

**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 June 30, 2019

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 every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit 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	<input checked="" type="checkbox"/>	Accelerated Filer	<input type="checkbox"/>
Non-Accelerated Filer	<input type="checkbox"/>	Smaller Reporting Company	<input type="checkbox"/>
		Emerging Growth Company	<input type="checkbox"/>

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 June 30, 2019, there were 60,522,411 shares of Registrant's Common Stock outstanding.

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, par value \$.01 per share	ASH	New York Stock Exchange

PART I - FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

**ASHLAND GLOBAL HOLDINGS INC. AND CONSOLIDATED SUBSIDIARIES
STATEMENTS OF CONSOLIDATED COMPREHENSIVE INCOME (LOSS)**

(In millions except per share data - unaudited)	Three months ended		Nine months ended	
	June 30		June 30	
	2019	2018	2019	2018
Sales	\$ 641	\$ 668	\$ 1,884	\$ 1,922
Cost of sales	434	439	1,327	1,290
Gross profit	207	229	557	632
Selling, general and administrative expense	150	181	429	481
Research and development expense	17	18	51	55
Equity and other income	3	—	3	2
Operating income	43	30	80	98
Net interest and other expense	21	28	73	78
Other net periodic benefit income	—	—	17	1
Net income (loss) on divestitures	—	(2)	(3)	(3)
Income from continuing operations before income taxes	22	—	21	18
Income tax expense (benefit)	(1)	(11)	24	(3)
Income (loss) from continuing operations	23	11	(3)	21
Income from discontinued operations (net of income taxes)	43	25	97	83
Net income	\$ 66	\$ 36	\$ 94	\$ 104

PER SHARE DATA

Basic earnings per share - Note L

Income (loss) from continuing operations	\$ 0.38	\$ 0.18	\$ (0.05)	\$ 0.33
Income from discontinued operations	0.68	0.39	1.55	1.34
Net income	\$ 1.06	\$ 0.57	\$ 1.50	\$ 1.67

Diluted earnings per share - Note L

Income (loss) from continuing operations	\$ 0.37	\$ 0.18	\$ (0.05)	\$ 0.32
Income from discontinued operations	0.68	0.38	1.55	1.32
Net income	\$ 1.05	\$ 0.56	\$ 1.50	\$ 1.64

COMPREHENSIVE INCOME (LOSS)

Net income	\$ 66	\$ 36	\$ 94	\$ 104
Other comprehensive income (loss), net of tax				
Unrealized translation gain (loss)	3	(140)	(37)	(82)
Pension and postretirement obligation adjustment	—	—	(6)	—
Net change in investment securities	—	2	—	4
Other comprehensive income (loss)	3	(138)	(43)	(78)
Comprehensive income (loss)	\$ 69	\$ (102)	\$ 51	\$ 26

SEE NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS.

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

(In millions - unaudited)	June 30, 2019	September 30, 2018
ASSETS		
Current assets		
Cash and cash equivalents	\$ 132	\$ 294
Accounts receivable (a)	507	522
Inventories - Note F	595	596
Other assets	47	60
Held for sale - Note B	756	240
Total current assets	2,037	1,712
Noncurrent assets		
Property, plant and equipment		
Cost	3,196	3,172
Accumulated depreciation	1,616	1,526
Net property, plant and equipment	1,580	1,646
Goodwill - Note G	2,285	2,304
Intangibles - Note G	1,118	1,185
Restricted investments - Note E	310	312
Asbestos insurance receivable - Note K	161	179
Deferred income taxes	28	28
Other assets	406	416
Held for sale - Note B	—	477
Total noncurrent assets	5,888	6,547
Total assets	\$ 7,925	\$ 8,259
LIABILITIES AND EQUITY		
Current liabilities		
Short-term debt - Note H	\$ 332	\$ 254
Trade and other payables	275	331
Accrued expenses and other liabilities	241	328
Held for sale - Note B	159	163
Total current liabilities	1,007	1,076
Noncurrent liabilities		
Long-term debt - Note H	2,275	2,275
Asbestos litigation reserve - Note K	576	612
Deferred income taxes	284	286
Employee benefit obligations - Note J	147	156
Other liabilities	419	422
Held for sale - Note B	—	26
Total noncurrent liabilities	3,701	3,777
Commitments and contingencies - Note K		
Stockholders' equity - Note M	3,217	3,406
Total liabilities and stockholders' equity	\$ 7,925	\$ 8,259

(a) Accounts receivable includes an allowance for doubtful accounts of \$3 million at both June 30, 2019 and September 30, 2018.

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, 2018	\$ 1	\$ 946	\$ 2,750	\$ (291)	\$ 3,406
Adoption of new accounting pronouncements (b)			34	(34)	—
Total comprehensive income (loss)					
Net income (loss)			94		94
Other comprehensive income (loss)				(43)	(43)
Regular dividends, \$0.775 per common share			(48)		(48)
Common shares issued under stock incentive and other plans (c)		8			8
Repurchase of common stock (d)		(200)			(200)
BALANCE AT JUNE 30, 2019	<u>\$ 1</u>	<u>\$ 754</u>	<u>\$ 2,830</u>	<u>\$ (368)</u>	<u>\$ 3,217</u>

(a) At June 30, 2019 and September 30, 2018, the after-tax accumulated other comprehensive loss attributable to Ashland of \$367 million and \$291 million, respectively, was each comprised of net unrealized translation losses of \$365 million and \$328 million, respectively, net unrealized gains on investment securities of zero and \$34 million, respectively, and unrecognized prior service costs as a result of certain employee benefit plan amendments of \$3 million and unrecognized prior services credits of \$3 million, respectively.

(b) Represents the cumulative-effect adjustment related to the adoption of the new guidance related to the accounting for equity securities and the tax effects of intercompany transfers during fiscal 2019. See Note A for more information.

(c) Common shares issued were 281,077 for the nine months ended June 30, 2019.

(d) Common shares repurchased were 2,236,546 for the nine months ended June 30, 2019.

SEE NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS.

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

Nine months ended
June 30

(In millions - unaudited)

	2019	2018
CASH FLOWS PROVIDED (USED) BY OPERATING ACTIVITIES FROM CONTINUING OPERATIONS		
Net income	\$ 94	\$ 104
Income from discontinued operations (net of taxes)	(97)	(83)
Adjustments to reconcile income from continuing operations to cash flows from operating activities:		
Depreciation and amortization	225	209
Original issue discount and debt issuance costs amortization	6	6
Deferred income taxes	1	(3)
Distributions from equity affiliates	—	1
Stock based compensation expense	17	20
Loss (income) from restricted investments	(10)	(10)
Excess tax benefit on stock based compensation	3	4
Impairments	8	—
Pension contributions	(4)	(8)
Gain on pension and other postretirement plan remeasurements	(18)	—
Change in operating assets and liabilities (a)	(132)	(147)
Total cash flows provided by operating activities from continuing operations	<u>93</u>	<u>93</u>
CASH FLOWS PROVIDED (USED) BY INVESTING ACTIVITIES FROM CONTINUING OPERATIONS		
Additions to property, plant and equipment	(103)	(87)
Proceeds from disposal of property, plant and equipment	4	1
Purchase of operations	(2)	(11)
Proceeds from sales of operations	—	1
Life insurance payments	—	(37)
Net purchase of funds restricted for specific transactions	(2)	(10)
Reimbursement from restricted investments	25	25
Proceeds from sales of securities	156	17
Purchase of securities	(156)	(17)
Proceeds from the settlement of derivative instruments	4	1
Payments for the settlement of derivative instruments	(2)	(3)
Total cash flows used by investing activities from continuing operations	<u>(76)</u>	<u>(120)</u>
CASH FLOWS PROVIDED (USED) BY FINANCING ACTIVITIES FROM CONTINUING OPERATIONS		
Repayment of long-term debt	(10)	(135)
Proceeds from (repayment of) short-term debt	83	(158)
Debt issuance costs	—	(1)
Cash dividends paid	(48)	(44)
Repurchase of common stock	(200)	—
Stock based compensation employee withholding taxes paid in cash	(8)	(8)
Total cash flows used by financing activities from continuing operations	<u>(183)</u>	<u>(346)</u>
CASH PROVIDED (USED) BY CONTINUING OPERATIONS		
Cash provided (used) by discontinued operations		
Operating cash flows	—	2
Investing cash flows	6	(15)
Total cash provided (used) by discontinued operations	6	(13)
Effect of currency exchange rate changes on cash and cash equivalents	(2)	2
INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	<u>(162)</u>	<u>(384)</u>
CASH AND CASH EQUIVALENTS - BEGINNING OF PERIOD	294	566
CASH AND CASH EQUIVALENTS - END OF PERIOD	<u>\$ 132</u>	<u>\$ 182</u>

(a) Excludes changes resulting from operations acquired, sold or held for sale.

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 Global Holdings Inc.'s (Ashland or the Company) Annual Report on Form 10-K for the fiscal year ended September 30, 2018. Results of operations for the period ended June 30, 2019 are not necessarily indicative of the expected results for the remaining quarters in the fiscal year.

On November 15, 2018, Ashland announced that it had signed a definitive agreement to sell substantially all of the assets and liabilities of its Composites segment and Intermediates and Solvents facility in Marl, Germany (Marl facility). This expected divestiture represents a strategic shift in Ashland's business and, in accordance with U.S. GAAP, qualified as a discontinued operation. As a result, the operating results and cash flows related to Composites and the Marl facility have been reflected as discontinued operations in the Statements of Consolidated Comprehensive Income (Loss) and Statements of Condensed Consolidated Cash Flows. The assets and liabilities that are to be sold have met the requirements to be classified within the Condensed Consolidated Balance Sheets under a held for sale designation. See Notes B and C for additional information on this expected divestiture.

As a result of classifying the Composites reporting segment as a discontinued operation, Ashland is now comprised of two reportable segments: Specialty Ingredients and Intermediates and Solvents. The financial information reported for Intermediates and Solvents excludes the activity from the Marl facility due to the expected divestiture.

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 pronouncements

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, 2018. The following standards relevant to Ashland were either issued or adopted in the current period or will become effective in a subsequent period.

Revenue recognition

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 and subsequent amendments to it superseded most current revenue recognition guidance, in an effort to converge the revenue recognition principles within U.S. GAAP. This new guidance required 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 had the option of using a full retrospective or a modified retrospective approach to adopt the new guidance. This guidance became effective for Ashland on October 1, 2018.

Ashland formed an implementation team that evaluated 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 would have on the organization. The assessment process consisted of categorizing Ashland's revenue streams and reviewing the current internal accounting policies and practices to determine potential differences that could result from applying the requirements of the new standard to revenue contracts. Additional discussions and meetings with each revenue stream team 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.

Ashland elected to adopt this standard using the modified retrospective approach and determined that the overall impact was not material to the Condensed Consolidated Financial Statements. As a result, no cumulative-effect adjustment was made to retained earnings in the Condensed Consolidated Balance Sheets. Further, there has been no significant change to the manner and timing of recognizing revenue. However, there are significant additional disclosures within the Notes to Condensed Consolidated Financial Statements. ASC 606 requires disclosure of disaggregated revenue into categories that depict the nature of how Ashland's revenue and cash flows are affected by economic factors. Additionally, Ashland is required to disclose additional information related to its revenue recognition policy. See Note O for these additional disclosures.

Leases

In February 2016, the FASB issued new accounting guidance related to lease transactions. The main objective of this guidance is to increase transparency and comparability among organizations by requiring lessees to recognize assets and liabilities on the balance sheet for the right to use assets and obligations created by leases and to disclose key information about leasing arrangements. The presentation of the Statements of Consolidated Comprehensive Income (Loss) and the Statements of Condensed Consolidated Cash Flows is largely unchanged under this guidance. This guidance retains a distinction between finance leases and operating leases, and the classification criteria for distinguishing between finance leases and operating leases are substantially similar to the classification criteria for distinguishing between capital leases and operating leases in the current accounting literature. The guidance will become effective for Ashland on October 1, 2019 and it will have a significant effect on Ashland's Condensed Consolidated Balance Sheet and disclosures.

In July 2018, the FASB amended this guidance to give entities the option to apply the standard at the adoption date and recognize a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption. Ashland will utilize this transition method upon adopting the guidance. Ashland will also elect the practical expedient package related to the identification, classification and accounting for initial direct costs whereby prior conclusions do not have to be reassessed for leases that commenced before the effective date. As Ashland will not reassess such conclusions, Ashland does not plan to adopt the practical expedient to use hindsight to determine the likelihood of whether a lease will be extended, terminated or whether a purchase option will be exercised.

Ashland's implementation team is continuing to identify leases, determine policy elections, gather data, implement changes to business processes and controls, and quantifying the impact that this guidance will have within its Condensed Consolidated Financial Statements.

Other accounting pronouncements

In January 2016, the FASB issued accounting guidance related to the recognition and measurement as well as the presentation and disclosures for certain financial instruments. Most notably, the guidance requires entities to measure equity investments at fair value and to recognize any changes in fair value in net income rather than accumulated other comprehensive income (AOCI). The guidance became effective for Ashland on October 1, 2018 and resulted in Ashland recording a cumulative-effect adjustment to reclassify net after-tax unrealized gains of \$34 million on its equity securities from AOCI to retained earnings. In the current period, the adoption of this guidance resulted in a significant impact to net income as Ashland recognized investment gains of \$6 million and \$3 million for the three and nine months ended June 30, 2019, respectively, within the net interest and other expense caption on the Statement of Consolidated Comprehensive Income (Loss). The impact of this new guidance could continue to have a material impact on Ashland's Statements of Consolidated Comprehensive Income (Loss) in prospective periods depending on the fluctuations of unrealized gains and losses within the investment securities portfolio. For current and future periods, the changes in fair value of the equity securities will no longer be classified within other comprehensive income under the new guidance. For further information on Ashland's equity securities, see Note E.

In October 2016, the FASB issued new accounting guidance which requires entities to recognize the income tax effects of intercompany transfers of assets other than inventory when the transfer occurs. This guidance eliminates the exception under previous U.S. GAAP that the income tax effects of all intercompany transfers of assets other than inventory be deferred until the assets are sold to a third party or otherwise recovered through use. This guidance became effective for Ashland on October 1, 2018 and was applied using a modified retrospective approach. Consequently, Ashland recorded a cumulative-effect adjustment to reclassify less than \$1 million from other current assets and deferred taxes to retained earnings.

NOTE B – DIVESTITURES

Composites and Marl facility

On November 15, 2018, Ashland announced that it had signed a definitive agreement to sell its Composites segment and Intermediates and Solvents Marl facility to INEOS Enterprises (INEOS) in a transaction valued at \$1.1 billion. Ashland will retain the remaining Intermediates and Solvents facility in Lima, Ohio primarily for its own internal business use.

On July 1, 2019 an amendment was signed to exclude certain assets and liabilities related to Ashland's maleic anhydride business (Maleic business). Under the amendment, Ashland agreed to continue to operate the Maleic business and use commercially reasonable efforts to sell the Maleic business to another purchaser. In connection with any Maleic sale within 18 months of the closing of the Composites and Marl facility sale, excluding Maleic, INEOS will be entitled to the net proceeds, after deduction of the reasonable costs incurred by Ashland; provided that INEOS shall receive no less than \$35 million. If Ashland is unable to sell the Maleic business within 18 months of the closing of the Composites and Marl facility sale, excluding Maleic, Ashland has agreed to reimburse \$35 million to INEOS.

In late July, Ashland and INEOS agreed to certain additional changes to the sale agreement subject to approval by and reflecting continued discussions with the US Federal Trade Commission. As part of the proposed changes, the purchase price has been adjusted to \$1.015 billion while Ashland retains the right to the Maleic business, including the retention of any subsequent sale proceeds. The company anticipates that remaining regulatory approvals will be received shortly.

Ashland currently expects net proceeds from the sale of Composites and Marl facility to total approximately \$0.9 billion and anticipates that the proceeds will be primarily used to reduce outstanding debt and other corporate purposes.

The sale of Composites and Marl facility, excluding Maleic, is expected to close by late summer, contingent on certain customary regulatory approvals, standard closing conditions and completion of required employee information and consultation processes. Upon the closing of this transaction, Ashland currently expects to recognize a pre-tax gain in excess of \$400 million within the Statements of Consolidated Comprehensive Income (Loss).

Since this transaction represents a strategic shift in Ashland's business and had a major effect on Ashland's operations and financial results, the operating results and cash flows related to Composites and the Marl facility, including Maleic, have been reflected as discontinued operations in the Statements of Consolidated Comprehensive Income (Loss) and Statements of Condensed Consolidated Cash Flows. See Note C for the results of operations for Composites and the Marl facility, including Maleic, for all periods presented.

Certain indirect corporate costs included within the selling, general and administrative expense caption of the Statements of Consolidated Comprehensive Income (Loss) that were previously allocated to the Composites segment and Marl facility do not qualify for classification within discontinued operations and are now reported as selling, general and administrative expense within continuing operations on a consolidated basis and within the Unallocated and other segment. These costs were \$10 million and \$12 million during the three months ended June 30, 2019 and 2018, respectively, and \$33 million and \$35 million during the nine months ended June 30, 2019 and 2018, respectively. Ashland is currently implementing plans to eliminate these costs as part of the global restructuring program.

Subsequent to the completion of the sale, Ashland expects to provide certain transition services to INEOS Enterprises for a fee. While the transition services are expected to vary in duration depending upon the type of service provided, Ashland expects to reduce costs as the transition services are completed.

Other corporate assets

Ashland is currently in the process of pursuing options to divest several corporate assets, primarily related to land and buildings, that are expected to close within the next 12 months. The net property, plant and equipment value related to these sites was \$6 million at June 30, 2019 and \$9 million at September 30, 2018. During the nine months ended June 30, 2019, a \$5 million impairment charge was recorded within the selling, general and administrative expense caption of the Statement of Consolidated Comprehensive Income (Loss) for one of these corporate assets.

Held for sale classification

The assets and liabilities of Composites and the Marl facility, including Maleic, along with other corporate asset divestitures for current and prior periods have been reflected as assets and liabilities held for sale. As a result, in accordance with U.S. GAAP standards, depreciation and amortization are no longer being recorded within the Statements of Consolidated Comprehensive Income (Loss) and the Condensed Consolidated Balance Sheets. These assets and liabilities are comprised of the following components:

(In millions)	June 30 2019	September 30 2018
Accounts receivable, net (a)	\$ 168	\$ 159
Inventories	71	67
Net property, plant and equipment	269	—
Goodwill	144	—
Intangibles	38	—
Deferred income taxes	7	—
Other assets	59	14
Current assets held for sale	<u>\$ 756</u>	<u>\$ 240</u>
Net property, plant and equipment	\$ —	\$ 254
Goodwill	—	144
Intangibles	—	40
Deferred income taxes	—	7
Other assets	—	32
Noncurrent assets held for sale	<u>\$ —</u>	<u>\$ 477</u>
Trade and other payables	\$ 123	\$ 152
Employee benefit obligations	23	—
Accrued expenses and other liabilities	11	11
Other liabilities	2	—
Current liabilities held for sale	<u>\$ 159</u>	<u>\$ 163</u>
Employee benefit obligations	—	23
Other liabilities	—	3
Noncurrent liabilities held for sale	<u>\$ —</u>	<u>\$ 26</u>

(a) Accounts receivable included an allowance for doubtful accounts of \$3 million at both June 30, 2019 and September 30, 2018.

NOTE C— DISCONTINUED OPERATIONS

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

As previously described in Note B, Ashland announced that it had signed a definitive agreement on November 15, 2018 to sell its Composites segment and Intermediates and Solvents Marl facility, including Maleic. Ashland determined that this expected divestiture qualified as a discontinued operation, in accordance with U.S. GAAP, since it represents a strategic shift for Ashland and had a major effect on Ashland's operations and financial results. Accordingly, the operating results and cash flows for Composites and the Marl facility have been classified as discontinued operations within the Condensed Consolidated Financial Statements for all periods presented.

Ashland completed the distribution of its remaining 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 represented a strategic shift for Ashland and had a major effect on Ashland's operations and financial results. Ashland has made subsequent tax adjustments to the discontinued operations caption related to this transaction.

During the three and nine months ended June 30, 2019, a \$28 million pre-tax gain was recorded upon the completion of a property sale directly relating to Ashland's Distribution segment sold in 2011.

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 and nine months ended June 30, 2019 and 2018.

(In millions)	Three months ended		Nine months ended	
	June 30		June 30	
	2019	2018	2019	2018
Income (loss) from discontinued operations (net of tax)				
Composites/Marl facility	\$ 24	\$ 25	\$ 77	\$ 74
Valvoline	—	(7)	1	1
Asbestos-related litigation	—	9	—	12
Water Technologies	—	—	1	(1)
Distribution	19	(2)	18	(3)
	<u>\$ 43</u>	<u>\$ 25</u>	<u>\$ 97</u>	<u>\$ 83</u>

The following table presents a reconciliation of the captions within Ashland's Statements of Consolidated Comprehensive Income (Loss) for the income (loss) from discontinued operations attributable to Composites and the Marl facility for the three and nine months ended June 30, 2019 and 2018. Interest expense was allocated to discontinued operations based on Ashland's mandatory debt prepayments upon the disposition of Composites and the Marl facility, including Maleic.

