authorization remains under the 2015 stock repurchase program.

Stockholder dividends

In May 2017, subsequent to the final distribution of Valvoline Inc.'s common stock, the Board of Directors of Ashland announced a quarterly cash dividend of 22.5 cents per share to eligible shareholders at record which was paid for quarterly dividends in the first quarter of fiscal 2018 and the third and fourth quarters of fiscal 2017. This represented a reduction from the previous quarterly dividend of 39 cents per share which was paid for quarterly dividends in the first and second quarters of fiscal 2017.

Capital expenditures

Capital expenditures were $24 million for the three months ended December 31, 2017 and averaged approximately $217 million during the last three fiscal years.

Contractual obligations and commitments

As a result of the Tax Act that was enacted during December 2017, Ashland has currently estimated and identified that the one-time transition tax related to the new law is estimated to be approximately $160 million payable over eight years, with the first payment of approximately $13 million due during the first quarter of fiscal year 2019. Ashland will continue to reassess this estimate in future periods.

In addition, during January 2018, Ashland repatriated approximately $300 million in cash that was used to repay existing debt. There were no other significant changes to the contractual obligations table as presented at September 30, 2017.

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), 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, 2017. 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, 2017.

OUTLOOK

Fiscal Year 2018

Ashland updated its financial outlook for fiscal 2018 as shown in the table below.

	Prior FY 2018 Outlook	Updated FY 2018 Outlook
Adjusted EBITDA		
Specialty Ingredients	$560 - $590 million	No change
Composites	$85 - $95 million	No change
Intermediates & Solvents	$40 - $50 million	No change
Unallocated and other	($35 - $45 million)	No change
Key Operating Metrics		
Free cash flow	>$220 million	No change
Adjusted diluted EPS	$3.20 - $3.40	$2.90 - $3.10
Corporate Items		
Depreciation & amortization	~$290 million	No change
Interest expense	$125 - $135 million	No change
Effective tax rate	8 - 13%	16 - 20%
Capital expenditures	$195 - $205 million	No change
Diluted share count	~64 million	No change

Second Quarter of 2018

For the second quarter of fiscal 2018, Ashland expects Adjusted diluted EPS to be in the range of $0.80-$0.90 per diluted share. This estimate assumes an effective tax rate of 18% based on the new U.S. tax legislation.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Ashland's market risk exposure at December 31, 2017 is generally consistent with the types of market risk exposures presented in Ashland's Annual Report on Form 10-K for the fiscal year ended September 30, 2017.

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, 2017.

Changes in Internal Control over Financial Reporting - During the three months ended December 31, 2017, 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.

During the June 2017 quarter, Ashland completed its purchase of Pharmachem. Although management believes appropriate internal controls and procedures have been maintained, Pharmachem’s controls and procedures for the recording, processing, and summarizing of financial information have not been fully evaluated by Ashland’s management as of December 31, 2017. As such, there is a risk that deficiencies may exist and not yet be identified that could constitute significant deficiencies or in the aggregate, a material weakness related to Pharmachem's businesses.

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, 2017, 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 82 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 USEPA 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 USEPA released the FFS. The CPG

submitted the Draft RI/FS Report on April 30, 2015. The USEPA 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 USEPA 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, 2017. 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, 2017.

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, 2017.

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

Share repurchase activity during the three months ended December 31, 2017 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)(a)
October 1, 2017 to October 31, 2017	—	$ —	—	$ 500
November 1, 2017 to November 30, 2017:				
Employee Tax Withholdings	16,465 (b)	66.56	—	500
December 1, 2017 to December 31, 2017	—	—	—	500
Total	16,465		—	$ 500

(a) 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. In September 2017, the Company's Board of Directors renewed the program for the remaining $500 million. 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, 2017, $500 million remains available for repurchase under this authorization.

(b) 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*	Amendment No. 1 to the Ashland Global Holdings Inc. Non-Qualified Defined Contribution Plan
10.2	Ashland Global Holdings Inc. 2018 Omnibus Incentive Compensation Plan (filed as Exhibit 10.1 to Ashland's Form 8-K filed on January 26, 2018 (SEC File No. 333-211719), and incorporated herein by reference).
10.3	Form of Stock-Settled Restricted Stock Unit Award Agreement under the Ashland Global Holdings Inc. 2018 Omnibus Incentive Compensation Plan (filed as Exhibit 10.2 to Ashland's Form 8-K filed on January 26, 2018 (SEC File No. 333-211719), and incorporated herein by reference).
10.4	Form of Restricted Stock Award Agreement under the Ashland Global Holdings Inc. 2018 Omnibus Incentive Compensation Plan (filed as Exhibit 10.3 to Ashland's Form 8-K filed on January 26, 2018 (SEC File No. 333-211719), and incorporated herein by reference).
10.5	Form of Stock Appreciation Rights Award Agreement under the Ashland Global Holdings Inc. 2018 Omnibus Incentive Compensation Plan (filed as Exhibit 10.4 to Ashland's Form 8-K filed on January 26, 2018 (SEC File No. 333-211719), and incorporated herein by reference).
10.6	Form of Performance Unit Award Agreement under the Ashland Global Holdings Inc. 2018 Omnibus Incentive Compensation Plan (filed as Exhibit 10.5 to Ashland's Form 8-K filed on January 26, 2018 (SEC File No. 333-211719), and incorporated herein by reference).
10.7	Form of Cash-Settled Restricted Stock Unit Award Agreement under the Ashland Global Holdings Inc. 2018 Omnibus Incentive Compensation Plan (filed as Exhibit 10.6 to Ashland's Form 8-K filed on January 26, 2018 (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, 2017 and December 31, 2016; (ii) Condensed Consolidated Balance Sheets at December 31, 2017 and September 30, 2017; (iii) Statements of Consolidated Equity at December 31, 2017; (iv) Statements of Condensed Consolidated Cash Flows for the three months ended December 31, 2017 and December 31, 2016; 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 30, 2018

/s/ J. Kevin Willis

J. Kevin Willis
Senior Vice President and Chief Financial Officer
(on behalf of the Registrant and as principal financial officer)