(In millions)	Three months ended		Nine months ended	
	June 30		June 30	
	2019	2018	2019	2018
Income (loss) from discontinued operations attributable to Composites/Marl facility				
Sales	\$ 281	\$ 303	\$ 840	\$ 865
Cost of sales	(215)	(242)	(648)	(703)
Selling, general and administrative expense	(20)	(22)	(61)	(55)
Research and development expense	(2)	(3)	(9)	(9)
Equity and other income	—	—	3	4
Pretax operating income of discontinued operations	44	36	125	102
Net interest and other expense	(6)	(5)	(18)	(15)
Pretax income of discontinued operations	38	31	107	87
Income tax expense	(14)	(6)	(30)	(13)
Income from discontinued operations	<u>\$ 24</u>	<u>\$ 25</u>	<u>\$ 77</u>	<u>\$ 74</u>

NOTE D – RESTRUCTURING ACTIVITIES

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

Severance costs

During fiscal 2018, Ashland announced and initiated a company-wide cost reduction program as a result of ongoing strategic asset plans and activities. As part of this restructuring program, Ashland announced a voluntary severance offer (VSO) to certain qualifying employees that was formally approved during 2018. Additionally, during fiscal 2018, an involuntary program for employees was also initiated as part of the restructuring program. The VSO and involuntary programs resulted in a severance charge of \$36 million during the September 2018 quarter of fiscal 2018.

During the three and nine months ended June 30, 2019, these programs resulted in additional severance expense of \$3 million and \$7 million, respectively, which was primarily recorded within the selling, general and administrative expense caption of the Statement of Consolidated Comprehensive Income (Loss). No charges were incurred for the three or nine months ended June 30, 2018. As of June 30, 2019, the severance reserve for the company-wide restructuring program was \$14 million.

Facility costs

Ashland incurred zero and \$8 million of lease abandonment charges during the three and nine months ended June 30, 2019, respectively, due to the exit from certain office facilities in conjunction with the company-wide cost reduction program. Charges of \$8 million were incurred for the three or nine months ended June 30, 2018. The costs related to these reserves were recorded within the selling, general and administrative expense caption of the Statements of Consolidated Comprehensive Income (Loss) and are paid over the remaining lease terms. As of June 30, 2019, the reserve for facility costs was \$8 million.

The following table details at June 30, 2019, the amount of restructuring reserves related to the programs discussed above, and the related activity in these reserves during the nine months ended June 30, 2019. The severance and facility cost reserves were primarily recorded within accrued expenses and other liabilities in the Condensed Consolidated Balance Sheet as of June 30, 2019.

(In millions)	Severance costs	Facility costs	Total
Balance as of September 30, 2018	36	7	43
Restructuring reserve	7	8	15
Utilization (cash paid)	(29)	(7)	(36)
Balance as of June 30, 2019	<u>\$ 14</u>	<u>\$ 8</u>	<u>22</u>

Plant restructuring

During the nine months ended June 30, 2019, Specialty Ingredients committed to a cost reduction plan within an existing manufacturing facility. As a result, Ashland incurred restructuring charges of zero and \$47 million for the three and nine months ended June 30, 2019, respectively. These charges were recorded primarily within the cost of sales caption of the Statements of Consolidated Comprehensive Income (Loss) consisting of \$38 million of accelerated depreciation and amortization, \$5 million of severance and \$4 million of plant closure costs during the nine months ended June 30, 2019. As of June 30, 2019, there was a restructuring reserve of \$1 million related to the \$5 million of severance costs and \$2 million related to the \$4 million of plant closure costs. The restructuring plan is expected to be completed during fiscal 2019.

NOTE E – FAIR VALUE MEASUREMENTS

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

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

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

Level 3 – Unobservable inputs for the asset or liability for which there is little, if any, market activity at the measurement date. Unobservable inputs reflect Ashland’s own assumptions about what market participants would use to price the asset or liability. The inputs are developed based on the best information available in the circumstances, which might include Ashland’s own financial data such as internally developed pricing models, discounted cash flow methodologies, as well as instruments for which the fair value determination requires significant management judgment.

For assets that are measured using quoted prices in active markets (Level 1), the total fair value is the published market price per unit multiplied by the number of units held without consideration of transaction costs. Assets and liabilities that are measured using significant other observable inputs (Level 2) are primarily valued by reference to quoted prices of similar assets or liabilities in active markets, adjusted for any terms specific to that asset or liability. For all other assets and liabilities for which unobservable inputs are used (Level 3), fair value is derived using 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 June 30, 2019.

(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	\$ 132	\$ 132	\$ 132	\$ —	\$ —
Restricted investments (a)	329	329	329	—	—
Deferred compensation investments (b)	168	168	—	168	—
Investment of captive insurance company	4	4	4	—	—
Foreign currency derivatives	3	3	—	3	—
Total assets at fair value	\$ 636	\$ 636	\$ 465	\$ 171	\$ —
Liabilities					
Foreign currency derivatives	\$ 3	\$ 3	\$ —	\$ 3	\$ —

(a) Included in restricted investments is \$19 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, 2018.

(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	\$ 294	\$ 294	\$ 294	\$ —	\$ —
Restricted investments (a)	342	342	342	—	—
Deferred compensation investments (b)	165	165	—	165	—
Investment of captive insurance company	3	3	3	—	—
Foreign currency derivatives	11	11	—	11	—
Total assets at fair value	\$ 815	\$ 815	\$ 639	\$ 176	\$ —
Liabilities					
Foreign currency derivatives	\$ 3	\$ 3	\$ —	\$ 3	\$ —

(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

Investment income and realized gains and losses on these company-restricted investments are reported within the net interest and other financing expense caption on the Statements of Consolidated Comprehensive Income (Loss). In prior periods, the unrealized gains and losses on the equity securities were reported within the stockholders' equity section of the Condensed Consolidated Balance Sheets as a component of AOCI, net of the related deferred income taxes. Due to the accounting guidance adopted in the current year, as discussed in Note A, the unrealized gains and losses are now recognized in net income and are recorded within the net interest and other expense (income) caption in the Statements of Consolidated Comprehensive Income (Loss). The following table provides a summary of the activity within the investment portfolio as of June 30, 2019 and September 30, 2018:

(In millions)	June 30 2019	September 30 2018
Original cost	\$ 335	\$ 335
Accumulated adjustments, net	(47)	(38)
Adjusted cost, beginning of year (a)	288	297
Investment income (b)	7	8
Net unrealized gain (c)	31	54
Realized gains (c)	26	6
Settlement funds	2	10
Disbursements	(25)	(33)
Fair value	\$ 329	\$ 342

(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.

(c) Presented under the original cost method.

The following table presents gross unrealized gains and losses for the restricted investment securities as of June 30, 2019 and September 30, 2018:

(In millions)	Adjusted Cost	Gross Unrealized Gain	Gross Unrealized Loss	Fair Value
As of June 30, 2019				
Demand deposit	\$ 161	\$ —	\$ —	\$ 161
Equity mutual fund	71	29	—	100
Corporate bond mutual fund	66	2	—	68
Fair value	<u>\$ 298</u>	<u>\$ 31</u>	<u>\$ —</u>	<u>\$ 329</u>
As of September 30, 2018				
Demand deposit	\$ 20	\$ —	\$ —	\$ 20
Equity mutual fund	148	59	—	207
Corporate bond mutual fund	120	—	(5)	115
Fair value	<u>\$ 288</u>	<u>\$ 59</u>	<u>\$ (5)</u>	<u>\$ 342</u>

The unrealized gains and losses of \$54 million, net of the related deferred income taxes of \$20 million, as of September 30, 2018, were reclassified from AOCI to retained earnings within the Condensed Consolidated Balance Sheets due to the new accounting guidance adopted in the first quarter of fiscal year 2019.

The following table presents the investment income, net unrealized gains and losses, realized gains and disbursements related to the investments within the portfolio for the three and nine months ended June 30, 2019 and 2018.

(In millions)	Three months ended June 30		Nine months ended June 30	
	2019	2018	2019	2018
Investment income	\$ 2	\$ 2	\$ 7	\$ 6
Net unrealized gains (losses) (a)	6	4	3	6
Realized gains (b)	—	—	—	4
Disbursements	(5)	(7)	(25)	(25)

(a) Ashland determined that all unrealized gains and losses were related to equity securities with readily determinable fair values. Due to the new accounting guidance adopted in the first quarter of fiscal year 2019, the net unrealized losses during the three and nine months ended June 30, 2019 were recorded within the net interest and other expense (income) caption in the Statements of Consolidated Comprehensive Income (Loss). In 2018 these net unrealized gains (losses) were in AOCI.

(b) Relates only to the three and nine months ended June 30, 2018 prior to the adoption of the new accounting guidance for equity securities.

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 investment grade bond fund. Gains and losses related to deferred compensation investments are immediately recognized within the selling, general and administrative expense caption on the Statements of Consolidated Comprehensive Income (Loss). These investments generated gains of \$2 million and \$3 million during the three and nine months ended June 30, 2019, respectively, and \$2 million and \$6 million during the three and nine months ended June 30, 2018, respectively.

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 losses recognized during the three and nine months ended June 30, 2019 and 2018 within the Statements of Consolidated Comprehensive Income (Loss).

(In millions)	Three months ended		Nine months ended	
	June 30		June 30	
	2019	2018	2019	2018
Foreign currency derivative gains (losses)	\$ (4)	\$ (9)	\$ —	\$ (36)

The following table summarizes the fair values of the outstanding foreign currency derivatives as of June 30, 2019 and September 30, 2018 included in accounts receivable and accrued expenses and other liabilities of the Condensed Consolidated Balance Sheets.

(In millions)	June 30		September 30	
	2019		2018	
Foreign currency derivative assets	\$	3	\$	11
Notional contract values		254		1,209
Foreign currency derivative liabilities	\$	3	\$	3
Notional contract values		297		755

Other financial instruments

At June 30, 2019 and September 30, 2018, Ashland's long-term debt (including the current portion and excluding debt issuance cost discounts) had a carrying value of \$2,299 million and \$2,307 million, respectively, compared to a fair value of \$2,437 million and \$2,372 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 net realizable value. 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)	June 30, 2019		September 30, 2018	
Finished products	\$	374	\$	381
Raw materials, supplies and work in process		221		215
	\$	595	\$	596

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, 2018 assessment, Ashland determined that its reporting units for the allocation of goodwill were its three reportable segments: Specialty Ingredients, Composites and Intermediates and Solvents. At that time, Ashland determined no additional impairment existed. Due to the expected divestiture of the Composites reporting unit, Ashland has two remaining reporting units as of June 30, 2019: Specialty Ingredients and Intermediates and Solvents. See Note B for more information on the expected divestiture.

The following is a progression of goodwill by reportable segment for the nine months ended June 30, 2019.

(In millions)	Specialty Ingredients	Intermediates and Solvents ^(a)	Total
Balance at September 30, 2018	\$ 2,304	\$ —	\$ 2,304
Acquisitions	—	—	—
Currency translation	(19)	—	(19)
Balance at June 30, 2019	<u>\$ 2,285</u>	<u>\$ —</u>	<u>\$ 2,285</u>

(a) As of June 30, 2019 and September 30, 2018, there was accumulated impairment of \$90 million related to the Intermediates and Solvents reportable segment.

Intangibles

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 June 30, 2019 and September 30, 2018.

(In millions)	June 30, 2019		
	Gross carrying amount	Accumulated amortization	Net carrying amount
Definite-lived intangibles			
Trademarks and trade names	\$ 66	\$ (28)	\$ 38
Intellectual property	719	(382)	337
Customer and supplier relationships	753	(288)	465
Total definite-lived intangibles	<u>1,538</u>	<u>(698)</u>	<u>840</u>
Indefinite-lived intangibles			
Trademarks and trade names	278	—	278
Total intangible assets	<u>\$ 1,816</u>	<u>\$ (698)</u>	<u>\$ 1,118</u>

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(In millions)	September 30, 2018		
	Gross carrying amount	Accumulated amortization	Net carrying amount
Definite-lived intangibles			
Trademarks and trade names	\$ 66	\$ (25)	\$ 41
Intellectual property	721	(350)	371
Customer and supplier relationships	759	(264)	495
Total definite-lived intangibles	1,546	(639)	907
Indefinite-lived intangibles			
Trademarks and trade names	278	—	278
Total intangible assets	\$ 1,824	\$ (639)	\$ 1,185

Amortization expense recognized on intangible assets was \$22 million and \$23 million for the three months ended June 30, 2019 and 2018, respectively, and \$65 million and \$69 million for the nine months ended June 30, 2019 and 2018, 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 \$86 million in 2019 (includes nine months actual and three months estimated), \$86 million in 2020, \$85 million in 2021, \$85 million in 2022 and \$85 million in 2023. 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.

(In millions)	June 30, 2019	September 30, 2018
4.750% notes, due 2022	\$ 1,083	\$ 1,083
Term Loan B, due 2024	588	593
6.875% notes, due 2043	376	376
Term Loan A, due 2022	195	195
Accounts receivable securitizations	214	195
6.50% junior subordinated notes, due 2029	53	52
Revolving credit facility	90	25
Medium-term notes, due 2019, interest of 9.4%	—	5
Other (a)	8	5
Total debt	2,607	2,529
Short-term debt (includes current portion of long-term debt)	(332)	(254)
Long-term debt (less current portion)	\$ 2,275	\$ 2,275

(a) Includes \$18 million and \$21 million of debt issuance cost discounts as of June 30, 2019 and September 30, 2018, respectively, in addition to a European short-term loan facility with an outstanding balance of \$23 million at both June 30, 2019 and September 30, 2018.

The scheduled aggregate maturities of long-term debt by year (including the current portion and excluding debt issuance costs) are as follows: \$2 million remaining in 2019, \$6 million in 2020, \$14 million in 2021, \$1,279 million in 2022 and \$6 million in 2023.

Available borrowing capacity

The borrowing capacity remaining under the Revolving Credit Facility was \$661 million due to an outstanding balance of \$90 million, as well as a reduction of \$49 million for letters of credit outstanding at June 30, 2019. Ashland's total borrowing capacity at June 30, 2019 was \$673 million, which included \$12 million of available capacity from the two accounts receivable securitization facilities.

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 June 30, 2019, 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 June 30, 2019, Ashland's calculation of the consolidated net leverage ratio was 3.6.

The minimum required consolidated interest coverage ratio under the 2017 Credit Agreement during its entire duration is 3.0. At June 30, 2019, Ashland's calculation of the interest coverage ratio was 5.6.

NOTE I – INCOME TAXES

Tax Law Changes

The Tax Cuts and Jobs Act (Tax Act) was enacted on December 22, 2017. The Tax Act reduced the U.S. federal corporate tax rate from 35% to 21%, required companies to pay a one-time transition tax on earnings of certain foreign subsidiaries that were previously tax deferred and created new taxes on certain foreign sourced earnings. Through September 30, 2018 we recorded provisional amounts for certain enactment date effects of the Tax Act by applying the guidance in SAB 118 because we had not yet completed our enactment date accounting for these effects. During 2019, Ashland completed its internal accounting assessment for the tax effects of enactment of the Tax Act and recorded adjustments to provisional amounts previously recorded. Ashland's final assessment resulted in net unfavorable tax adjustments of \$24 million during the three months ended December 31, 2018 and an unfavorable \$6 million during the three months ended June 30, 2019. These adjustments are primarily related to the one-time transition tax assessed on foreign cash and unremitted earnings. There could be additional guidance issued subsequent to December 31, 2018 that could impact our interpretation of the Tax Act and such changes could affect the amounts recorded. The impact, if any, of further transitional tax guidance that may be issued by the U.S. Treasury would be reflected in the Company's provision for income tax in the period such guidance is effective.

Deferred 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 21%. Ashland finalized its assessment of the provisional amount previously recorded for the remeasurement of the deferred tax balance which resulted in an unfavorable tax adjustment of \$2 million during the three months ended December 31, 2018.

Foreign tax effects

The one-time transition tax is based on Ashland's total post-1986 earnings and profits of foreign subsidiaries that were previously deferred from U.S. income taxes. Ashland finalized its assessment of the provisional amount previously recorded for this one-time transition tax liability which resulted in an unfavorable tax adjustment of \$22 million during the three months ended December 31, 2018 and a \$6 million unfavorable tax adjustment during the three months ended June 30, 2019. After these final adjustments, the total obligation for the one-time transition tax was \$57 million as of June 30, 2019. No additional income taxes have been provided for any remaining undistributed foreign earnings or any additional outside basis difference, 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 calculations and additional outside basis difference is not practicable at this time.

Global Intangible Low-Taxed Income

Regarding new Global Intangible Low-Taxed Income (GILTI) tax rules, Ashland made an election to treat taxes due on future GILTI exclusions as a current period expense when incurred.

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 a negative 5% for the three months ended June 30, 2019 and 114% for the nine months ended June 30, 2019. The current quarter tax rate was primarily impacted by income mix, as well as \$2 million in net favorable tax discrete items including the favorable adjustment from the release of reserves related to unrecognized tax benefits and the unfavorable adjustment related to transaction tax and other items. The current nine month period was primarily impacted by the items referenced in the three-month period, as well as a net \$17 million from unfavorable tax discrete items including the final assessment of the Tax Act and other items.

Prior fiscal year

The overall effective tax rate was not meaningful for the three months ended June 30, 2018 and a negative 17% for the nine months ended June 30, 2018. The quarter rate was primarily impacted by income mix and net favorable tax discrete adjustments of \$5 million related to a state tax rate change and other items. The nine-month period was primarily impacted by the items referenced in the quarter, as well as a net \$6 million from unfavorable tax discrete items including the assessment of the Tax Act, the tax rate change in a foreign country, and other items.

Unrecognized tax benefits

Changes in unrecognized tax benefits are summarized as follows for the nine months ended June 30, 2019.

(In millions)	
Balance at October 1, 2018	\$ 164
Decreases related to positions taken on items from prior years	(3)
Increases related to positions taken in the current year	5
Lapse of statute of limitations	(8)
Balance at June 30, 2019	<u>\$ 158</u>

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 \$2 million and \$4 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

Plan contributions

For the nine months ended June 30, 2019, Ashland contributed \$3 million to its non-U.S. pension plans and \$1 million to its U.S. pension plans. Ashland expects to make additional contributions of approximately \$2 million to its non-U.S. plans during the remainder of 2019.

Plan remeasurement

Ashland settled a non-U.S. pension plan during the first quarter of fiscal 2019, which required the plan to be remeasured. This remeasurement resulted in a curtailment gain of \$18 million.

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		Other postretirement benefits	
	2019	2018	2019	2018
Three months ended June 30				
Service cost	\$ 1	\$ 2	\$ 1	\$ 1
Interest cost	2	3	—	—
Expected return on plan assets	(2)	(3)	—	—
Curtailment	—	—	—	—
Actuarial (gain) loss	—	—	—	—
Total net periodic benefit costs	<u>\$ 1</u>	<u>\$ 2</u>	<u>\$ 1</u>	<u>\$ 1</u>
Nine months ended June 30				
Service cost	\$ 4	\$ 6	\$ 1	\$ 1
Interest cost	8	7	1	1
Expected return on plan assets	(8)	(9)	—	—
Curtailment	(18)	—	—	—
Actuarial gain	—	—	—	—
Total net periodic benefit costs (income)	<u>\$ (14)</u>	<u>\$ 4</u>	<u>\$ 2</u>	<u>\$ 2</u>

For segment reporting purposes, service cost is proportionately allocated to each segment, excluding the Unallocated and other segment, and is recorded within the selling, general and administrative expense and cost of sales captions on the Statements of Consolidated Comprehensive Loss (Income). All other components are recorded within the other net periodic benefit income caption on the Statements of Consolidated Comprehensive Loss (Income).

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 Nathan Associates Inc. (Nathan). The methodology used by Nathan 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, Nathan 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 (Loss).

Ashland asbestos-related litigation

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

(In thousands)	Nine months ended		Years ended September 30		
	June 30		2018	2017	2016
	2019	2018	2018	2017	2016
Open claims - beginning of year	53	54	54	57	60
New claims filed	2	2	2	2	2
Claims settled	(1)	(1)	(1)	(1)	—
Claims dismissed	(1)	(2)	(2)	(4)	(5)
Open claims - end of period	53	53	53	54	57

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 Nathan.

During the most recent annual update of this estimate completed during the June 2019 quarter, it was determined that the liability for Ashland asbestos-related claims should be increased by \$1 million. Total reserves for asbestos claims were \$360 million at June 30, 2019 compared to \$380 million at September 30, 2018.

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

(In millions)	Nine months ended		Years ended September 30		
	June 30		2018	2017	2016
	2019	2018	2018	2017	2016
Asbestos reserve - beginning of year	\$ 380	\$ 419	\$ 419	\$ 415	\$ 409
Reserve adjustment	1	(8)	(8)	36	37
Amounts paid	(21)	(26)	(31)	(32)	(31)
Asbestos reserve - end of period (a)	\$ 360	\$ 385	\$ 380	\$ 419	\$ 415

(a) Includes \$28 million and \$30 million classified in accrued expenses and other liabilities on the Condensed Consolidated Balance Sheets as of June 30, 2019 and September 30, 2018, respectively.

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. A substantial portion of the estimated receivables from insurance companies are expected to be due from domestic insurers.

At June 30, 2019, Ashland's receivable for recoveries of litigation defense and claim settlement costs from insurers amounted to \$130 million (excluding the Hercules receivable for asbestos claims) compared to \$140 million at September 30, 2018. During the June 2019 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 decrease in the receivable for probable insurance recoveries.

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

(In millions)	Nine months ended		Years ended September 30		
	June 30		2018	2017	2016
	2019	2018			
Insurance receivable - beginning of year	\$ 140	\$ 155	\$ 155	\$ 151	\$ 150
Receivable adjustment	(5)	(5)	(5)	15	16
Insurance settlement	—	—	—	(5)	(4)
Amounts collected	(5)	(8)	(10)	(6)	(11)
Insurance receivable - end of period (a)	<u>\$ 130</u>	<u>\$ 142</u>	<u>\$ 140</u>	<u>\$ 155</u>	<u>\$ 151</u>

(a) Includes \$18 million and \$15 million classified in accounts receivable on the Condensed Consolidated Balance Sheets as of June 30, 2019 and September 30, 2018, respectively.

Hercules asbestos-related litigation

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

(In thousands)	Nine months ended		Years ended September 30		
	June 30		2018	2017	2016
	2019	2018			
Open claims - beginning of year	13	12	12	15	20
New claims filed	—	1	2	1	1
Claims dismissed	(1)	(1)	(1)	(4)	(6)
Open claims - end of period	<u>12</u>	<u>12</u>	<u>13</u>	<u>12</u>	<u>15</u>

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 Nathan. As a result of the most recent annual update of this estimate, completed during the June 2019 quarter, it was determined that the liability for Hercules asbestos-related claims should be decreased by \$10 million. Total reserves for asbestos claims were \$257 million at June 30, 2019 compared to \$282 million at September 30, 2018.

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

(In millions)	Nine months ended		Years ended September 30		
	June 30		2018	2017	2016
	2019	2018	2018	2017	2016
Asbestos reserve - beginning of year	\$ 282	\$ 323	\$ 323	\$ 321	\$ 311
Reserve adjustments	(10)	(19)	(19)	16	25
Amounts paid	(15)	(15)	(22)	(14)	(15)
Asbestos reserve - end of period (a)	<u>\$ 257</u>	<u>\$ 289</u>	<u>\$ 282</u>	<u>\$ 323</u>	<u>\$ 321</u>

(a) Included \$13 million and \$20 million classified in accrued expenses and other liabilities on the Condensed Consolidated Balance Sheets as of June 30, 2019 and September 30, 2018, respectively.

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 June 30, 2019, Ashland's receivable for recoveries of litigation defense and claims costs from insurers with respect to Hercules amounted to \$49 million. During the June 2019 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 decrease of \$5 million in the receivable for probable insurance recoveries.

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

(In millions)	Nine months ended		Years ended September 30		
	June 30		2018	2017	2016
	2019	2018	2018	2017	2016
Insurance receivable - beginning of year	\$ 54	\$ 68	\$ 68	\$ 63	\$ 56
Receivable adjustment	(5)	(14)	(14)	5	7
Insurance receivable - end of period	<u>\$ 49</u>	<u>\$ 54</u>	<u>\$ 54</u>	<u>\$ 68</u>	<u>\$ 63</u>

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. Considering these inherent uncertainties, Ashland believes that the asbestos reserves for Ashland and Hercules represent the best estimate within a range of possible outcomes. As a part of the process to develop these estimates of future asbestos costs, a range of long-term cost models was developed. These models are based on national studies that predict the number of people likely to develop asbestos-related diseases and are heavily influenced by assumptions regarding long-term inflation rates for indemnity payments and legal defense costs, as well as other variables mentioned previously. Ashland has currently estimated in various models ranging from approximately 40 to 50 year periods that it is reasonably possible that total future litigation defense and claim settlement costs on an inflated and undiscounted basis could range as high as approximately \$550 million for the Ashland asbestos-related litigation (current reserve of \$360 million) and approximately \$390 million for the Hercules asbestos-related litigation (current reserve of \$257 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 June 30, 2019, such locations included 80 waste treatment or disposal sites where Ashland has been identified as a potentially responsible party under Superfund or similar state laws, 113 current and former operating facilities and about 1,225 service station properties, of which 30 are being actively remediated.

Ashland's reserves for environmental remediation and related environmental litigation amounted to \$192 million at June 30, 2019 compared to \$187 million at September 30, 2018, of which \$152 million at June 30, 2019 and \$147 million at September 30, 2018 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 nine months ended June 30, 2019 and 2018.

(In millions)	Nine months ended	
	June 30	
	2019	2018
Reserve - beginning of period	\$ 187	\$ 163
Disbursements	(23)	(26)
Revised obligation estimates and accretion	28	55
Reserve - end of period	<u>\$ 192</u>	<u>\$ 192</u>

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 June 30, 2019 and September 30, 2018, Ashland's recorded receivable for these probable insurance recoveries was \$13 million and \$12 million, respectively, of which \$12 million and \$11 million, respectively, at June 30, 2019 and September 30, 2018 were classified in other noncurrent assets on the Condensed Consolidated Balance Sheets.

Components of environmental remediation expense included within the selling, general and administrative expense caption of the Statements of Consolidated Comprehensive Income (Loss) are presented in the following table for the three and nine months ended June 30, 2019 and 2018.

(In millions)	Three months ended		Nine months ended	
	June 30		June 30	
	2019	2018	2019	2018
Environmental expense	\$ 21	\$ 37	\$ 27	\$ 54
Accretion	—	—	1	1
Legal expense	2	1	5	4
Total expense	23	38	33	59
Insurance receivable	(1)	(1)	(2)	(2)
Total expense, net of receivable activity (a)	\$ 22	\$ 37	\$ 31	\$ 57

(a) Net expense of \$5 million and \$7 million for the three and nine months ended June 30, 2019, respectively, and \$3 million and \$4 million for the three and nine months ended June 30, 2018, respectively, relates to divested businesses which qualified for treatment as discontinued operations for which certain environmental liabilities were retained by Ashland. These amounts are classified within the income from discontinued operations caption of the Statements of Consolidated Comprehensive Income (loss).

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 \$450 million. The largest reserve for any site is 14% 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 June 30, 2019 and September 30, 2018. 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 June 30, 2019 and September 30, 2018.

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 1 million and 0.7 million at June 30, 2019 and 2018, respectively. Earnings per share is reported under the treasury stock method.

(In millions, except per share data)	Three months ended		Nine months ended	
	June 30		June 30	
	2019	2018	2019	2018
Numerator				
Numerator for basic and diluted EPS -				
Income (loss) from continuing operations	\$ 23	\$ 11	\$ (3)	\$ 21
Denominator				
Denominator for basic EPS - Weighted-average common shares outstanding				
	61	63	63	63
Share based awards convertible to common shares (a)	1	1	—	1
Denominator for diluted EPS - Adjusted weighted-average shares and assumed conversions				
	62	64	63	64
EPS from continuing operations				
Basic	\$ 0.38	\$ 0.18	\$ (0.05)	\$ 0.33
Diluted	0.37	0.18	(0.05)	0.32

(a) As a result of the loss from continuing operations attributable to Ashland during the nine months ended June 30, 2019, the effect of the share-based awards convertible to common shares would be antidilutive. In accordance with U.S. GAAP, these shares have been excluded from the diluted EPS calculation.

NOTE M – EQUITY ITEMS

Stock repurchase programs

During March 2018, Ashland's Board of Directors approved a new \$1 billion stock repurchase program, which replaced the 2015 stock repurchase program. Under the new program, Ashland's common shares may be repurchased in open market transactions, privately negotiated transactions or pursuant to one or more accelerated stock repurchase programs or Rule 10b5-1 plans. As of June 30, 2019, \$800 million remained available for repurchase under this authorization.

2019 stock repurchase program agreements

In May 2019, under the 2018 stock repurchase program, Ashland announced that it entered into an accelerated share repurchase agreement (2019 ASR Agreement). Under the 2019 ASR Agreement, Ashland paid an initial purchase price of \$200 million and received an initial delivery of 2.2 million shares of common stock during May 2019. The 2019 ASR Agreement is scheduled to terminate no later than August 2019 but may be terminated early in certain circumstances, in whole or in part.

Stockholder dividends

In May 2019, the Board of Directors of Ashland announced a quarterly cash dividend of 27.5 cents per share to eligible stockholders of record, which was paid in the third quarter of fiscal 2019. This dividend represented a 10% increase over the previous quarters' dividend. Dividends of 25 cents per share were paid in the first and second quarter of fiscal 2019 and the third and fourth quarters of fiscal 2018. These dividends represented an 11% increase over the previous quarterly cash dividend of 22.5 cents per share paid in the first and second quarters of fiscal 2018.

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.

(In millions)	2019			2018		
	Before tax	Tax (expense) benefit	Net of tax	Before tax	Tax (expense) benefit	Net of tax
Three months ended June 30						
Other comprehensive income (loss)						
Unrealized translation gain (loss)	\$ 3	\$ —	\$ 3	\$ (140)	\$ —	\$ (140)
Pension and postretirement obligation adjustment:						
Adjustment of unrecognized prior service costs	—	—	—	—	—	—
Net change in investment securities:						
Unrealized gains during periods (a)	—	—	—	4	(2)	2
Reclassification adjustment for gains included in net income	—	—	—	—	—	—
Total other comprehensive income (loss)	\$ 3	\$ —	\$ 3	\$ (136)	\$ (2)	\$ (138)
Nine months ended June 30						
Other comprehensive income (loss)						
Unrealized translation gain (loss)	\$ (37)	\$ —	\$ (37)	\$ (82)	\$ —	\$ (82)
Pension and postretirement obligation adjustment:						
Adjustment of unrecognized prior service costs	(7)	1	(6)	—	—	—
Net change in investment securities:						
Unrealized gains during periods (a)	—	—	—	10	(3)	7
Reclassification adjustment for gains included in net income	—	—	—	(4)	1	(3)
Total other comprehensive income (loss)	\$ (44)	\$ 1	\$ (43)	\$ (76)	\$ (2)	\$ (78)

(a) Due to the adoption of new accounting guidance in fiscal 2019, unrealized gains and losses on Ashland's equity securities are now recognized in net income rather than AOCI. See Notes A and E for more information.

Summary of stockholders' equity

A reconciliation of changes in stockholders' equity are as follows:

(In millions)	Three months ended		Nine months ended	
	June 30		June 30	
	2019	2018	2019	2018
Common stock and paid in capital				
Balance, beginning of period	\$ 953	\$ 936	\$ 947	\$ 932
Common shares issued under stock incentive and other plans (a)	2	7	8	11
Common shares purchased under repurchase program (b)	(200)	—	(200)	—
Balance, end of period	755	943	755	943
Retained earnings				
Balance, beginning of period	2,780	2,736	2,750	2,696
Adoption of new accounting pronouncements (c)	—	—	34	—
Net income (loss)	66	36	94	104
Regular dividends	(16)	(16)	(48)	(44)
Balance, end of period	2,830	2,756	2,830	2,756
Accumulated other comprehensive income (loss)				
Balance, beginning of period	(371)	(162)	(291)	(222)
Adoption of new accounting pronouncements (c)	—	—	(34)	—
Unrealized translation gain (loss)	3	(140)	(37)	(82)
Pension and postretirement obligation adjustment	—	—	(6)	—
Net change in investment securities	—	2	—	4
Balance, end of period	(368)	(300)	(368)	(300)
Total stockholders' equity	\$ 3,217	\$ 3,399	\$ 3,217	\$ 3,399
Cash dividends declared per common share	\$ 0.275	\$ 0.25	\$ 0.775	\$ 0.70

(a) Common shares issued were 46,725 and 42,958 for the three months ended June 30, 2019 and 2018 and 281,077 and 308,779 for the nine months ended June 30, 2019 and 2018.

(b) Common shares repurchased were 2,236,546 in the three and nine months ended June 30, 2019.

(c) Represents the cumulative-effect adjustment related to the adoption of the new guidance related to the accounting for equity securities and tax effects of intercompany transfers during fiscal 2019. See Note A for more information.

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 pre-tax stock-based compensation expense included in continuing operations are as follows:

(In millions)	Three months ended		Nine months ended	
	June 30		June 30	
	2019 (a)	2018 (b)	2019 (a)	2018 (b)
SARs	\$ 1	\$ 2	\$ 5	\$ 5
Nonvested stock awards	6	6	16	17
Performance share awards	(1)	4	1	10
	\$ 6	\$ 12	\$ 22	\$ 32

(a) Included \$2 million and \$5 million of expense related to cash-settled nonvested restricted stock awards during the three and nine months ended June 30, 2019 and \$2 million of income related to cash-settled performance units during the three and nine months ended June 30, 2019.

(b) Included \$3 million and \$7 million of expense related to cash-settled nonvested restricted stock awards and \$2 million and \$5 million of expense related to cash-settled performance units during the three and nine months ended June 30, 2018, respectively.

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 generally lapse ten years after the date of grant. SARs granted for nine months ended June 30, 2019 and 2018 were 300 thousand and 470 thousand, respectively. As of June 30, 2019, there was \$8 million of total unrecognized compensation costs related to SARs. That cost is expected to be recognized over a weighted-average period of 1.8 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 or units were 1 thousand and 2 thousand for the three months ended June 30, 2019 and 2018, respectively, and 95 thousand and 146 thousand for the nine months ended June 30, 2019 and 2018, respectively. As of June 30, 2019, there was \$9 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 1.9 years.

Cash-settled nonvested stock awards

Certain nonvested stock awards are granted to employees and are settled in cash upon vesting. As of June 30, 2019, 113 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 \$3 million during the three months ended June 30, 2019 and 2018, respectively, and \$5 million and \$7 million during the nine months ended June 30, 2019 and 2018, 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 of Ashland and Valvoline. At June 30, 2019, there were 30 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 and resulted in \$1 million and \$2 million of expense for the three and nine months ended June 30, 2019, respectively, and \$1 million and \$4 million of expense for the three and nine months ended June 30, 2018, respectively. As of June 30, 2019, there was \$1 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. Awards settled in shares are recorded as a component of stockholders' equity while awards settled in cash are recorded as a liability within the Condensed Consolidated Balance Sheets.

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 total shareholder return (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 and 2019, 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. No performance shares/units were granted for the three months ended June 30, 2019 and 2018. Performance shares/units granted for the nine months ended June 30, 2019 and 2018 were 78 thousand and 101 thousand, respectively. As of June 30, 2019, there was \$5 million of total unrecognized compensation costs related to performance shares/units. That cost is expected to be recognized over a weighted-average period of 1.6 years.

NOTE O – REVENUE

Effective October 1, 2018, Ashland adopted 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). As a result of the adoption, there was no material impact to Ashland's Condensed Consolidated Financial Statements. The additional disclosures that Ashland is required to disclose on an interim and annual basis are contained within this Note O.

Revenue recognition

Ashland's revenue is measured as the amount of consideration it expects to receive in exchange for transferring goods or providing services and is recognized when performance obligations are satisfied under the terms of contracts with customers. Ashland generally utilizes standardized language for the terms of contracts within each purchase order, unless a separate agreement has been entered into with a customer that supersedes the standard language within the purchase order.

A performance obligation is deemed to be satisfied by Ashland when control of the product or service is transferred to the customer. The transaction price of a contract, or the amount Ashland expects to receive upon satisfaction of all performance obligations, is determined by reference to the contract's terms and includes adjustments, if applicable, for any variable consideration, such as volume discounts, rebates, refunds and rights to return. Where a contract contains more than one distinct performance obligation, the transaction price is allocated to each performance obligation based on the standalone selling price of each performance obligation, although these situations do not occur frequently and are generally not included within Ashland's contracts. Any unsatisfied performance obligations were not material. Standalone selling prices are based on prices Ashland charges to customers, which in some cases are based on established market prices. Ashland generally collects the cash from its customers within 60 days of the product delivery date. Sales and other similar taxes collected from customers on behalf of third parties are excluded from the contract price.

All of Ashland's revenue is derived from contracts with customers, and nearly all contracts with customers contain one performance obligation for the transfer of goods where such performance obligation is satisfied at a point in time. Control of a product is deemed to be transferred to the customer generally upon shipment or delivery. Costs for shipping and handling activities, whether performed before or after the customer obtains control of the goods, are accounted for as fulfillment costs when not reimbursed.

Costs incurred to obtain contracts with customers have historically not been significant and are expensed immediately as the period of performance is generally one year or less. Ashland records bad debt expense in specific situations when it is determined that the customer is unable to meet its financial obligation.

Practical expedients

Upon adoption, Ashland utilized the following applicable practical expedients, as permitted by ASC 606, Revenue from Contracts with Customers:

- Sales and other similar taxes collected from customers on behalf of third parties are excluded from the contract price;
- Costs for shipping and handling activities, whether performed before or after the customer obtains control of the goods, are accounted for as fulfillment costs when not reimbursed; and
- Costs incurred to obtain contracts with customers are expensed immediately when the amortization period is one year or less.

Trade receivables

Trade receivables are defined as receivables arising from contracts with customers and are recorded within the accounts receivable caption within the Condensed Consolidated Balance Sheets. Ashland's trade receivables were \$472 million and \$482 million as of June 30, 2019 and September 30, 2018, respectively.

Disaggregation of revenue

Ashland disaggregates its revenue from contracts with customers by segment, geographical region and product category, as Ashland believes these categories best depict how management reviews the financial performance of its operations for the three and nine months ended June 30, 2018 and 2019. See the following tables for details:

(In millions) Geography	Sales by geography			
	Specialty Ingredients		Intermediates and Solvents	
	2019	2018	2019	2018
Three months ended June 30				
North America	\$ 246	\$ 253	\$ 15	\$ 14
Europe	204	208	5	6
Asia Pacific	117	121	7	9
Latin America & other	46	56	1	1
	<u>\$ 613</u>	<u>\$ 638</u>	<u>\$ 28</u>	<u>\$ 30</u>
Nine months ended June 30				
North America	\$ 712	\$ 733	\$ 42	\$ 42
Europe	594	597	16	19
Asia Pacific	348	339	20	23
Latin America & other	149	165	3	4
	<u>\$ 1,803</u>	<u>\$ 1,834</u>	<u>\$ 81</u>	<u>\$ 88</u>

ASHLAND GLOBAL HOLDINGS INC. AND CONSOLIDATED SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

Sales by product category

(In millions)	2019	2018
Three months ended June 30		
Ashland Specialty Ingredients		
Cellulosics	\$ 219	\$ 223
Poly-vinyl pyrrolidones	108	110
Adhesives	88	90
Actives	36	36
Vinyl ethers	25	39
Pharmachem	59	55
Other	78	85
	<u>\$ 613</u>	<u>\$ 638</u>
Intermediates and Solvents		
Derivatives	\$ 22	\$ 25
Butanediol	6	5
	<u>\$ 28</u>	<u>\$ 30</u>
Total	<u>\$ 641</u>	<u>\$ 668</u>

Sales by product category

(In millions)	2019	2018
Nine months ended June 30		
Ashland Specialty Ingredients		
Cellulosics	\$ 633	\$ 616
Poly-vinyl pyrrolidones	312	320
Adhesives	259	259
Actives	116	116
Vinyl ethers	80	106
Pharmachem	182	176
Other	221	241
	<u>\$ 1,803</u>	<u>\$ 1,834</u>
Intermediates and Solvents		
Derivatives	\$ 67	\$ 73
Butanediol	14	15
	<u>\$ 81</u>	<u>\$ 88</u>
Total	<u>\$ 1,884</u>	<u>\$ 1,922</u>

NOTE P – 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

Ashland's reportable segments were impacted in the current year due to the expected divestiture of the Composites reportable segment and Intermediates and Solvents Marl facility and reclassification to discontinued operations. As a result, Ashland's operations are managed by the chief operating decision maker within the following two reportable segments: Specialty Ingredients and Intermediates and Solvents. The financial information for Intermediates and Solvents excludes the activity from the Marl facility due to the expected divestiture and has therefore been restated in prior periods.

Reportable segment business descriptions

Specialty Ingredients offers industry-leading products, technologies and resources for solving formulation and product-performance challenges. Using 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 offers comprehensive and innovative solutions for 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.

Intermediates and Solvents is a leading producer of 1,4 butanediol 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. On November 15, 2018, Ashland announced that it had signed a definitive agreement to sell its Composites segment and Intermediates and Solvents Marl facility. As a result, the financial information for Intermediates and Solvents excludes the activity from the Marl facility due to the expected divestiture and has been restated in prior periods.

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 significant costs to its reportable segments except for certain significant company-wide restructuring activities, including stranded costs, 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.

ASHLAND GLOBAL HOLDINGS INC. AND CONSOLIDATED SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

The following table presents various financial information for each reportable segment for the three and nine months ended June 30, 2019 and 2018.

(In millions - unaudited)	Three months ended June 30		Nine months ended June 30	
	2019	2018	2019	2018
SALES				
Specialty Ingredients	\$ 613	\$ 638	\$ 1,803	\$ 1,834
Intermediates and Solvents	28	30	81	88
	<u>\$ 641</u>	<u>\$ 668</u>	<u>\$ 1,884</u>	<u>\$ 1,922</u>
OPERATING INCOME (LOSS)				
Specialty Ingredients	\$ 84	\$ 91	\$ 180	\$ 222
Intermediates and Solvents	5	5	10	11
Unallocated and other	(46)	(66)	(110)	(135)
	<u>\$ 43</u>	<u>\$ 30</u>	<u>\$ 80</u>	<u>\$ 98</u>

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 program to eliminate certain existing corporate and Specialty Ingredients expenses (including the possibility that such cost eliminations may not occur or may take longer to implement than anticipated), the expected divestiture of its Composites segment and the butanediol (BDO) manufacturing facility in Marl, Germany, and related merchant Intermediates and Solvents (I&S) products (including, in each case, the possibility that a transaction may not occur or that, if a transaction does occur, Ashland may not realize the anticipated benefits from such transaction), the impact of acquisitions and/or divestitures Ashland has made or may make (including the possibility that Ashland may not realize the anticipated benefits from such transactions); 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); Ashland’s ability to generate sufficient cash to finance its stock repurchase plans; 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.

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 6,000 employees worldwide, Ashland serves customers in more than 100 countries.

Ashland's sales generated outside of North America were 59% and 60% for the three months ended June 30, 2019 and 2018, respectively, and 60% for both the nine months ended June 30, 2019 and 2018. Sales by region expressed as a percentage of total consolidated sales for the three and nine months ended June 30 were as follows:

Sales by Geography	Three months ended June 30		Nine months ended June 30	
	2019	2018	2019	2018
North America (a)	41%	40%	40%	40%
Europe	33%	32%	32%	32%
Asia Pacific	19%	19%	20%	19%
Latin America & other	7%	9%	8%	9%
	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>

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

Reportable segments

Ashland's businesses are managed within the following two reportable segments: Specialty Ingredients and Intermediates and Solvents. For further descriptions of each reportable segment, see "Results of Operations – Reportable Segment Review" beginning on page 48.

The contribution to sales by each reportable segment expressed as a percentage of total consolidated sales for the three and nine months ended June 30 were as follows:

Sales by Reportable Segment	Three months ended June 30		Nine months ended June 30	
	2019	2018	2019	2018
Specialty Ingredients	96%	95%	96%	95%
Intermediates and Solvents	4%	5%	4%	5%
	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>

KEY DEVELOPMENTS

Business results

Ashland recorded net income of \$66 million, or an increase of 83%, in the current quarter (\$23 million in continuing operations and \$43 million in discontinued operations) compared to net income of \$36 million (\$11 million in continuing operations and \$25 million in discontinued operations) in the prior year quarter. Results for Ashland's continuing operations were primarily driven by the performance of Specialty Ingredients and the Intermediates and Solvents operating results, as well as Corporate costs, between periods. Discontinued operations were primarily driven by the results of distribution and the Composites segment and Marl facility. Ashland's Adjusted EBITDA decreased by 1% to \$140 million (see U.S. GAAP reconciliation on page 44).

Composites segment and Marl facility

On November 15, 2018, Ashland announced that it had signed a definitive agreement to sell its Composites segment and Intermediates and Solvents Marl facility to INEOS Enterprises (INEOS) in a transaction valued at \$1.1 billion. Ashland will retain the remaining Intermediates and Solvents facility in Lima, Ohio primarily for its own internal business use.

On July 1, 2019 an amendment was signed to exclude certain assets and liabilities related to Ashland's maleic anhydride business (Maleic business). Under the amendment, Ashland agreed to continue to operate the Maleic business and use commercially reasonable efforts to sell the Maleic business to another purchaser. In connection with any Maleic sale within 18 months of the closing of the composites and Marl facility sale, excluding Maleic, INEOS will be entitled to the net proceeds, after deduction of the reasonable costs incurred by Ashland; provided that INEOS shall receive no less than \$35 million. If Ashland is unable to sell the Maleic business within 18 months of the closing of the Composites and Marl facility sale, excluding Maleic, Ashland has agreed to reimburse \$35 million to INEOS.

In late July, Ashland and INEOS agreed to certain additional changes to the sale agreement, subject to approval by and reflecting continued discussions with the US Federal Trade Commission. As part of the proposed changes, the purchase price has been adjusted to \$1.015 billion while Ashland retains the right to the Maleic business, including the retention of any subsequent sale proceeds. The company anticipates that remaining regulatory approvals will be received shortly.

Ashland currently expects net proceeds from the sale of the Composites and Marl facility to total approximately \$0.9 billion and anticipates that the proceeds will be primarily used to reduce outstanding debt and other corporate purposes.

The sale of Composites and Marl facility, excluding Maleic, is expected to close by late summer, contingent on certain customary regulatory approvals, standard closing conditions and completion of required employee information and consultation processes. Upon the closing of this transaction, Ashland currently expects to recognize a pre-tax gain in excess of \$400 million within the Statements of Consolidated Comprehensive Income (Loss).

Since this transaction signifies a strategic shift in Ashland's business and had a major effect on Ashland's operations and financial results, the operating results and cash flows related to Composites and the Marl facility, including Maleic, have been reflected as discontinued operations in the Statements of Consolidated Comprehensive Income (Loss) and Statements of Condensed Consolidated Cash Flows. See Note C of the Notes to Condensed Consolidated Financial Statements for the results of operations for Composites and the Marl facility, including Maleic, for all periods presented.

Certain indirect corporate costs included within the selling, general and administrative expense caption of the Statements of Consolidated Comprehensive Income (Loss) that were previously allocated to the Composites segment and Marl facility do not qualify for classification within discontinued operations and are now reported as selling, general and administrative expense within continuing operations on a consolidated basis and within the Unallocated and other segment. These costs were \$10 million and \$12 million during the three months ended June 30, 2019 and 2018, respectively, and \$33 million and \$35 million during the nine months ended June 30, 2019 and 2018, respectively. Ashland is currently implementing plans to eliminate these costs as part of the global restructuring program.

Subsequent to the completion of the sale, Ashland expects to provide certain transition services to INEOS Enterprises for a fee. While the transition services are expected to vary in duration depending upon the type of service provided, Ashland expects to reduce costs as the transition services are completed.

Cost Reduction Program

In early May 2018, Ashland announced a cost reduction program to accelerate EBITDA margin growth by creating a leaner, more cost competitive company with improved operating efficiency, faster decision making and a stronger customer focus. Under this program, Ashland intends to eliminate a total of \$120 million of existing allocated costs, direct expenses within Specialty Ingredients SG&A, and facility-related costs as follows:

- Approximately \$70 million of costs allocated to the Composites business and to the butanediol manufacturing facility in Marl, Germany, are expected to be offset or eliminated through transfers and reductions. This reduction is intended to eliminate stranded costs.
- Approximately \$50 million of additional costs are expected to be eliminated to drive improved profitability in Specialty Ingredients and accelerate achievement of its adjusted EBITDA margin target of 25-27 percent.

Ashland continues to expect to achieve the full \$120 million in run-rate savings by the end of calendar year 2019. Ashland met its expectation for capturing the targeted \$20 million in annualized run-rate savings under this program by the end of the September 2018 quarter. An additional \$30 million, \$20 million, and \$15 million in run-rate savings were captured in the December 2018, March 2019, and June 2019 quarters, respectively, bringing the total annualized run-rate savings to \$85 million as of June 30, 2019.

Share Repurchase Program

On April 30, 2019, Ashland announced an intention to commence a \$200 million share repurchase program under Ashland's Board of Directors approved \$1 billion stock repurchase program in fiscal 2018.

In May 2019, under the 2018 stock repurchase program, Ashland announced that it entered into an accelerated share repurchase agreement (2019 ASR Agreement). Under the 2019 ASR Agreement, Ashland paid an initial purchase price of \$200 million and received an initial delivery of 2.2 million shares of common stock during May 2019. The 2019 ASR Agreement is scheduled to terminate no later than August 2019 but may be terminated early in certain circumstances, in whole or in part.

As of June 30, 2019, \$800 million remained available for repurchase under the \$1 billion stock repurchase program.

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 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 measure 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 measure 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.

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.

Current Quarter - Key financial results for the three months ended June 30, 2019 and 2018 included the following:

- Ashland's net income amounted to \$66 million and \$36 million for the three months ended June 30, 2019 and 2018, respectively, or \$1.05 and \$0.56 diluted earnings per share, respectively.
- Discontinued operations, which are reported net of taxes, resulted in income of \$43 million and \$25 million during the three months ended June 30, 2019 and 2018, respectively.
- Income from continuing operations, which excludes results from discontinued operations, amounted to \$23 million and \$11 million for the three months ended June 30, 2019 and 2018, respectively.
- The effective income tax rates for the three months ended June 30, 2019 and 2018 were significantly impacted by certain tax discrete items in both the current and prior year quarters resulting in a benefit for both periods.
- Ashland incurred pretax net interest and other financing expense of \$21 million and expense of \$28 million for the three months ended June 30, 2019 and 2018, respectively. Due to the adoption of new accounting guidance, the current quarter included \$6 million of unrealized gains on restricted investments.
- Operating income was \$43 million and \$30 million for the three months ended June 30, 2019 and 2018, respectively.

Year-to-date - Key financial results for the nine months ended June 30, 2019 and 2018 included the following:

- Ashland recorded net income of \$94 million and \$104 million for the nine months ended June 30, 2019 and 2018, respectively, or \$1.50 and \$1.64 diluted earnings per share, respectively.
- Discontinued operations, which are reported net of taxes, resulted in income of \$97 million and \$83 million during the nine months ended June 30, 2019 and 2018, respectively.

- Ashland's results from continuing operations, which excludes results from discontinued operations, amounted to a loss of \$3 million and income of \$21 million for the nine months ended June 30, 2019 and 2018, respectively.
- The effective income tax rates were 114% and negative 17% for the nine months ended June 30, 2019 and 2018, respectively, and were significantly impacted by certain tax discrete items in both the current and prior periods.
- Ashland incurred pretax net interest and other financing expense of \$73 million and \$78 million for the nine months ended June 30, 2019 and 2018, respectively.
- Other net periodic benefit income totaled \$17 million and \$1 million for the nine months ended June 30, 2019 and 2018, respectively.
- Net loss on divestitures totaled \$3 million for both the nine months ended June 30, 2019 and 2018.
- Operating income amounted to \$80 million and \$98 million for the nine months ended June 30, 2019 and 2018, respectively.

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

Operating income

Current Quarter – Operating income was \$43 million and \$30 million for the three months ended June 30, 2019 and 2018, respectively. The current and prior year quarters' operating income included certain key items that were excluded to arrive at Adjusted EBITDA and are quantified in the table on page 40. These operating key items for the applicable periods are summarized as follows:

- Restructuring, separation and other costs – Ashland periodically implements company-wide cost reduction programs related to acquisitions, divestitures and other cost reduction programs in order to enhance profitability through streamlined operations and an improved overall cost structure. Ashland often incurs severance, facility and integration costs associated with these programs. See Note D in the Notes to Condensed Consolidated Financial Statements for further information on the company-wide cost reduction program.
- Accelerated depreciation – As a result of various restructuring activities at certain office facilities and manufacturing facilities during the prior year quarter, Ashland recorded accelerated depreciation due to changes in the expected useful life of certain property, plant and equipment.
- Environmental reserve adjustments – 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. As a result of these activities, Ashland recorded non-cash adjustments during the current and prior year quarters to its environmental liabilities and receivables related to previously divested businesses or non-operational sites. See Note K of the Notes to Condensed Consolidated Financial Statements for more information.
- Tax indemnity expense – Ashland incurred a charge in the current quarter for pre-tax indemnity related items.
- Unplanned plant shutdown – Ashland incurred an unplanned plant shutdown during the quarter at its Parlin facility for force majeure contract issues.

Operating income for the three months ended June 30, 2019 and 2018 included depreciation and amortization of \$62 million and \$65 million, respectively (which excluded accelerated depreciation and amortization of \$2 million for the three months ended June 30, 2018).

Year-to-date - Operating income was \$80 million and \$98 million for the nine months ended June 30, 2019 and 2018, respectively. The current and prior year period operating income included certain key items that were excluded to arrive at Adjusted EBITDA and are quantified in the table on page 40. These operating key items for the applicable periods are summarized as follows:

- Restructuring, separation and other costs – Ashland periodically implements company-wide cost reduction programs related to acquisitions, divestitures and other cost reduction programs in order to enhance profitability through streamlined operations and an improved overall cost structure. Ashland often incurs severance, facility and integration costs associated with these programs. See Note D in the Notes to Condensed Consolidated Financial Statements for further information on the company-wide cost reduction program.
- Accelerated depreciation – As a result of various restructuring activities at certain office facilities and manufacturing facilities during both the current and prior year periods, Ashland recorded accelerated depreciation due to changes in the expected useful life of certain property, plant and equipment.
- Proxy costs – Ashland incurred significant consulting and other costs associated with the 2019 Annual Meeting of Stockholders and agreement with Cruiser Capital.
- Environmental reserve adjustments – 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. As a result of these activities, Ashland recorded non-cash adjustments during the current and prior year periods to its environmental liabilities and receivables related to previously divested businesses or non-operational sites. See Note K of the Notes to Condensed Consolidated Financial Statements for more information.
- Tax indemnity expense – Ashland incurred a charge in the current quarter for pre-tax indemnity related items.
- Unplanned plant shutdown – Ashland incurred an unplanned plant shutdown during the quarter at its Parlin facility for force majeure contract issues.
- Legal settlement – Ashland received one-time proceeds from a legal settlement during the prior year period.

Operating income for the nine months ended June 30, 2019 and 2018 included depreciation and amortization of \$186 million and \$196 million, respectively (which excluded accelerated depreciation and amortization of \$39 million and \$13 million for the nine months ended June 30, 2019 and 2018, respectively).

Non-operating key items affecting EBITDA

Current Year-to-Date

- Gain on pension and other postretirement plan remeasurements – Ashland recognized a remeasurement gain due to the settlement of a non-U.S. pension plan during the first quarter of fiscal 2019. See Note J of the Notes to Condensed Consolidated Financial Statements for more information.
- Net loss on divestitures – Ashland recorded a loss during the first quarter of fiscal 2019 related to the impairment of an investment, while 2018 included a charge from a previous manufacturing facility.

EBITDA and Adjusted EBITDA

EBITDA totaled \$148 million and \$118 million for the three months ended June 30, 2019 and 2018, respectively, and \$377 million and \$375 million for the nine months ended June 30, 2019 and 2018, 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 previously described. Management believes the use of such non-GAAP measures on a consolidated and reportable segment basis assists investors in understanding the ongoing operating performance by presenting the financial results between periods on a more comparable basis.

(In millions)	Three months ended		Nine months ended	
	June 30		June 30	
	2019	2018	2019	2018
Net income	\$ 66	\$ 36	\$ 94	\$ 104
Income tax expense (benefit)	(1)	(11)	24	(3)
Net interest and other expense	21	28	73	78
Depreciation and amortization (a)	62	65	186	196
EBITDA	148	118	377	375
Income from discontinued operations (net of tax)	(43)	(25)	(97)	(83)
Key items included in EBITDA:				
Restructuring, separation and other costs	12	14	50	30
Proxy costs	—	—	5	—
Accelerated depreciation	—	—	39	11
Legal settlement	—	—	—	(5)
Environmental reserve adjustments	15	32	15	43
Unplanned plant shutdown	2	—	2	—
Tax indemnity expense	6	—	6	—
Gain on pension and other postretirement plan remeasurements	—	—	(18)	—
Net loss on divestitures	—	2	3	2
Total key items included in EBITDA	35	48	102	81
Adjusted EBITDA	\$ 140	\$ 141	\$ 382	\$ 373
Total key items included in EBITDA	\$ 35	\$ 48	\$ 102	\$ 81
Unrealized gain on securities (b)	(6)	—	(3)	—
Debt refinancing costs (c)	—	1	—	1
Total key items, before tax	\$ 29	\$ 49	\$ 99	\$ 82

(a) Excludes \$2 million of accelerated depreciation for the three months ended June 30, 2018, and \$39 million and \$13 million for the nine months ended June 30, 2019 and 2018, respectively.

(b) Due to the adoption of new accounting guidance in the current year, the unrealized losses on certain investment securities directly impact earnings and are recorded within the net interest and other expense (income) caption on the Statements of Consolidated Comprehensive Income (Loss). See Notes A and E of the Notes to Condensed Consolidated Financial Statements for more information.

(c) Debt refinancing costs during the three and nine months ended June 30, 2018 primarily included a \$1 million charge for new debt issuance costs incurred with the repricing of the 2017 TLB facility. All debt refinancing costs were recorded within the net interest and other financing expense caption on the Statement of Consolidated Comprehensive Income (Loss).

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. Key items are defined as the financial effects from significant transactions that may have caused short-term fluctuations in net income and/or operating income which Ashland believes do not accurately reflect Ashland's underlying business performance and trends. 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. Management believes investors and analysts use this financial measure in assessing Ashland's business performance and that presenting this non-GAAP measure on a consolidated basis assists investors in better understanding Ashland's ongoing business performance and enhances their ability to compare period-to-period financial results.

	Three months ended		Nine months ended	
	June 30		June 30	
	2019	2018	2019	2018
Diluted EPS from continuing operations (as reported)	\$ 0.37	\$ 0.18	\$ (0.05)	\$ 0.32
Key items, before tax:				
Restructuring, separation and other costs	0.19	0.21	1.40	0.65
Proxy costs	—	—	0.08	—
Tax indemnity expense	0.10	—	0.10	—
Gain on pension and other postretirement plan remeasurements	—	—	(0.29)	—
Environmental reserve adjustments	0.24	0.50	0.24	0.68
Legal settlement	—	—	—	(0.07)
Unplanned plant shutdowns	0.03	—	0.03	—
Unrealized gain on securities	(0.10)	—	(0.05)	—
Debt refinancing cost	—	0.02	—	0.02
Net loss on divestitures	—	0.04	0.05	0.04
Key items, before tax	0.46	0.77	1.56	1.32
Tax effect of key items (a)	(0.08)	(0.18)	(0.16)	(0.33)
Key items, after tax	0.38	0.59	1.40	0.99
Tax specific key items:				
Deferred tax rate changes	—	—	0.03	(2.06)
One-time transition tax	0.10	—	0.44	2.22
Uncertain tax positions	(0.13)	—	(0.12)	—
Restructuring and separation activity	—	—	(0.02)	—
Other	0.05	—	0.05	—
Tax specific key items (b)	0.02	—	0.38	0.16
Total key items	0.40	0.59	1.78	1.15
Adjusted diluted EPS from continuing operations (non-GAAP)	\$ 0.77	\$ 0.77	\$ 1.73	\$ 1.47

(a) Represents the diluted EPS impact from the tax effect of the key items that are previously identified above.

(b) Represents the diluted EPS impact from tax specific financial transactions, tax law changes or other matters that fall within the definition of key items. For additional explanation of these tax specific key items, see the income tax expense (benefit) discussion within the following caption review section.

Statements of Consolidated Comprehensive Income (Loss) – caption review

A comparative analysis of the Statements of Consolidated Comprehensive Income (Loss) by caption is provided as follows for the three and nine months ended June 30, 2019 and 2018.

(In millions)	Three months ended June 30			Nine months ended June 30		
	2019	2018	Change	2019	2018	Change
Sales	\$ 641	\$ 668	\$ (27)	\$ 1,884	\$ 1,922	\$ (38)

The following table provides a reconciliation of the change in sales between the three and nine months ended June 30, 2019 and 2018.

(In millions)	Three months ended June 30, 2019		Nine months ended June 30, 2019	
Currency exchange	\$	(13)	\$	(39)
Volume/product mix		(12)		(14)
Pricing		3		20
Acquisition and divestitures		(5)		(5)
Change in sales	\$	(27)	\$	(38)

Current Quarter - Sales for the current quarter decreased \$27 million compared to the prior year quarter. Unfavorable foreign currency exchange, Volume/product mix, and acquisitions and divestitures decreased sales by \$13 million, \$12 million and \$5 million, respectively. These decreases were partially offset by product pricing which increased sales by \$3 million.

Year-to-Date - Sales for the current year decreased \$38 million compared to the prior year period. Unfavorable foreign currency exchange, volume/product mix and acquisitions and divestitures each decreased sales by \$39 million, \$14 million, and \$5 million, respectively. These decreases were partially offset by improvements to product pricing which increased sales by \$20 million.

(In millions)	Three months ended June 30			Nine months ended June 30		
	2019	2018	Change	2019	2018	Change
Cost of sales	\$ 434	\$ 439	\$ (5)	\$ 1,327	\$ 1,290	\$ 37
Gross profit as a percent of sales	32.3%	34.3%		29.6%	32.9%	

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 and nine months ended June 30, 2019 and 2018.

(In millions)	Three months ended June 30, 2019		Nine months ended June 30, 2019	
Changes in:				
Accelerated depreciation	\$	—	\$	38
Severance and other restructuring costs		2		10
Production and raw material costs		10		19
Volume/product mix		(6)		(5)
Currency exchange		(6)		(20)
Acquisitions and divestitures		(5)		(5)
Change in cost of sales	\$	(5)	\$	37

Current Quarter - Cost of sales for the current quarter decreased \$5 million compared to the prior year quarter. Decreases in volume/product mix, currency exchange, and acquisitions and divestitures totaling \$17 million were the primary driver in the cost of sales decline. These declines were offset by a \$10 million increase in production and raw materials costs and a \$2 million increase related to other net plant costs.

Year-to-Date - Cost of sales for the current year increased \$37 million compared to the prior year period. Due to the planned closure of a manufacturing facility during the current period, accelerated depreciation increased cost of sales by \$38 million while severance and other plant restructuring costs increased cost of sales by \$10 million. Unfavorable production costs increased cost of sales by \$19 million while volume and product mix decreased cost of sales by \$5 million. Favorable foreign currency exchange decreased cost of sales by \$20 million with acquisitions and divestitures adding another \$5 million decline.

(In millions)	Three months ended June 30			Nine months ended June 30		
	2019	2018	Change	2019	2018	Change
Selling, general and administrative expense	\$ 150	\$ 181	\$ (31)	\$ 429	\$ 481	\$ (52)
As a percent of sales	23.4%	27.1%		22.8%	25.0%	

Current Quarter - Selling, general and administrative expense for the current quarter decreased \$31 million compared to the prior year quarter with expenses as a percent of sales decreasing 3.7 percentage points. Key drivers of the fluctuation in selling, general and administrative expense compared to the prior year quarter were:

- \$17 million and \$34 million in net environmental-related expenses during the current and prior year period, respectively (see Note K for more information);
- \$12 million and \$13 million of key items for restructuring, separation and other costs during the current and prior year quarters, respectively, comprised of the following:
 - o \$12 million and \$11 million of severance, lease abandonment and other restructuring costs related to company-wide cost-savings initiatives during the current and prior year quarters, respectively;
 - o \$1 million of Pharmachem integration costs during the prior year quarter;
 - o \$1 million of costs related to the separation of Valvoline during the prior year quarter;
- \$6 million of tax indemnity costs during the current quarter;
- Lower variable compensation of \$5 million during the current quarter;
- Favorable currency exchange of \$4 million as well as achieved cost savings during the current quarter.

Year-to-Date - Selling, general and administrative expense for the current period decreased \$52 million compared to the prior year period with expenses as a percent of sales decreasing 2.2 percentage points. Key drivers of the fluctuation in selling, general and administrative expense compared to the prior year were:

- \$24 million and \$53 million in net environmental-related expenses during the current and prior year period, respectively (see Note K for more information);
- \$42 million and \$34 million of key items for restructuring, separation and other costs during the current and prior year periods, respectively, comprised of the following:
 - o \$42 million and \$11 million of severance, lease abandonment and other restructuring costs related to company-wide cost-savings initiatives during the current and prior year periods, respectively;
 - o \$9 million of costs related to the separation of Valvoline during the prior year period;
 - o \$8 million of accelerated depreciation related to the planned closure of an office building during the prior year period; and
 - o \$6 million of Pharmachem integration costs during the prior year period;
- \$6 million of tax indemnity costs during the current period;
- \$5 million of consulting and other costs associated with the 2019 proxy during the current year period;
- Lower variable compensation of \$10 million during the current period;
- Favorable currency exchange of \$8 million as well as achieved cost savings during the current year period.

(In millions)	Three months ended June 30			Nine months ended June 30		
	2019	2018	Change	2019	2018	Change
Research and development expense	\$ 17	\$ 18	\$ (1)	\$ 51	\$ 55	\$ (4)

Current Quarter - Research and development expense declined compared to the prior year quarter, primarily due to the overall company-wide cost reduction program.

Year-to-Date - Research and development expense declined compared to the prior year period, primarily due to the overall company-wide cost reduction program.

(In millions)	Three months ended June 30			Nine months ended June 30		
	2019	2018	Change	2019	2018	Change
Equity and other income (loss)						
Equity income (a)	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Other income	3	—	3	3	2	1
	<u>\$ 3</u>	<u>\$ —</u>	<u>\$ 3</u>	<u>\$ 3</u>	<u>\$ 2</u>	<u>\$ 1</u>

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

Current Quarter - Other income increased compared to the prior year primarily due to proceeds from a financial subsidy in China.

Year-to-Date - Other income was relatively consistent year over year.

(In millions)	Three months ended June 30			Nine months ended June 30		
	2019	2018	Change	2019	2018	Change
Net interest and other expense (income)						
Interest expense	\$ 28	\$ 30	\$ (2)	\$ 81	\$ 88	\$ (7)
Interest income	—	(1)	1	(1)	(3)	2
Loss (income) from restricted investments	(8)	(2)	(6)	(10)	(10)	—
Other financing costs	1	1	—	3	3	—
	<u>\$ 21</u>	<u>\$ 28</u>	<u>\$ (7)</u>	<u>\$ 73</u>	<u>\$ 78</u>	<u>\$ (5)</u>

Current Quarter - Net interest and other expense decreased by \$7 million during the current quarter compared to the prior year quarter. Interest expense decreased slightly due to lower debt levels during the current quarter compared to the prior year quarter. In the current quarter, restricted investments included gains on equity securities of \$8 million as compared to \$2 million in the prior period. See Note E of the Notes to Condensed Consolidated Financial Statements for more information on the restricted investments.

Year-to-Date - Net interest and other expense decreased by \$5 million during the current year compared to the prior year period. Interest expense decreased \$7 million due to lower debt levels during the current year compared to the prior year period. Restricted investments included gains on equity securities of \$10 million for each period. See Note E of the Notes to Condensed Consolidated Financial Statements for more information on the restricted investments.

(In millions)	Three months ended June 30			Nine months ended June 30		
	2019	2018	Change	2019	2018	Change
Other net periodic benefit income	\$ —	\$ —	\$ —	\$ 17	\$ 1	\$ 16

Current Quarter - Other net periodic benefit remained relatively consistent for the current quarter compared to the prior quarter.

Year-to-Date - Other net periodic benefit income during the current year period primarily related to the curtailment gain from the settlement of a non-U.S. pension plan in the first quarter of fiscal 2019.

(In millions)	Three months ended June 30			Nine months ended June 30		
	2019	2018	Change	2019	2018	Change
Net income (loss) on divestitures	\$ —	\$ (2)	\$ 2	\$ (3)	\$ (3)	\$ —

Current Quarter - The activity in the prior period related to a charge from a previous manufacturing facility.

Year-to-Date - The activity in the current period related to the impairment of an investment during the first quarter of fiscal 2019, while activity in the prior year period primarily related to post-closing adjustments for certain divestitures in addition to the activity in the current quarter.

(In millions)	Three months ended June 30			Nine months ended June 30		
	2019	2018	Change	2019	2018	Change
Income tax expense (benefit)	\$ (1)	\$ (11)	\$ 10	\$ 24	\$ (3)	\$ 27
Effective tax rate	(5)%	NM		114%	(17)%	

Current Quarter - 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 a negative 5% for the three months ended June 30, 2019 and was primarily impacted by income mix, as well as \$2 million in net favorable tax discrete items including the favorable adjustment from the release of reserves related to unrecognized tax benefits and the unfavorable adjustment related to transition tax and other items.

The overall effective tax rate was not meaningful for the three months ended June 30, 2018 and was primarily impacted by the current quarter income mix and favorable tax discrete adjustments of \$5 million related to a state tax rate change and other items.

Year-to-Date - 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 114% for the nine months ended June 30, 2019 and was primarily impacted by the items referenced in the three month period as well as a net \$17 million from unfavorable tax discrete items including the final assessment of the Tax Act and other items.

The overall effective tax rate was a negative 17% for the nine months ended June 30, 2018 and was primarily impacted by the items referenced in the quarter, as well as a net \$6 million from unfavorable tax discrete items including the final assessment of the Tax Act, the tax rate change in a foreign country, and other items.

Adjusted income tax expense (benefit)

Key items are defined as the financial effects from significant transactions that may have caused short-term fluctuations in net income and/or operating income which Ashland believes do not accurately reflect Ashland's underlying business performance and trends. Tax specific key items are defined as the financial effects from tax specific financial transactions, tax law changes or other matters that fall within the definition of key items as previously described. The effective tax rate, excluding key items, which is a non-GAAP measure, has been prepared to illustrate the ongoing tax effects of Ashland's operations. Management believes investors and analysts use this financial measure in assessing Ashland's business performance and that presenting this non-GAAP measure on a consolidated basis assists investors in better understanding Ashland's ongoing business performance and enhancing their ability to compare period-to-period financial results.

The effective tax rate during the three and nine months ended June 30, 2019 and 2018 was significantly impacted by the following tax specific key items:

- Deferred tax rate changes – Includes the impact from the remeasurement of Ashland’s domestic deferred tax balances resulting from the enactment of the Tax Act as well as the impact from deferred rate changes for other jurisdictions;
- One-time transition tax – Includes the impact from the one-time transition tax resulting from the enactment of the Tax Act;
- Restructuring and separation activity – Includes the impact from company-wide cost reduction programs; and
- Other tax reform – Includes the impact from other items related to the Tax Act and other tax law changes. These adjustments include the impact from the deductibility of compensation items and miscellaneous state tax items.

The following table is a calculation of the effective tax rate, excluding these key items.

(In millions)	Three months ended		Nine months ended	
	June 30		June 30	
	2019	2018	2019	2018
Income (Loss) from continuing operations before income taxes	\$ 22	\$ —	\$ 21	\$ 18
Key items (pre-tax) (a)	29	49	99	82
Adjusted income from continuing operations before income taxes	\$ 51	\$ 49	\$ 120	\$ 100
Income tax expense (benefit)	\$ (1)	\$ (11)	\$ 24	\$ (3)
Income tax rate adjustments:				
Tax effect of key items	5	11	10	21
Tax specific key items: (b)				
Deferred tax rate changes	—	—	(2)	130
One-time transition tax	(6)	—	(28)	(142)
Uncertain tax positions	8	—	8	—
Restructuring and separation activity	—	—	1	—
Other	(3)	—	(3)	—
Total income tax rate adjustments	4	11	(14)	9
Adjusted income tax expense	\$ 3	\$ —	\$ 10	\$ 6
Effective tax rate, excluding key items (Non-GAAP) (c)	6%	1%	8%	6%

(a) See Adjusted EBITDA reconciliation table previously disclosed in this Management, Discussion and Analysis for a summary of the key items, before tax.

(b) For additional information on the effect that these tax specific key items had on EPS, see the Adjusted Diluted EPS table previously disclosed in this Management Discussion and Analysis.

(c) Due to rounding conventions, the effective tax rate presented may not recalculate precisely based on the numbers disclosed within this table.

(In millions)	Three months ended June 30			Nine months ended June 30		
	2019	2018	Change	2019	2018	Change
Income (loss) from discontinued operation (net of taxes)						
Composites/Marl facility	\$ 24	\$ 25	\$ (1)	\$ 77	\$ 74	\$ 3
Valvoline	—	(7)	7	1	1	—
Asbestos-related litigation	—	9	(9)	—	12	(12)
Water Technologies	—	—	—	1	(1)	2
Distribution	19	(2)	21	18	(3)	21
	<u>\$ 43</u>	<u>\$ 25</u>	<u>\$ 18</u>	<u>\$ 97</u>	<u>\$ 83</u>	<u>\$ 14</u>

Current Quarter - As a result of the expected divestiture of the Composites segment and Marl facility, including Maleic, the related operating results have been reflected as discontinued operations (net of tax) within the Statements of Consolidated Comprehensive Income (Loss). See Note B for more information on this expected divestiture. In the current quarter, the sales and pre-tax operating income included in discontinued operations were \$281 million and \$44 million, respectively. In the prior year quarter, the sales and pre-tax operating income included in discontinued operations were \$303 million and \$36 million, respectively.

The activity within discontinued operations for Valvoline during the prior year quarter was primarily related to adjustments in conjunction with a Tax Matters Agreement established at the time of Valvoline's separation from Ashland.

The activity for Water Technologies and Distribution during the current quarter was related to post-closing adjustments including a \$28 million pre-tax gain in the current quarter related to the completion of a property sale directly related to the previously divested Distribution segment.

Year-to-Date - As a result of the expected divestiture of the Composites segment and Marl facility, the related operating results have been reflected as discontinued operations (net of tax) within the Statements of Consolidated Comprehensive Income (Loss). See Note B for more information on this expected divestiture. In the current year period, the sales and pre-tax operating income included in discontinued operations were \$840 million and \$125 million, respectively. In the prior year period, the sales and pre-tax operating income included in discontinued operations were \$865 million and \$102 million, respectively.

The activity within discontinued operations for Valvoline during the prior year was primarily related to adjustments in conjunction with a Tax Matters Agreement established at the time of Valvoline's separation from Ashland.

The activity related to Water Technologies during the current quarter was related to post-closing adjustments.

The activity related to Distribution was related to the completion of a property sale directly related to the previously divested Distribution segment.

Other comprehensive income (loss)

A comparative analysis of the components of other comprehensive income (loss) is provided below for the three and nine months ended June 30, 2019 and 2018.

(In millions)	Three months ended June 30			Nine months ended June 30		
	2019	2018	Change	2019	2018	Change
Other comprehensive income (loss) (net of taxes)						
Unrealized translation gain (loss)	\$ 3	\$ (140)	\$ 143	\$ (37)	\$ (82)	\$ 45
Pension and postretirement obligation adjustment	—	—	—	(6)	—	—
Net change in investment securities	—	2	(2)	—	4	(4)
	<u>\$ 3</u>	<u>\$ (138)</u>	<u>\$ 141</u>	<u>\$ (43)</u>	<u>\$ (78)</u>	<u>\$ 41</u>

Current Quarter - Total other comprehensive income (loss), net of tax, for the current quarter increased \$141 million compared to the prior year quarter as a result of the following components:

- For the three months ended June 30, 2019, the change in unrealized gain (loss) from foreign currency translation adjustments resulted in a gain of \$3 million compared to a loss of \$140 million for the three months ended June 30, 2018. The fluctuations in unrealized translation gains and losses are primarily due to translating foreign subsidiary financial statements from local currencies to U.S. Dollars.
- For the three months ended June 30, 2018, the net change in investment securities related to restricted investments amounted to a gain of \$2 million. Due to the adoption of new accounting guidance in the current year, unrealized gains and losses on Ashland's equity securities are now recognized in net income rather than AOCI. See Notes A and E of the Notes to Condensed Consolidated Financial Statements for more information.

Year-to-Date - Total other comprehensive income (loss), net of tax, for the current period increased \$41 million compared to the prior year period as a result of the following components:

- For the nine months ended June 30, 2019, the change in unrealized gain (loss) from foreign currency translation adjustments resulted in a loss of \$37 million compared to a loss of \$82 million for the nine months ended June 30, 2018. The fluctuations in unrealized translation gains and losses are primarily due to translating foreign subsidiary financial statements from local currencies to U.S. Dollars.
- For the nine months ended June 30, 2019, the pension and postretirement obligation adjustment included \$6 million of prior service costs recognized within other comprehensive income (loss) due to pension plan remeasurements.
- The net change in investment securities related to restricted investments amounted to losses of \$4 million during the nine months ended June 30, 2018. Due to the adoption of new accounting guidance in the current year, unrealized gains and losses on Ashland's equity securities are now recognized in net income rather than AOCI. See Notes A and E of the Notes to Condensed Consolidated Financial Statements for more information.

RESULTS OF OPERATIONS – REPORTABLE SEGMENT REVIEW

Ashland's operations are managed within the following two reportable segments: Specialty Ingredients 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 companies. Ashland allocates all significant costs to its reportable segments except for certain significant company-wide restructuring activities, including stranded costs, 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 (Loss).

The following table discloses sales, operating income, depreciation and amortization and statistical operating information by reportable segment for the three months ended June 30, 2019 and 2018.

(In millions)	Three months ended		Nine months ended	
	June 30		June 30	
	2019	2018	2019	2018
Sales				
Specialty Ingredients	\$ 613	\$ 638	\$ 1,803	\$ 1,834
Intermediates and Solvents	28	30	81	88
	<u>\$ 641</u>	<u>\$ 668</u>	<u>\$ 1,884</u>	<u>\$ 1,922</u>
Operating income (loss)				
Specialty Ingredients	\$ 84	\$ 91	\$ 180	\$ 222
Intermediates and Solvents	5	5	10	11
Unallocated and other	(46)	(66)	(110)	(135)
	<u>\$ 43</u>	<u>\$ 30</u>	<u>\$ 80</u>	<u>\$ 98</u>
Depreciation and amortization				
Specialty Ingredients	\$ 59	\$ 63	\$ 213	\$ 189
Intermediates and Solvents	3	3	9	10
Unallocated and other	—	1	3	10
	<u>\$ 62</u>	<u>\$ 67</u>	<u>\$ 225</u>	<u>\$ 209</u>
Operating information				
Specialty Ingredients				
Sales per shipping day	\$ 9.6	\$ 10.0	\$ 9.5	\$ 9.7
Metric tons sold (thousands)	81.8	83.1	237.2	240.1
Gross profit as a percent of sales (a)	32.7%	34.9%	30.0%	33.4%
Intermediates and Solvents				
Sales per shipping day	\$ 0.4	\$ 0.5	\$ 0.4	\$ 0.5
Metric tons sold (thousands)	9.1	9.2	25.4	28.1
Gross profit as a percent of sales (a)	24.5%	24.5%	21.0%	21.8%

(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 and nine months ended June 30, 2019 and 2018 were as follows. Ashland includes only U.S. and Canada in its North American designation.

Sales by Geography	Three months ended June 30, 2019		Nine months ended June 30, 2019	
	Specialty Ingredients	Intermediates and Solvents	Specialty Ingredients	Intermediates and Solvents
North America	40%	54%	40%	52%
Europe	33%	18%	33%	20%
Asia Pacific	19%	24%	19%	24%
Latin America & other	8%	4%	8%	4%
	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>

Sales by Geography	Three months ended June 30, 2018		Nine months ended June 30, 2018	
	Specialty Ingredients	Intermediates and Solvents	Specialty Ingredients	Intermediates and Solvents
North America	40%	48%	40%	47%
Europe	33%	19%	33%	22%
Asia Pacific	19%	29%	18%	26%
Latin America & other	8%	4%	9%	5%
	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>

Specialty Ingredients

Specialty Ingredients offers industry-leading products, technologies and resources for solving formulation and product-performance challenges. Using natural, synthetic and semisynthetic polymers derived from cellulose ethers, vinyl pyrrolidones, acrylic polymers, polyester and polyurethane-based adhesives, and plant and seed extract, Specialty Ingredients offers comprehensive and innovative solutions for consumer and industrial applications. Key customers include pharmaceutical companies; makers of personal care products, food and beverages; makers of nutraceuticals and supplements; manufacturers of paint, coatings and construction materials; packaging and converting; and oilfield service companies.

June 2019 quarter compared to June 2018 quarter

Specialty Ingredients' sales decreased \$25 million to \$613 million in the current quarter. Unfavorable foreign currency exchange, acquisitions and divestitures and volume/product mix (including a 1% negative impact associated with Colgate-Gantrez product reformulation) reduced sales by \$13 million, \$5 million and \$10 million, respectively. This decrease was partially offset by improved product pricing of \$3 million.

Gross profit during the current quarter decreased \$22 million compared to the prior year quarter. Foreign currency exchange decreased gross profit by \$6 million with volume/product mix adding an additional \$6 million decline. The unfavorable impact of pricing and cost, which was \$10 million, included a \$2 million impact from the following key item during the current quarter:

- \$2 million of unplanned shutdown costs for a manufacturing facility during the current quarter.

In total, gross profit margin during the current quarter decreased 2.2 percentage points as compared to the prior year quarter to 32.7%.

Selling, general and administrative expenses (which include research and development expenses throughout the reportable segment discussion and analysis) decreased \$13 million compared to the prior year quarter, primarily related to the company-wide cost reduction program as well as a favorable foreign currency exchange and lower variable compensation. Equity and other income increased \$2 million compared to the prior year quarter.

Operating income totaled \$84 million for the current quarter compared to \$91 million in the prior year quarter. Current quarter EBITDA decreased \$9 million to \$143 million, while Adjusted EBITDA decreased \$9 million to \$146 million. Adjusted EBITDA margin decreased 0.5 percentage points in the current quarter to 23.8%.

Fiscal 2019 year-to-date compared to fiscal 2018 year-to-date

Specialty Ingredients' sales decreased \$31 million to \$1,803 million in the current period. Unfavorable foreign currency exchange, volume (including a 1% negative impact associated with Colgate-Gantrez product reformulation) and acquisitions and divestitures decreased sales by \$38 million, \$5 million and \$5 million, respectively. This decrease was partially offset by product pricing which increased sales by \$17 million.

Gross profit during the current year decreased \$73 million compared to the prior year period. The impact of pricing and costs decreased gross profit by \$46 million, which included a \$46 million net impact from the following key items during the current and prior year period:

- \$45 million of restructuring costs related to the planned closure of a manufacturing facility during the prior quarter (which included \$38 million of accelerated depreciation and amortization);
- \$2 million of unplanned plant shutdown costs for a manufacturing facility during the quarter; and
- \$1 million of severance and restructuring costs related to the closure of a manufacturing facility during the prior period.

Additionally, unfavorable foreign currency exchange and lower volumes decreased gross profit by \$19 million and \$8 million, respectively. In total, gross profit margin during the current period decreased 3.4 percentage points as compared to the prior year period to 30.0%.

Selling, general and administrative expenses decreased \$27 million compared to the prior year period, primarily related to the company-wide cost reduction program as well as a favorable foreign currency exchange and lower variable compensation. Equity and other income increased \$4 million compared to the prior year period.

Operating income totaled \$180 million for the current year compared to \$222 million in the prior year. Current quarter EBITDA decreased \$50 million to \$355 million. Adjusted EBITDA decreased \$7 million to \$406 million. Adjusted EBITDA margin remained flat in the current year period at 22.5%.

EBITDA and adjusted EBITDA reconciliation

The following EBITDA and Adjusted EBITDA presentation for the three and nine months ended June 30, 2019 and 2018 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 during the current year period related to \$10 million and \$1 million of restructuring costs associated with the closure of manufacturing facilities for the nine months ended June 30, 2019 and 2018, respectively. Additionally, costs of zero million, \$2 million, \$38 million and \$6 million were incurred for accelerated depreciation related to planned facility closure for the three and nine months ended June 30, 2019 and 2018, respectively. Costs of \$2 million for each of the three and nine months ended June 30, 2019 related to an unplanned plant shutdown. Finally, environmental remediation cost of \$1 million each were recorded for the three and nine months ended June 30, 2019 and 2018, respectively.

(In millions)	Three months ended		Nine months ended	
	June 30		June 30	
	2019	2018	2019	2018
Operating income	\$ 84	\$ 91	\$ 180	\$ 222
Depreciation and amortization (a)	59	61	175	183
EBITDA	143	152	355	405
Accelerated depreciation	—	2	38	6
Environmental reserve adjustments	1	1	1	1
Unplanned plant shutdown	2	—	2	—
Severance and other restructuring costs	—	—	10	1
Adjusted EBITDA	<u>\$ 146</u>	<u>\$ 155</u>	<u>\$ 406</u>	<u>\$ 413</u>

(a) Excludes 2 million of accelerated depreciation for the three months ended June 30, 2018, and \$38 million and \$6 million of accelerated depreciation for the nine months ended June 30, 2019 and 2018, respectively.

Intermediates and Solvents

Intermediates and Solvents is a leading producer of 1,4 butanediol 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.

On November 15, 2018, Ashland announced that it had signed a definitive agreement to sell its Composites segment and Marl facility. As a result, the financial information for Intermediates and Solvents excludes the activity from the Marl facility due to the expected divestiture and has been restated in prior periods.

June 2019 quarter compared to June 2018 quarter

Intermediates and Solvents' sales decreased \$2 million to \$28 million in the current quarter primarily due to decreased volumes.

Gross profit was flat during the current quarter compared to the prior year quarter. Gross profit margin remained the same compared to the prior year quarter at 24.5%.

Selling, general and administrative expenses remained consistent with the prior year quarter.

Operating income was \$5 million in both the current and prior year quarter. EBITDA remained the same at \$8 million in the current quarter compared to the prior year quarter, while EBITDA margin increased 1.9 percentage points in the current quarter to 28.6%.

Fiscal 2019 year-to-date compared to fiscal 2018 year-to-date

Intermediates and Solvents' sales decreased \$7 million to \$81 million in the current period. Lower volume/product mix and unfavorable foreign currency exchange decreased sales by \$9 million and \$1 million, respectively. These decreases were partially offset by improved product pricing which increased sales by \$3 million.

Gross profit decreased \$1 million during the current period compared to the prior year period. Volume declines and unfavorable foreign currency exchange decreased gross profit by \$2 million and \$1 million, respectively. The net impact of pricing and costs offset those decreases by \$2 million. In total, gross profit margin decreased 0.8 percentage points as compared to the prior year period to 21.0%.

Selling, general and administrative expenses remained consistent with the prior period.

Operating income totaled \$10 million in the current period as compared to \$11 million in the prior year period. EBITDA decreased \$2 million to \$19 million in the current period, while EBITDA margin decreased 0.4 percentage points in the current period to 23.5%.

EBITDA reconciliation

The following EBITDA presentation for the three and nine months ended June 30, 2019 and 2018 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 or periods.

(In millions)	Three months ended		Nine months ended	
	June 30		June 30	
	2019	2018	2019	2018
Operating income	\$ 5	\$ 5	\$ 10	\$ 11
Depreciation and amortization	3	3	9	10
EBITDA	<u>\$ 8</u>	<u>\$ 8</u>	<u>\$ 19</u>	<u>\$ 21</u>

Unallocated and other

The following table summarizes the key components of the Unallocated and other segment's operating income (loss) for the three and nine months ended June 30, 2019 and 2018.

(In millions)	Three months ended		Nine months ended	
	June 30		June 30	
	2019	2018	2019	2018
Restructuring activities	\$ (24)	\$ (29)	\$ (77)	\$ (77)
Environmental expenses	(16)	(32)	(22)	(51)
Proxy costs	—	—	(5)	—
Tax indemnity costs	(6)	—	(6)	—
Legal settlement	—	—	—	5
Other income (expense)	—	(5)	—	(12)
Total expense	<u>\$ (46)</u>	<u>\$ (66)</u>	<u>\$ (110)</u>	<u>\$ (135)</u>

June 2019 quarter compared to June 2018 quarter

Unallocated and other recorded expense of \$46 million and \$66 million for the three months ended June 30, 2019 and 2018, respectively. The current and prior year quarters included charges for restructuring activities of \$24 million and \$29 million, respectively, which were comprised of the following items:

- \$10 million and \$16 million of stranded divestiture costs during the current and prior year quarters, respectively, primarily related to the planned divestiture of the Composites segment and Marl facility;

- \$14 million and \$5 million of severance, lease abandonment and other restructuring costs related to company-wide cost reduction programs during the current and prior quarters, respectively;
- \$1 million of costs related to the separation of Valvoline during the prior year quarter; and
- \$7 million for a lease abandonment charge related to the exit from an office building during the prior year quarter.

The remaining unallocated items during the current period primarily included \$16 million for environmental expenses and \$6 million for tax indemnity costs. The remaining items during the prior year primarily included \$32 million of environmental expenses.

Fiscal 2019 year-to-date compared to fiscal 2018 year-to-date

Unallocated and other recorded expense of \$110 million and \$135 million for the nine months ended June 30, 2019 and 2018, respectively. The current and prior year periods included charges for restructuring activities of \$77 million, each, which were comprised of the following items:

- \$34 million and \$44 million of stranded divestiture costs during the current and prior year periods, respectively;
- \$39 million and \$8 million of severance, lease abandonment and other restructuring costs related to company-wide cost reduction programs during the current and prior year periods, respectively;
- \$4 million of impairment related to the planned sale of an office building during the current year period;
- \$4 million of accelerated depreciation related to the planned closure of an office building during the prior period;
- \$7 million for a lease abandonment charge related to the exit from an office building during the prior year period;
- \$5 million of integration costs related to the acquisition of Pharmachem during the prior period; and
- \$9 million of costs related to the separation of Valvoline during the prior year period.

The remaining unallocated items during the current period primarily included \$22 million for environmental expenses, \$6 million for tax indemnity costs and \$5 million in proxy defense costs. The remaining items during the prior year period primarily included \$51 million for environmental expenses and \$5 million of income related to proceeds from a legal settlement.

FINANCIAL POSITION

Liquidity

Ashland had \$132 million in cash and cash equivalents as of June 30, 2019, of which \$118 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.

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 nine months ended June 30, 2019 and 2018.

(In millions)	Nine months ended June 30	
	2019	2018
Cash provided (used) by:		
Operating activities from continuing operations	\$ 93	\$ 93
Investing activities from continuing operations	(76)	(120)
Financing activities from continuing operations	(183)	(346)
Discontinued operations	6	(13)
Effect of currency exchange rate changes on cash and cash equivalents	(2)	2
Net decrease in cash and cash equivalents	<u>\$ (162)</u>	<u>\$ (384)</u>

Operating activities

The following discloses the cash flows associated with Ashland's operating activities for the nine months ended June 30, 2019 and 2018.

(In millions)	Nine months ended June 30	
	2019	2018
Cash flows provided (used) by operating activities from continuing operations		
Net income	\$ 94	\$ 104
Income from discontinued operations (net of taxes)	(97)	(83)
Adjustments to reconcile income from continuing operations to cash flows from operating activities:		
Depreciation and amortization	225	209
Original issue discount and debt issuance costs amortization	6	6
Distribution from affiliates	—	1
Deferred income taxes	1	(3)
Stock based compensation expense	17	20
Loss (income) from restricted investments	(10)	(10)
Excess tax benefit on stock based compensation	3	4
Impairments	8	—
Pension contributions	(4)	(8)
Gain on pension and other postretirement plan remeasurements	(18)	—
Change in operating assets and liabilities (a)	(132)	(147)
Total cash flows provided by operating activities from continuing operations	<u>\$ 93</u>	<u>\$ 93</u>

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

Cash flows provided from operating activities from continuing operations, a major source of Ashland's liquidity, amounted to a cash inflow of \$93 million during both the current and prior year quarters.

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 \$94 and \$112 million for the nine months ended June 30, 2019 and 2018, respectively, and were driven by the following:

- Accounts receivable – There was a cash inflow of \$21 million and an outflow of \$27 million during the current and prior year periods, respectively, which were primarily due to the net of collections and sales during the first nine months of each fiscal year.
- Inventory – There was a cash inflow of \$3 million and an outflow of \$22 million during the current and prior year periods, respectively, which were primarily driven by sales volumes and inventory management strategies.
- Trade and other payables – There were cash outflows of \$118 million and \$63 million during the current and prior year periods, respectively, and primarily related to the timing of certain payments.

The remaining changes to operating assets and liabilities resulted in outflows of \$37 million and \$36 million in the current and prior year periods, respectively, and were primarily due to income taxes paid or income tax refunds, interest paid, and adjustments to certain accruals and other long-term assets and liabilities.

Operating Activities – Summary

Operating cash flows for the current year period included a loss from continuing operations of \$3 million. Additionally, the current period included non-cash adjustments of \$225 million for depreciation and amortization, \$10 million for a gain on restricted investments, \$8 million for an impairment of a held for sale facility and \$18 million for the gain on pension and other postretirement plan remeasurements.

Operating cash flows for the prior year period included income from continuing operations of \$21 million. Additionally, the prior year period included a non-cash adjustment of \$209 million for depreciation and amortization.

Investing activities

The following discloses the cash flows associated with Ashland’s investing activities for the nine months ended June 30, 2019 and 2018.

(In millions)	Nine months ended June 30	
	2019	2018
Cash flows provided (used) by investing activities from continuing operations		
Additions to property, plant and equipment	\$ (103)	\$ (87)
Proceeds from disposal of property, plant and equipment	4	1
Purchase of operations	(2)	(11)
Proceeds from sales of operations	—	1
Life insurance payments	—	(37)
Net purchase of funds restricted for specific transactions	(2)	(10)
Reimbursement from restricted investments	25	25
Proceeds from sales of securities	156	17
Purchase of securities	(156)	(17)
Proceeds from the settlement of derivative instruments	4	1
Payments for the settlement of derivative instruments	(2)	(3)
Total cash flows used by investing activities from continuing operations	\$ (76)	\$ (120)

Cash used by investing activities was \$76 million and \$120 million for the current and prior periods, respectively. The significant cash investing activities for the current period primarily related to cash outflows of \$103 million for property additions compared to \$87 million in the prior year period. The prior period also included cash outflows of \$37 million related to payments for a corporate-owned life insurance policy loan and \$11 million for the purchase of Vornia Limited. There were reimbursements from the restricted renewable annual asbestos trust of \$25 million during both the current and prior year periods. Additionally, there were proceeds from the settlement of derivative instruments of \$4 million this period compared to \$1 million for the prior year period.

Financing activities

The following discloses the cash flows associated with Ashland's financing activities for the nine months ended June 30, 2019 and 2018.

(In millions)	Nine months ended June 30	
	2019	2018
Cash flows provided (used) by financing activities from continuing operations		
Repayment of long-term debt	(10)	(135)
Proceeds from (repayment of) short-term debt	83	(158)
Debt issuance costs		(1)
Cash dividends paid	(48)	(44)
Repurchase of common stock	(200)	—
Stock based compensation employee withholding taxes paid in cash	(8)	(8)
Total cash flows used by financing activities from continuing operations	<u>\$ (183)</u>	<u>\$ (346)</u>

Cash flows used by financing activities resulted in outflows \$183 million and \$346 million for the current and prior year periods, respectively.

Significant cash financing activities for the current period included long-term cash outflows of \$10 million, primarily related to repayments of term loans and debentures. The current period included cash dividends paid of \$0.775 per share, for a total of \$48 million. There was a \$200 million outflow related to the accelerated share repurchase program. Additionally, \$83 million of inflows were drawn out of the 2017 Revolving Credit Facility.

Significant cash financing activities for the prior year period included short-term debt net repayments of \$158 million related to the 2017 Revolving Credit Facility and the accounts receivable securitization. The outstanding balance of the 2017 Revolving Credit Facility and a portion of the accounts receivable securitization were repaid using approximately \$135 million of cash that was repatriated in January 2018. The prior period included cash dividends paid of \$0.7 per share, for a total of \$44 million.

The following discloses the cash flows associated with Ashland's discontinued operations for the nine months ended June 30, 2019 and 2018.

(In millions)	Nine months ended June 30	
	2019	2018
Cash provided (used) by discontinued operations		
Operating cash flows	\$ —	\$ 2
Investing cash flows	6	(15)
Total cash used by discontinued operations	<u>\$ 6</u>	<u>\$ (13)</u>

Cash flows for discontinued operations in the current period included net cash inflows of \$12 million related to the activity of Composites and the Marl facility. The remaining cash flows for discontinued operations related to other previously divested businesses, including net payments of asbestos and environmental liabilities and the proceeds from the sale of a legacy Distribution environmental site.

Cash flows for discontinued operations in the prior year period included net cash inflows of \$21 million related to the activity of Composites and the Marl facility. The remaining cash flows for discontinued operations 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)	Nine months ended	
	June 30	
	2019	2018
Total cash flows provided (used) by operating activities from continuing operations	\$ 93	\$ 93
Adjustments:		
Additions to property, plant and equipment	(103)	(87)
Free cash flows (a)	<u>\$ (10)</u>	<u>\$ 6</u>

(a) Includes \$55 million and \$37 million of restructuring payments for the nine months ended June 30 2019 and 2018, respectively.

Working capital (current assets minus current liabilities, excluding current assets and current liabilities held for sale and long-term debt due within one year) amounted to \$439 million and \$570 million as of June 30, 2019 and September 30, 2018, respectively. Liquid assets (cash, cash equivalents and accounts receivable) amounted to 75% of current liabilities (excluding current liabilities held for sale) as of June 30, 2019 and September 30, 2018.

The following summary reflects Ashland's cash and unused borrowing capacity as of June 30, 2019 and September 30, 2018.

(In millions)	June 30	September 30
	2019	2018
Cash and investment securities		
Cash and cash equivalents	\$ 132	\$ 294
Unused borrowing capacity		
Revolving credit facility	\$ 661	\$ 725
Accounts receivable securitizations	12	29

The borrowing capacity remaining under the \$800 million revolving credit facility was \$661 million due to an outstanding balance of \$90 million, as well as a reduction of \$49 million for letters of credit outstanding at June 30, 2019. In total, Ashland's available liquidity position, which includes cash, the revolving credit facility and the accounts receivable securitization facilities, was \$805 million at June 30, 2019, compared to \$1,048 million at September 30, 2018.

Capital resources

Debt

The following summary reflects Ashland's debt as of June 30, 2019 and September 30, 2018.

(In millions)	June 30	September 30
	2019	2018
Short-term debt (includes current portion of long-term debt)	\$ 332	\$ 254
Long-term debt (less current portion and debt issuance cost discounts) (a)	2,275	2,275
Total debt	<u>\$ 2,607</u>	<u>\$ 2,529</u>

(a) Includes \$18 million and \$21 million of debt issuance cost discounts as of June 30, 2019 and September 30, 2018, respectively.

The current portion of long-term debt was \$6 million at June 30, 2019. Debt as a percent of capital employed was 45% and 43% at June 30, 2019 and September 30, 2018, respectively. At June 30, 2019, Ashland's total debt had an outstanding principal balance of \$2,673 million, discounts of \$48 million, and debt issuance costs of \$18 million. The scheduled aggregate maturities of long-term debt by year (including the current portion and excluding debt issuance costs) are as follows: \$2 million remaining in 2019, \$6 million in 2020, \$14 million in 2021, \$1,279 million in 2022 and \$6 million in 2023.

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 June 30, 2019, 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 40. 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. At June 30, 2019, Ashland's calculation of the consolidated net leverage ratio was 3.6.

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 June 30, 2019, Ashland's calculation of the consolidated interest coverage ratio was 5.6.

Any change in Covenant Adjusted EBITDA of \$100 million would have an approximate 0.5x 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 0.1x.

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 \$189 million since September 30, 2018 to \$3,217 million at June 30, 2019. The decrease of \$189 million was due to a net income of \$94 million, common shares issued under stock incentive and other plans of \$8 million, deferred translation losses of \$37 million, cash dividends of \$48 million, \$6 million related to the pension and other postretirement obligation adjustment, and accelerated share repurchase program activity of \$200 million.

Stock repurchase program

During March 2018, Ashland's Board of Directors approved a new \$1 billion stock repurchase program. Under the new program, Ashland's common shares may be repurchased in open market transactions, privately negotiated transactions or pursuant to one or more accelerated stock repurchase programs or Rule 10b5-1 plans. As of June 30, 2019, \$800 million remained available for repurchase under this authorization after the acquisition of 2.2 million shares for \$200 million during the third quarter.

Stockholder dividends

In May 2019, the Board of Directors of Ashland announced a quarterly cash dividend of 27.5 cents per share to eligible stockholders of record, which was paid in the third quarter of fiscal 2019. This dividend represented a 10% increase over the previous quarters' dividend. Dividends of 25 cents per share were paid in the first and second quarter of fiscal 2019 and the third and fourth quarters of fiscal 2018. These dividends represented an 11% increase over the previous quarterly cash dividend of 22.5 cents per share paid in the first and second quarters of fiscal 2018.

Capital expenditures

Capital expenditures were \$103 million for the nine months ended June 30, 2019 compared to \$87 million for the nine months ended June 30, 2018.

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, 2018. 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 nine months ended June 30, 2019.

OUTLOOK

Fiscal Year 2019

Ashland updated its financial outlook for fiscal 2019 as shown in the table below.

	Prior FY 2019 Outlook	Updated FY 2019 Outlook
Adjusted EBITDA		
Specialty Ingredients	\$585 - \$610 million	\$560 - \$570 million
Intermediates & Solvents	\$20 - \$30 million	\$23 - \$27 million
Unallocated and other	(\$45 - \$55) million	(\$50 - \$55) million
Key Operating Metrics		
Adjusted diluted EPS	\$2.90 - \$3.20	\$2.65 - \$2.75
Free cash flow*	~ \$165 - \$175 million	~ \$100 - \$110 million
Corporate Items		
Depreciation & amortization	~250 million	Reaffirmed
Interest expense	\$90 - \$100 million	\$95 - \$100 million
Effective tax rate	14-16%	10-12%
Capital expenditures	~\$160 million	Reaffirmed
Diluted share count**	~ 63 million	Reaffirmed

* These figures include approximately \$60 million in restructuring payments in the Updated Outlook and an estimated \$40 million in the Prior Outlook.

** Includes updated diluted share count associated with the share repurchase.

For the fourth quarter of fiscal 2019, Ashland expects adjusted diluted earnings per share in the range of \$0.92-\$1.02. This estimate assumes an effective tax rate of 13% percent for the fourth quarter.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Ashland's market risk exposure at June 30, 2019 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, 2018.

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 June 30, 2019.

Changes in Internal Control over Financial Reporting - During the nine months ended June 30, 2019, there were no significant changes in Ashland's internal control over financial reporting, or in other factors, that occurred during the period covered by this quarterly report that have materially affected, or are reasonably likely to materially affect, Ashland's internal control over financial reporting.

PART II – OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

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

Asbestos-Related Litigation

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

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

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

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

Environmental Proceedings

(a) *CERCLA and Similar State Law Sites* - Under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 and similar state laws, Ashland and its subsidiaries may be subject to joint and several liability for cleanup costs in connection with alleged releases of hazardous substances at sites where it has been identified as a "potentially responsible party" (PRP). As of June 30, 2019, 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 80 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 another chemical company to conduct and pay for the remedial design. This chemical company has sued Ashland, ISP and numerous other defendants to recover past and future costs pursuant to the CERCLA. Ashland, ISP and numerous other defendants have filed a Motion to Dismiss all of the claims. Ashland and ISP are participating in an USEPA allocation process. The release of the FFS Record of Decision, the current allocations proceedings and the lawsuit are not expected to be material to Ashland.

(d) *Freetown, MA Resource Conservation and Recovery Act (RCRA) Matter* - On September 27, 2018, the USEPA issued a Complaint, Compliance Order and Opportunity for Hearing to ISP Freetown Fine Chemicals, Inc.'s facility in Assonet, Massachusetts alleging various violations of the RCRA relating to certain distillation tanks at the facility and seeking a penalty of \$203,792. Ashland disputes USEPA's stated interpretation of the RCRA regulations and their applicability to these tanks. While this matter could result in a penalty from USEPA in excess of \$100,000, the potential penalty is not expected to be material to Ashland.

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 June 30, 2019. 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 June 30, 2019.

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, 2018.

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

Share repurchase activity during the three months ended June 30, 2019 is presented below.

Issuer Purchases of Equity Securities

Q3 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)
April 1, 2019 to April 30, 2019	—	\$ —	—	\$ 1,000
May 1, 2019 to May 31, 2019 (b)	2,236,546	—	2,236,546	800
June 1, 2019 to June 30, 2019	—	—	—	800
Total	2,236,546		2,236,546	\$ 800

- (a) During March 2018, Ashland’s Board of Directors approved a new \$1 billion stock repurchase program, which replaced the previous stock repurchase program. The Company’s stock 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 June 30, 2019, \$800 million remains available for repurchase under this authorization.
- (b) In May 2019, the Company entered into an accelerated share repurchase program (ASR) to purchase \$200 million of the Company’s common stock. In exchange for upfront payments totaling \$200 million, the financial institution committed to deliver shares during the ASR’s purchase period, which will end no later than August 2019. The total number of shares ultimately delivered, and therefore the average price paid per share, will be determined at the end of the applicable purchase period based on the volume weighted average price of the Company’s stock during the period. During the third quarter of 2019, 2,236,546 shares were initially delivered to the Company and retired. This does not represent the final number of shares to be delivered under the ASR. The upfront payment of \$200 million was accounted for as a reduction to shareholder’s equity in the Company’s Condensed Consolidated Balance Sheet.

ITEM 6. EXHIBITS

(a) Exhibits

- 2.1 [First Amendment to Stock and Asset Purchase Agreement, dated July 1, 2019, between Ashland Global Holdings Inc. and INEOS Enterprises Holdings Limited \(pursuant to Item 601\(b\)\(2\) of Regulation S-K, exhibits, schedules and certain annexes to the Stock and Asset Purchase Agreement have been omitted; exhibits, schedules and annexes will be supplementally provided to the SEC upon request\) \(filed as Exhibit 2.1 to Ashland's Form 8-K filed on July 8, 2019 \(SEC File No. 333-211719\) and incorporated herein by reference\).](#)
- 10.1* [Ashland Global Holdings Inc. Deferred Compensation Plan for Employees \(Amended and Restated Effective as of May 22, 2019\).](#)
- 10.2* [Ashland Global Holdings Inc. Deferred Compensation Plan for Non-Employee Directors \(Amended and Restated as of May 22, 2019\).](#)
- 10.3* [Ashland Global Holdings Inc. NonQualified Defined Contribution Plan \(Amended and Restated as of May 22, 2019\).](#)
- 10.4* [Ashland Global Holdings Inc. Supplemental Defined Contribution Plan for Certain Employees \(Amended and Restated as of May 22, 2019\).](#)
- 10.5* [Form of Restricted Stock Award Agreement under the Ashland Global Holdings Inc. 2018 Omnibus Incentive Compensation Plan.](#)
- 10.6* [Form of Stock Appreciation Rights Award Agreement \(Stock Settled\) under the Ashland Global Holdings Inc. 2018 Omnibus Incentive Compensation Plan.](#)
- 10.7* [Form of Restricted Stock Unit Award Agreement under the Ashland Global Holdings Inc. 2018 Omnibus Incentive Compensation Plan.](#)
- 10.8* [Form of Stock-Settled Performance Unit Award Agreement under the Ashland Global Holdings Inc. 2018 Omnibus Incentive Compensation Plan.](#)
- 10.9 [Master Confirmation – Uncollared Accelerated Share Repurchase, dated May 6, 2019, between Ashland Global Holdings Inc. and Goldman Sachs \(filed as Exhibit 10.1 to Ashland's Form 8-K filed on May 7, 2019 \(SEC File No. 333-211719\) and incorporated herein by reference\).](#)
- 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 – the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL 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 (Loss) for the three months ended June 30, 2019 and June 30, 2018; (ii) Condensed Consolidated Balance

Sheets at June 30, 2019 and September 30, 2018; (iii) Statements of Consolidated Equity at June 30, 2019; (iv) Statements of Condensed Consolidated Cash Flows for the nine months ended June 30, 2019 and June 30, 2018; 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.

July 31, 2019

Ashland Global Holdings Inc.

(Registrant)

/s/ J. Kevin Willis

J. Kevin Willis

Senior Vice President and Chief Financial Officer

(on behalf of the Registrant and as principal
financial officer)

ASHLAND GLOBAL HOLDINGS INC.
DEFERRED COMPENSATION PLAN FOR EMPLOYEES
(Amended and Restated Effective as of May 22, 2019)

ASHLAND GLOBAL HOLDINGS INC.
DEFERRED COMPENSATION PLAN FOR EMPLOYEES
(Amended and Restated Effective as of May 22, 2019)

WHEREAS, the Ashland Inc. Deferred Compensation Plan for Employees (2005) was approved by the Board of Directors of Ashland Inc. on November 4, 2004 to be effective January 1, 2005;

WHEREAS, the Plan as approved and effective reserved the right to amend it;

WHEREAS, the right to amend the Plan was exercised on April 21, 2005 by Ashland Inc. amending and restating the Plan, effective January 1, 2005 and further amending the Plan on October 28, 2005, October 7, 2008, and January 1, 2017, with all amendments making the Plan effective as of January 1, 2005;

WHEREAS, Ashland Inc. was converted into Ashland LLC, a limited liability company, and the shareholders of Ashland Inc. exchanged their shares of Ashland Inc. stock for shares of Ashland Global Holdings Inc. and Ashland Global Holdings Inc. became the sponsor of the Plan;

WHEREAS, Ashland Global Holdings Inc. desires to exercise the right to amend the Plan and thereby institute the fourth amendment and restatement of the Plan;

NOW, THEREFORE, effective May 22, 2019, except as otherwise provided herein, the Plan is amended and restated as follows:

1. PURPOSE

The Plan is maintained primarily for the purpose of providing an opportunity to defer compensation for retirement or other future purposes to a select group of management or highly compensated employees (including former employees that met these criteria when employed). The obligations of the Company hereunder constitute a mere promise to make the payments provided for in this Plan. No employee, his or her spouse or the estate of either of them shall have, by reason of this Plan, any right, title or interest of any kind in or to any property of the Company. To the extent any Participant has a right to receive payments from the Company under this Plan, such right shall be no greater than the right of any unsecured general creditor of the Company.

2. DEFINITIONS

The following definitions shall be applicable throughout the Plan:

(a) “**Accounting Date**” means the Business Day on which a calculation concerning a Participant’s Compensation Account is performed, or as otherwise defined by the Committee or the Company.

- (b) “**Beneficiary**” means the beneficiary elected under the Company’s 401(k) Plan, or if none, then the estate of a deceased Participant.
- (c) “**Board**” means the Board of Directors of Ashland Global Holdings Inc.
- (d) “**Business Day**” means a day on which the New York Stock Exchange is open for trading activity.
- (e) “**Change in Control**” shall be deemed to have occurred if:
1. there shall be consummated (A) any consolidation or merger of Ashland Global Holdings Inc. (a “**Business Combination**”), other than a consolidation or merger of Ashland Global Holdings Inc. into or with a direct or indirect wholly-owned subsidiary, as a result of which the shareholders of Ashland Global Holdings Inc. own (directly or indirectly), immediately after the Business Combination, less than fifty percent (50%) of the then outstanding shares of common stock that are entitled to vote generally for the election of directors of the corporation resulting from such Business Combination, or pursuant to which shares of Ashland Global Holdings Inc.’s Common Stock would be converted into cash, securities or other property, other than a Business Combination in which the holders of Ashland Global Holdings Inc.’s Common Stock immediately prior to the Business Combination have substantially the same proportionate ownership of common stock of the surviving corporation immediately after the Business Combination, or (B) any sale, lease, exchange or transfer (in one transaction or a series of related transactions) of all or substantially all the assets of Ashland Global Holdings Inc., provided, however, that no sale, lease, exchange or other transfer of all or substantially all the assets of Ashland Global Holdings Inc. shall be deemed to occur unless assets constituting at least eighty percent (80%) of the total assets of Ashland Global Holdings Inc. are transferred pursuant to such sale, lease, exchange or other transfer;
 2. the shareholders of Ashland Global Holdings Inc. shall approve any plan or proposal for the liquidation or dissolution of Ashland Global Holdings Inc.;
 3. any Person shall become the Beneficial Owner of securities of Ashland Global Holdings Inc. representing twenty percent (20%) or more of the combined voting power of Ashland Global Holdings Inc.’s then outstanding securities ordinarily (and apart from rights accruing in special circumstances) having the right to vote in the election of directors, as a result of a tender or exchange offer, open market purchases, privately-negotiated purchases or otherwise, without the approval of the Board; or
 4. at any time during a period of two (2) consecutive years, individuals who at the beginning of such period constituted the Board shall cease for any reason to constitute at least a majority thereof, unless the election or the

nomination for election by Ashland Global Holdings Inc.'s shareholders of each new director during such two- (2-) year period was approved by a vote of at least two-thirds (2/3) of the directors then still in office who were directors at the beginning of such two- (2-) year period.

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

(f) "Code" means the Internal Revenue Code of 1986, as amended.

(g) "Committee" means the Compensation Committee of the Board or its designee.

(h) "Common Stock" means the common stock, \$.01 par value, of Ashland Global Holdings Inc.

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

(j) "Company" means Ashland Global Holdings Inc. (as successor Plan sponsor to Ashland Inc.) and any successor thereto.

(k) "Compensation" means any employee compensation determined by the Committee or the Company to be properly deferrable under the Plan.

(l) "Compensation Account(s)" means the Deferral Account (also known as the Retirement Account), the In-Service Account (also known as the Flexible Distribution Account(s)), the Excess Plan Account and/or the SERP Account.

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

(n) "Credit Date" means the date Compensation otherwise would have been paid to the Participant if such Compensation was not Deferred Compensation.

(o) "Deferral Account" also known as "Retirement Account" means the account(s), established annually as determined by the Committee or the Company, described in Section 9(a) to which the Participant's Deferred Compensation is credited and from which distributions are made.

(p) "Deferred Compensation" means the Compensation the Participant elects to defer pursuant to the Plan, which is credited to the Participant's Compensation Account(s).

(q) **“Disability”** means that a Participant is unable to engage in any substantial gainful activity because of a medically determinable physical or mental impairment that is expected to result in death or last for a continuous period of twelve (12) or more months, all within the meaning of Code section 409A. Corporate Human Resources or its delegate shall determine whether a Participant has incurred a Disability.

(r) **“Election”** means a Participant’s delivery of a notice of election to defer payment of all or a portion of his or her Compensation under the terms of the Plan. Such notice shall also include instructions specifying the time(s) the Deferred Compensation will be paid and the form (i.e., lump sum or installments) in which it will be paid. Such Elections may be annual or evergreen (as determined by the Committee or the Company), and shall comply with Code section 409A to the extent applicable, and be irrevocable except as otherwise provided in the Plan or pursuant to Treasury guidance. Elections shall be in the form, and made and delivered, as prescribed by the Committee or the Company.

(s) **“Employee”** means a full-time, regular salaried employee (which term shall be deemed to include officers) of the Company and its present and future Related Entities.

(t) **“ERISA”** means the Employee Retirement Income Security Act of 1974, as amended.

(u) **“Exchange Act”** means the Securities Exchange Act of 1934, as amended.

(v) **“Excess Payments”** means payments made to a Participant pursuant to the Plan and the Excess Plan. These are amounts that a Participant deferred from the Excess Plan to this Plan which were transferred to this Plan at a time when the amounts were payable under the Excess Plan and held in an Excess Plan Account for the Participant.

(w) **“Excess Plan”** means the Ashland Inc. Nonqualified Excess Benefit Pension Plan transferred by Ashland Inc. to, and assumed by, Valvoline LLC effective as of September 1, 2016, as it now exists or as it may hereafter be amended.

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

(y) **“In-Service Account(s)”** also known as **“Flexible Distribution Account(s)”** means the account(s), established annually as determined by the Committee or the Company, described in Section 9(b) to which the Participant’s Deferred Compensation is credited and from which distributions are made.

(z) **“Participant”** means an Employee who is a highly-compensated or management employee selected to participate in the Plan and who has elected to defer payment of all or a portion of his or her Compensation under the Plan or who otherwise has a Compensation Account in the Plan.

(aa) **“Performance-Based Compensation”** means Compensation that meets requirements specified by the Secretary of the Treasury, including Treasury Regulation section

1.409A-1(e). Performance-Based Compensation will include the attributes that it is variable, contingent on the satisfaction of pre-established metrics and is not readily ascertainable at the time of the Election to defer such compensation under Section 8(b).

(bb) “**Plan**” means this Ashland Global Holdings Inc. Deferred Compensation Plan for Employees (Amended and Restated Effective January 1, 2017) as it now exists or as it may hereafter be amended.

(cc) “**Plan Year**” means the calendar year.

(dd) “**Related Entities**” means (a) any corporation that is a member of a “controlled group of corporations” as defined in Code section 414(b) that includes the Company, and (b) any trade or business that is under “common control” as defined in Code section 414(c) that includes the Company.

(ee) “**Secretary of the Treasury**” or “**Treasury**” means the United States Department of Treasury.

(ff) “**Separation from Service**” or “**Termination**” means a termination from employment resulting in a cessation of performing active service for the Company and the Related Entities. An Employee is considered to incur a Separation from Service on the date the Employee terminates employment with the Company and the Related Entities or when it is reasonably anticipated that the Employee’s services to the Company and the Related Entities will permanently decrease to twenty percent (20%) or less of the average amount of services performed for the Company during the immediately preceding thirty-six (36) month period (or period of total employment if less than thirty-six (36) months). Notwithstanding anything in the foregoing to the contrary, a Separation from Service does not occur as a result of military leave, sick leave or other bona fide leave of absence not exceeding six (6) months or the period during which the Employee retains a right to reemployment.

(gg) “**SERP**” means the Amended and Restated Ashland Inc. Supplemental Early Retirement Plan for Certain Employees transferred by Ashland Inc. to, and assumed by, Valvoline LLC effective as of September 1, 2016, as it now exists or as it may hereafter be amended.

(hh) “**Specified Employee**” means, for a particular Plan Year, any Employee who was “specified employee” within the meaning of Section 409A of the Code and using the identification methodology selected by the Company from time to time.

(ii) “**Stock Unit(s)**” means the share equivalents credited to the Common Stock Fund of a Participant’s Compensation Account pursuant to Section 6.

(jj) “**Unforeseeable Emergency**” means a severe financial hardship of a Participant (that cannot be alleviated by compensation or reimbursement received insurance companies or otherwise as provided in Treasury Regulation Section 1.409A-3(i)(3)) because of (i) an illness or accident of the Participant, the Participant’s spouse or dependent (as defined in Code section 152(a)); (ii) a loss of the Participant’s property due to casualty; or (iii) such other similar extraordinary unforeseeable circumstances because of events beyond the control of the Participant.

Corporate Human Resources or its delegate shall determine whether a Participant has incurred an Unforeseeable Emergency.

3. SHARES; ADJUSTMENTS IN EVENT OF CHANGES IN CAPITALIZATION

(a) *Shares Authorized for Issuance.* There shall be reserved for issuance under the Plan 941,716 shares of Common Stock (as adjusted on May 12, 2017 pursuant to Section 3(c) below), subject to further adjustment pursuant to subsection (c) below.

(b) *Units Authorized for Credit.* The maximum number of Stock Units that may be credited to Participants' Compensation Accounts under the Plan is 2,825,147 (as adjusted on May 12, 2017 pursuant to Section 3(c) below), subject to further adjustment pursuant to subsection (c) below.

(c) *Adjustments in Certain Events.* In the event of any change in the outstanding Common Stock of the Company by reason of any stock split, share dividend, recapitalization, merger, consolidation, reorganization, combination, or exchange or reclassification of shares, split-up, split-off, spin-off, liquidation or other similar change in capitalization, or any distribution to common shareholders other than ordinary cash dividends, the number or kind of shares or Stock Units that may be issued or credited under the Plan shall be automatically adjusted so that the proportionate interest of the Participants shall be maintained as before the occurrence of such event. Such adjustment shall be conclusive and binding for all purposes of the Plan.

4. ELIGIBILITY

The Committee shall have the authority to select from management and/or highly compensated Employees those Employees who shall be eligible to participate in the Plan; provided, however, that employees and/or retirees who have elected to defer an amount into this Plan from another plan sponsored or maintained by the Company, the terms of which allowed such employee or retiree to make such a deferral election into this Plan, shall be considered to be eligible to participate in this Plan.

5. ADMINISTRATION

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

6. PARTICIPANT COMPENSATION ACCOUNT(S)

Upon election to participate in the Plan, there shall be established a Deferral Account and/or In-Service Account(s), as designated by the Participant, to which there shall be credited any Deferred Compensation, as of each Credit Date. Each such Compensation Account shall be credited (or debited) on each Accounting Date with hypothetical income (or hypothetical loss) based upon a hypothetical investment in any one or more of the investment options available under the Plan, as prescribed by the Committee, for the particular Compensation credited, which may include a Common Stock Fund, as elected by the Participant under the terms of Section 8. The crediting or debiting on each Accounting Date of hypothetical income (or hypothetical loss) shall be made for the respective amounts that were subject to each Election under Section 8. All investments of a Participant's Compensation Account, including, but not limited to Stock Units in which such Participant's Compensation Account may be invested in the Common Stock Fund, shall be on each relevant Accounting Date valued at Fair Market Value. Additionally, all distributions, investments and investment exchanges allowed and made under the Plan shall be as of the relevant Accounting Date at Fair Market Value.

7. EARLY WITHDRAWAL

(a) *Unforeseeable Emergency.* A Participant or a Participant's legal representative may submit an application for a distribution from either a Deferral Account or an In-Service Account because of an Unforeseeable Emergency. The amount of the distribution shall not exceed the amount necessary to satisfy the needs of the Unforeseeable Emergency. Such distribution shall include an amount to pay taxes reasonably anticipated as a result of the distribution. The amount allowed as a distribution under this Section 7(a) shall take into account the extent to which the Unforeseeable Emergency may be relieved by reimbursement, insurance or liquidation of the Participant's assets (but only to the extent such liquidation would itself not cause a severe financial hardship). The distribution shall be made in a single sum and paid as soon as practicable (but not later than sixty (60) days) after the application for the distribution on account of the Unforeseeable Emergency is approved. The provisions of this Section 7(a) shall be interpreted and administered in accordance with applicable guidance that may be issued by the Treasury.

(b) *Disability.* A Participant or a Participant's legal representative may submit an application for a distribution from the Deferral Account and In-Service Account because of the Participant's Disability. The distribution shall be made in a single sum and paid as soon as practicable (but not later than sixty (60) days) after the application for the distribution on account of the Participant's Disability is approved. The provisions of this Section 7(b) shall be interpreted and administered in accordance with applicable guidance that may be issued by the Treasury. If such guidance should allow an election of a period or form of distribution at the time of the application for a distribution on account of the Participant's Disability then the Plan shall allow such elections.

(c) *Prohibition on Acceleration.* Except as otherwise provided in the Plan and except as may be allowed in guidance from the Secretary of the Treasury, distributions from a Participant's Compensation Account(s) may not be made earlier than the time such amounts would otherwise be distributed pursuant to the terms of the Plan.

8. DEFERRAL ELECTIONS

(a) *General.* The Company or the Committee shall determine the timing of the filing of the appropriate Election forms. An effective Election may not be revoked or modified except as otherwise determined by the Company or the Committee or as stated herein.

(b) *Permissible Deferral Election.* A Participant's Election to defer Compensation may only be made in the taxable year before the Compensation is earned, with two (2) exceptions. The first exception applies to a Participant during his or her first (1st) year of eligibility to participate in the Plan. In that event such a Participant may, if so offered by the Company or the Committee, elect to defer Compensation for services performed after the Election, provided that the Election is made within thirty (30) days of the date the Participant becomes eligible to participate in the Plan.

The second exception is with respect to an election to defer Performance-Based Compensation. If Performance-Based Compensation is based on services of a Participant performed over a period of at least twelve (12) months, then the Participant may, if so offered by (and on the terms and limitations specified by) the Company or the Committee, make an Election to defer all or part of such Performance-Based Compensation not later than six (6) months before the end of such service period.

A Participant's Election under this Section 8(b) shall specify the amount or percentage of Compensation deferred and specify the time and form of distribution from among those described in Section 9 of the Plan. Each Election to defer Compensation is a separate election regarding the time and form of distribution.

(c) *Hypothetical Investment Alternatives — Existing Balances.* A Participant may elect to change an existing selection as to the investment alternatives in effect with respect to an existing Compensation Account (in increments prescribed by the Committee or the Company) as often, and with such restrictions, as determined by the Committee or by the Company. If a Participant fails to make an investment selection for his or her Compensation Account, the Committee or the Company may prescribe a default selection or selections in any manner that appears reasonable in their discretion.

9. DISTRIBUTION

(a) *Deferral Account.* In accordance with a Participant's Election under Section 8, but subject to Sections 7 and 11, amounts subject to such Election in the Deferral Account (determined in accordance with Section 6) shall be distributed -

1. Upon a Participant's Separation from Service as either a lump sum or in installments not exceeding fifteen (15) years; provided, however, that the distribution to a Participant who is a Specified Employee must not be made before the earliest of the date that is six (6) months after the Participant's Separation from Service or the date of the Participant's death;
2. For Elections made prior to October 1, 2016, upon a Participant's death to the Participant's Beneficiary as either a lump sum or in installments not

exceeding fifteen (15) years from the date of the Participant's death; or for Elections made on or after October 1, 2016, upon a Participant's death to the Participant's Beneficiary in a lump sum; or

3. At a specified time or under a fixed schedule not exceeding fifteen (15) years from the Participant's Separation from Service.

(b) *In-Service Account.* In accordance with a Participant's Election under Section 8, but subject to Sections 7 and 11, amounts subject to such Election in an In-Service Account (determined in accordance with Section 6) shall be distributed -

1. For Elections made prior to October 1, 2016, upon a Participant's death to the Participant's Beneficiary as either a lump sum or in installments not exceeding fifteen (15) years; or for Elections made on or after October 1, 2016, upon a Participant's death to the Participant's Beneficiary in a lump sum; or
2. At a specified time or under a fixed schedule not less than two (2) years measured from the beginning of the Plan Year after the Plan Year in which the Election is made and not exceeding fifteen (15) years measured from the beginning of the Plan Year after the Plan Year in which the Election is made.

(c) *Excess Plan and SERP Accounts.* In accordance with a Participant's Election, but subject to Sections 7 and 11, amounts subject to such Election in either the Excess Plan Account or SERP Account, or both (determined in accordance with Section 6) shall be distributed -

1. Upon a Participant's Separation from Service and entitlement to a distribution under the Excess Plan and/or SERP, as applicable, as either a lump sum or in installments not exceeding fifteen (15) years from the date the Participant was entitled to a distribution under the Excess Plan and/or SERP, as applicable; provided, however, that the distribution to a Participant who is a Specified Employee must not be made before the earliest of the date that is six (6) months after the Participant was entitled to a distribution under the Excess Plan and/or SERP, as applicable or the date of the Participant's death;
2. For Elections made prior to October 1, 2016, upon a Participant's death to the Participant's Beneficiary as either a lump sum or in installments not exceeding fifteen (15) years from the date of the Participant's death; or for Elections made on or after October 1, 2016, upon or Participant's death to Participant's Beneficiary in a lump sum; or
3. At a specified time or under a fixed schedule not exceeding fifteen (15) years from the date the Participant incurred a Separation from Service and was entitled to a distribution under the Excess Plan and/or SERP, as applicable.

(d) *Medium of Distribution and Default Method.* A Participant's Deferral Account, In-Service Account, Excess Plan Account and/or SERP Account shall be distributed in cash; provided that any amounts credited to the Common Stock Fund shall be distributed in whole shares of Common Stock with any remainder distributed in cash. If no Election is made by a Participant as to the distribution or form of payment from one or more of his or her Compensation Account(s), upon the earliest time that a distribution from such account is to be made pursuant to the terms of the Plan, such account shall be paid in cash or shares of Common Stock (or a combination of both) as determined above in a lump sum within sixty (60) days following the Participant's Separation from Service (provided that if such sixty (60) day period begins in one calendar year and ends in the next calendar year, the Participant shall have no right, directly or indirectly, to designate the calendar year of payment).

(e) *Election to Delay the Time or Change the Form of Distribution.* A Participant may make an Election to delay the time of a distribution or change the form of a distribution, or may elect to do both, with respect to an amount that would be payable pursuant to an Election (except in the event of a distribution on account of the Participant's death) if all of the following requirements are met -

1. Such an Election may not take effect until at least twelve (12) months after it is made;
2. Any delay to the distribution that would take effect because of the Election is at least to a date five (5) years after the date the distribution otherwise would have begun; and
3. Such an Election may not be made less than twelve (12) months before the date of the first scheduled payment.

(f) *Distribution Exceptions.* Notwithstanding anything in the Plan to the contrary, the following shall apply to the distribution of Contribution Accounts:

1. Distribution pursuant to a domestic relations order as described in Section 12;
2. Distribution of a Participant's or Beneficiary's Compensation Accounts shall be made in a single lump sum payment as soon as possible provided the distribution will be of the entirety of the Participant's or Beneficiary's Compensation Accounts and the distribution does not exceed the adjusted Code section 402(g) limit; and
3. Distribution or suspension of contributions may be made in the discretion of the Company for any other permitted purpose under Treas. Reg. section 1.409A-3(j)(4)(ii)-(xiv).

(g) *Timing of Payments to Specified Employees.* Notwithstanding anything in the Plan to the contrary, if a Participant is a Specified Employee as of the date of his or her Separation from Service, then no distribution/payment of such Participant's Compensation Accounts shall be made upon the Participant's Separation from Service until the first payroll date of the seventh month

following the Participant's Separation from Service (or, if earlier, upon the date of the Participant's death or such other earlier time as would not result in a tax or penalty under Code section 409A) (the "**Specified Employee Payment Date**"). Any payments to which a Specified Employee otherwise would have been entitled under the Plan during the period between the Participant's Separation from Service and the Specified Employee Payment Date shall be accumulated and paid in a lump sum payment on the Specified Employee Payment Date.

10. BENEFICIARY

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

11. CHANGE IN CONTROL

In the event of a Change in Control, the Company shall reimburse a Participant for the legal fees and expenses incurred if the Participant is required to seek to obtain or enforce any right to distribution. In the event that it is determined that such Participant is properly entitled to a cash or other distribution hereunder, such Participant shall also be entitled to interest thereon payable in an amount equivalent to the Prime Rate of Interest quoted by Citibank, N.A. as its prime commercial lending rate on the subject date from the date such distribution should have been made to and including the date it is made. Notwithstanding any provision of this Plan to the contrary, this Section 11 may not be amended after a Change in Control occurs without the written consent of a majority in number of Participants.

12. INALIENABILITY OF BENEFITS; UNFUNDED PLAN

The interests of the Participants and their Beneficiaries under the Plan may not in any way be voluntarily or involuntarily transferred, alienated or assigned, nor subject to attachment, execution, garnishment or other such equitable or legal process. A Participant or Beneficiary cannot waive the provisions of this Section 12. Notwithstanding anything contained herein to the contrary, valid court ordered divisions of a Participant's Compensation Account(s) pursuant to a domestic relations order may be recognized and distributions may be made pursuant to such an order provided that such distributions are consistent with this Section 12. A domestic relations order intended to assign a benefit hereunder to a former spouse of a Participant must be delivered to the Company. The Company will review the order to determine if it is qualified. Upon notification by the Company that the order is qualified, the spouse will be able to elect a distribution of the assigned benefit by the end of the fifth calendar year following the calendar year during which the Company or its delegate notifies the former spouse that the order is qualified. In all events, the entire assigned benefit must be distributed by the end of the fifth calendar year following the calendar year during which the Company or its delegate notifies the former spouse that the order is qualified. The Company may prescribe procedures that are consistent with this Section 12 and applicable law to implement benefit assignments pursuant to qualified orders.

The Plan at all times shall be unfunded; and no provision shall be made at any time with respect to segregating assets of any Participant for the payment of any amounts hereunder. The Plan constitutes a mere promise of the Company and the Related Entities to make payments to

Participants (and, to the extent applicable, Participants' Beneficiaries) in the future. Participants and their Beneficiaries and estates have rights only as unsecured general creditors of the Company and the Related Entities.

13. CLAIMS

(a) *Initial Claim — Notice of Denial.* If any claim for benefits (within the meaning of section 503 of ERISA) is denied in whole or in part, the Company (which shall include the Company or its delegate throughout this Section 13) will provide written notification of the denied claim to the Participant or Beneficiary, as applicable, (hereinafter referred to as the claimant) in a reasonable period, but not later than 90 days after the claim is received. The 90 day period can be extended under special circumstances. If special circumstances apply, the claimant will be notified before the end of the 90 day period after the claim was received. The notice will identify the special circumstances. It will also specify the expected date of the decision. When special circumstances apply, the claimant must be notified of the decision not later than 180 days after the claim is received.

The written decision will include:

1. The reasons for the denial.
2. Reference to the Plan provisions on which the denial is based. The reference need not be to page numbers or to section headings or titles. The reference only needs to sufficiently describe the provisions so that the provisions could be identified based on that description.
3. A description of additional materials or information needed to process the claim. It will also explain why those materials or information are needed.
4. A description of the procedure to appeal the denial, including the time limits applicable to those procedures. It will also state that the claimant may file a civil action under section 502(a) of ERISA (ERISA — §29 U.S.C. 1132). The claimant must complete the Plan's appeal procedure before filing a civil action in court.

If the claimant does not receive notice of the decision on the claim within the prescribed time periods, the claim is deemed denied. In that event the claimant may proceed with the appeal procedure described below.

(b) *Disability Claims Procedure.* Notwithstanding Section 13(a) above, the following will apply with regard to claims for a benefit which require a determination of Disability (a "Disability Claim"). The Company will notify the claimant of the Company's determination within a reasonable period of time, but in any event within 45 days after receipt of the Disability Claim by the Company. The Company may extend the period for making the benefit determination by 30 days if it determines that such an extension is necessary due to matters beyond the control of the Plan and if it notifies the claimant, prior to the expiration of the initial 45 day period, of circumstances requiring the extension of time and the date by which the Company expects to render a decision. The Company may further extend the period for making the benefit

determination by 30 days if it determines that such an extension is necessary due to matters beyond the control of the Plan and if it notifies the claimant, prior to the expiration of the first 30 day extension period, of the circumstances requiring the extension of time and the date by which the Company expects to render a decision. Any notice of extension under this Section 13(b) shall include the standards on which entitlement to a disability-based benefit is based, the unresolved issues that prevent a decision on the Disability Claim, and the additional information needed to resolve those issues for which the claimant will be afforded at least 45 days within which to provide the specified information. Any denial related to a Disability Claim shall be written in a manner calculated to be understood by the claimant.

The written decision will include:

1. The reasons for the denial.
2. Reference to the specific Plan provisions on which the denial is based.
3. A description of additional materials or information needed to process the claim. It will also explain why those materials or information are needed.
4. A description of the procedure to appeal the denial, including the time limits applicable to those procedures. It will also state that the claimant may file a civil action under section 502(a) of ERISA (ERISA — §29 U.S.C. 1132). The claimant must complete the Plan's appeal procedure before filing a civil action in court.
5. A discussion of the denial, including an explanation of the basis for disagreeing with or not the following: (a) the views presented by the claimant to the Plan of health care professionals treating the claimant and vocational professionals who evaluated the claimant, (b) the views of medical or vocational experts whose advice was obtained on behalf of the Plan in connection with a claimant's claim denial, without regard to whether the advice was relied upon in making the benefit determination, and (c) a disability determination regarding the claimant presented by the claimant to the Plan made by the Social Security Administration.
6. If the denial is based on a medical necessity or experimental treatment or similar exclusion or limit, either an explanation of the scientific or clinical judgment for the determination, applying the terms of the Plan to the claimant's medical circumstances, or a statement that such explanation will be provided free of charge upon request.
7. Either the specific internal rules, guidelines, protocols, standards or other similar criteria of the Plan relied upon in making the denial or a statement that such rules, guidelines, protocols, standards or other similar criteria do not exist.

8. A statement that the claimant is entitled to receive, upon request and free of charge, reasonable access to, and copies of, all documents, records, and other information relevant to the claimant's Disability Claim.

(c) *Appeal of Denied Claim.* The claimant may file a written appeal of a denied claim with the Company in such manner as determined from time to time. The Company is the named fiduciary under ERISA for purposes of the appeal of the denied claim. The Company may delegate its authority to rule on appeals of denied claims and any person or persons or entity to which such authority is delegated may re-delegate that authority. The appeal must be sent at least 60 days after the claimant received the denial of the initial claim. If the appeal is not sent within this time, then the right to appeal the denial is waived.

The claimant may submit materials and other information relating to the claim. The Company will appropriately consider these materials and other information, even if they were not part of the initial claim submission. The claimant will also be given reasonable and free access to or copies of documents, records and other information relevant to the claim.

Written notification of the decision on the appeal will be delivered to the claimant in a reasonable period, but not later than 60 days after the appeal is received. The 60 day period can be extended under special circumstances. If special circumstances apply, the claimant will be notified before the end of the 60 day period after the appeal was received. The notice will identify the special circumstances. It will also specify the expected date of the decision. When special circumstances apply, the claimant must be notified of the decision not later than 120 days after the appeal is received.

Special rules apply if the Company designates a committee as the appropriate named fiduciary for purposes of deciding appeals of denied claims. For the special rules to apply, the committee must meet regularly on at least a quarterly basis.

When the special rules for committee meetings apply the decision on the appeal must be made not later than the date of the committee meeting immediately following the receipt of the appeal. If the appeal is received within 30 days of the next following meeting, then the decision must not be made later than the date of the second committee meeting following the receipt of the appeal.

The period for making the decision on the appeal can be extended under special circumstances. If special circumstances apply, the claimant will be notified by the committee or its delegate before the end of the otherwise applicable period within which to make a decision. The notice will identify the special circumstances. It will also specify the expected date of the decision. When special circumstances apply, the claimant must be notified of the decision not later than the date of the third committee meeting after the appeal is received.

In any event, the claimant will be provided written notice of the decision within a reasonable period after the meeting at which the decision is made. The notification will not be later than 5 days after the meeting at which the decision is made.

Whether the decision on the appeal is made by a committee or not, a denial of the appeal will include:

1. The reasons for the denial.
2. Reference to the specific Plan provisions on which the denial is based.
3. A statement that the claimant may receive free of charge reasonable access to or copies of documents, records and other information relevant to the claim.
4. A description of any voluntary procedure for an additional appeal, if there is such a procedure. It will also state that the claimant may file a civil action under section 502(a) of ERISA (ERISA — §29 U.S.C. 1132).

If the claimant does not receive notice of the decision on the appeal within the prescribed time periods, the appeal is deemed denied. In that event the claimant may file a civil action in court. The decision regarding a denied claim is final and binding on all those who are affected by the decision. No additional appeals regarding that claim are allowed.

(d) *Appeal of Denied Disability Claim.* Notwithstanding Section 13(c) above, the following will apply with regard to appeals of Disability Claims, other than those Disability Claims determined under the Plan solely by reference to whether the person is entitled to disability based benefits under the Social Security Act or under a long term disability plan of the Company. An appeal of a Disability Claim must be brought within 180 days after receipt of the notice of the claim denial. Within 60 days after the Company receives a properly filed request for appeal, the Company shall conduct such review and advise the claimant in writing of its decision on appeal, unless special circumstances require an extension of time for conducting the appeal. If an extension of time for conducting the appeal is required, the Company shall provide the claimant with written notice of the extension before the expiration of the initial 60-day period, specifying the circumstances requiring an extension and the date by which such appeal shall be completed (which date shall not be later than 120 days after the date on which the Company received the request for appeal).

In such an appeal, the Company (a) will not afford deference to the initial determination made by the Company and will designate an individual to conduct the appeal process who is neither the individual who made the denial that is the subject of the appeal nor the subordinate of such individual; (b) in the case of an appeal of any denial that is based in whole or in part on a medical judgment, will consult with a health care professional who has appropriate training and expertise in the field of medicine involved in the medical judgment, and who was neither consulted in connection with the denial that is the subject of the appeal, nor the subordinate of any such individual; (c) will identify any medical or vocational experts whose advice was obtained on behalf of the Plan in connection with a claimant's claim denial, without regard as to whether the advice was relied upon in making the benefit determination; and (d) will provide the claimant, free of charge, with (i) any new or additional evidence considered, relied upon, or generated by the Plan in connection with the Disability Claim and (ii) the rationale for the determination on appeal. Such evidence and rationale shall be provided as soon as possible and sufficiently in advance of the date on which the written notice of the denial is required to be provided to give the claimant a reasonable opportunity to respond prior to that date. Any denial related to a Disability Claim shall be written in a manner calculated to be understood by the claimant.

The written decision will include:

1. The reasons for the denial.
2. Reference to the specific Plan provisions on which the denial is based.
3. A statement that the claimant may receive free of charge reasonable access to or copies of documents, records and other information relevant to the claim.
4. A statement of the claimant's right to bring a civil action under Section 502(a) of ERISA (ERISA — §29 U.S.C. 1132).
5. A discussion of the denial, including an explanation of the basis for disagreeing with or not the following: (a) the views presented by the claimant to the Plan of health care professionals treating the claimant and vocational professionals who evaluated the claimant, (b) the views of medical or vocational experts whose advice was obtained on behalf of the Plan in connection with a claimant's claim denial, without regard to whether the advice was relied upon in making the benefit determination, and (c) a disability determination regarding the claimant presented by the claimant to the Plan made by the Social Security Administration.
6. If the denial is based on a medical necessity or experimental treatment or similar exclusion or limit, either an explanation of the scientific or clinical judgment for the determination, applying the terms of the Plan to the claimant's medical circumstances, or a statement that such explanation will be provided free of charge upon request.
7. Either the specific internal rules, guidelines, protocols, standards or other similar criteria of the Plan relied upon in making the denial or a statement that such rules, guidelines, protocols, standards or other similar criteria do not exist.

(e) *Exhaustion of Claims and Review Procedures.* Following the exhaustion of the claims procedures set forth herein and in the event of subsequent civil action, the claimant shall be prohibited from presenting any evidence not considered by or presented to the Company in accordance with the claims procedures hereunder. No cause of action may be brought by a claimant who has received a claim denial later than two years following the date of such claim denial.

14. GOVERNING LAW

The provisions of this plan shall be interpreted and construed in accordance with the laws of the State of Delaware, except to the extent preempted by Federal law.

15. AMENDMENTS

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

- (a) increase the number of securities that may be issued under the Plan (except as provided in Section 3(c));
- (b) materially modify the requirements as to eligibility for participation in the Plan; or
- (c) otherwise materially increase the benefits accruing to Participants under the Plan; provided that, no amendment by the Company, Committee or the Board can directly or indirectly deprive any current or former Participant or Beneficiary of all or any portion of his vested Compensation Account which had accrued prior to the amendment, except to the extent required by the Code or other applicable law.

16. COMPLIANCE WITH RULE 16b-3

It is the intention of the Company that the Plan comply in all respects with Rule 16b-3 promulgated under Section 16(b) of the Exchange Act.

17. COMPLIANCE WITH 409A

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

18. EFFECTIVE DATE

The Plan was approved by the Committee and adopted by the Company to be effective as of January 1, 2017 and was amended and restated effective May 22, 2019.

[Signature page follows]

IN WITNESS WHEREOF, this amendment and restatement of the Plan is executed by Ashland Global Holdings Inc. this 22nd day of May 2019.

ASHLAND GLOBAL HOLDINGS INC.

By: /s/ Anne T. Schumann

Name: Anne T. Schumann

Title: SVP, CHRO & CIO

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

(Amended and Restated as of May 22, 2019)

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

(Amended and Restated as of May 22, 2019)

The Ashland Inc. Deferred Compensation Plan for Non-Employee Directors (2005) was approved by the Board of Directors of Ashland Inc. on November 4, 2004 to be effective January 1, 2005, and thereafter amended with changes effective January 26, 2007, January 1, 2008 and January 1, 2017.

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

Effective as of May 22, 2019, the Plan is amended and restated as follows:

ARTICLE I. GENERAL PROVISIONS

1. PURPOSE

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

2. DEFINITIONS

The following definitions shall be applicable throughout the Plan:

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

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

(c) “**Beneficiary**” means the Participant’s estate.

(d) “**Board**” means the Board of Directors of the Company.

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

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

1. there shall be consummated (A) any consolidation or merger of the Company (a “**Business Combination**”), other than a consolidation or merger of the Company into or with a direct or indirect wholly-owned subsidiary, as a result of which the shareholders of the Company own (directly or indirectly), immediately after the Business Combination, less than fifty percent (50%) of the then outstanding shares of common stock that are entitled to vote generally for the election of directors of the corporation resulting from such Business Combination, or pursuant to which shares of the Company’s Common Stock would be converted into cash, securities or other property, other than a Business Combination in which the holders of the Company’s Common Stock immediately prior to the Business Combination have substantially the same proportionate ownership of common stock of the surviving corporation immediately after the Business Combination, or (B) any sale, lease, exchange or transfer (in one transaction or a series of related transactions) of all or substantially all the assets of the Company, provided, however, that no sale, lease, exchange or other transfer of all or substantially all the assets of the Company shall be deemed to occur unless assets constituting at least eighty percent (80%) of the total assets of the Company are transferred pursuant to such sale, lease, exchange or other transfer;
2. the shareholders of the Company shall approve any plan or proposal for the liquidation or dissolution of the Company;
3. any Person shall become the Beneficial Owner of securities of the Company representing twenty percent (20%) or more of the combined voting power of the Company’s then outstanding securities ordinarily (and apart from rights accruing in special circumstances) having the right to vote in the election of directors, as a result of a tender or exchange offer, open market purchases, privately-negotiated purchases or otherwise, without the approval of the Board; or
4. at any time during a period of two (2) consecutive years, individuals who at the beginning of such period constituted the Board shall cease for any reason to constitute at least a majority thereof, unless the election or the nomination for election by the Company’s shareholders of each new director during such two- (2-) year period was approved by a vote of at least two-thirds (2/3) of the directors then still in office who were directors at the beginning of such two- (2-) year period.

Notwithstanding the foregoing, a “Change in Control” shall not be deemed to have occurred by virtue of (1) the consummation of any transaction or series of integrated transactions

immediately following which the record holders of the Common Stock of the Company immediately prior to such transaction or series of transactions continue to have substantially the same proportionate ownership in an entity which owns all or substantially all of the assets of the Company immediately following such transaction or series of transactions, or (2) the repurchase by the Company of outstanding shares of Common Stock or other securities pursuant to a tender or exchange offer.

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

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

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

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

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

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

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

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

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

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

(q) “**Disability**” means that a Participant is unable to engage in any substantial gainful activity because of a medically determinable physical or mental impairment that is expected to result in death or last for a continuous period of twelve (12) or more months, all within the meaning of Code Section 409A. Corporate Human Resources or its delegate shall determine whether a Participant has incurred a Disability.

(r) “**Election**” means a Participant’s delivery of a notice of election to defer payment of all or a portion of his or her Fees under the terms of the Plan. The Committee or the Company may prescribe other means of making and delivering an Election. An Election shall also include instructions specifying the time and form of payment of a Participant’s Deferred Fees and Restricted Stock Units and/or Account under the Plan. Such Elections shall comply with Code

section 409A to the extent applicable and be irrevocable except as otherwise provided in the Plan.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

3. SHARES; ADJUSTMENTS IN EVENT OF CHANGES IN CAPITALIZATION

(a) **Shares Authorized for Issuance.** There shall be reserved for issuance under the Plan of 941,716 shares of Common Stock (as adjusted on May 12, 2017 pursuant to subsection (b) below), subject to further adjustment pursuant to subsection (b) below. Such shares shall be authorized but unissued shares of Common Stock.

(b) **Adjustments in Certain Events.** In the event of any change in the outstanding Common Stock of the Company by reason of any stock split, stock dividend, recapitalization, merger, consolidation, reorganization, combination, or exchange of shares, split-up, split-off, spin-off, liquidation or other similar change in capitalization, or any distribution to common shareholders other than ordinary cash dividends, the number or kind of shares that may be issued under the Plan shall be automatically adjusted so that the proportionate interest of the Directors shall be maintained as before the occurrence of such event. Such adjustment shall be conclusive and binding for all purposes of the Plan.

4. ELIGIBILITY

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

5. ADMINISTRATION

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

ARTICLE II. FEES IN COMMON STOCK PROVISION

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

ARTICLE III. DEFERRED COMPENSATION

1. PARTICIPANT'S ACCOUNT

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

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

(c) **Restricted Stock Account and Restricted Stock Units.** Each Participant shall have his or her Restricted Stock Account credited on an Accounting Date with the number of Restricted Stock Units approved for such allocation equal to the number of shares of Common Stock (including fractions of a share) that could have been purchased with the dollar amount of the approved grant for this purpose at the Fair Market Value on the Accounting Date. The Restricted Stock Units so credited shall be separately maintained and accounted for in a Restricted Stock Account for the Participant. Amounts credited to the Restricted Stock Account shall be forfeitable until the one (1) year anniversary of the date on which such amounts were so

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

2. EARLY PAYMENT/DISTRIBUTION

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

(b) **Disability.** A Participant or a Participant's legal representative may submit an application for a total payment/distribution from the Participant's Account (including the non-forfeitable portion of the Participant's Restricted Stock Account) because of the Participant's Disability. The payment/distribution shall be made in a single lump sum and paid as soon as practicable (but not later than sixty (60) days) after the application is approved. The provisions of this Article III, Section 2(b) shall be interpreted and administered in accordance with applicable guidance that may be issued by the Treasury. If such guidance should allow an election of a period or form of distribution at the time of application for a distribution on account of the Participant's Disability then the Plan shall allow such elections.

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

3. ELECTIONS

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

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

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

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

2. **Restricted Stock Units.** Restricted Stock Units credited on an annual basis to a Participant's Restricted Stock Account cannot be transferred to another hypothetical investment alternative under the Plan.

4. **PAYMENT/DISTRIBUTION**

(a) **Account.** In accordance with a Participant's Election and as prescribed by the Committee or the Company, (i) Deferred Fees credited to a Participant's Deferred Fee Account and Stock Account, and (ii) the non-forfeitable portion of the Participant's Restricted Stock Account, shall be paid/distributed (in the medium set forth in Article III, Section 4(b) hereof) pursuant to the Participant's Fee Deferral Election (applicable to Deferred Fees) and Election (applicable to the Participant's Restricted Stock Account); provided that if such Fee Deferral Election or Election does not specify a time and form of distribution under Article III, Section 3 of the Plan, such amounts shall be paid in a lump sum within sixty (60) days following Termination (provided that if such sixty (60) day period begins in one calendar year and ends in the next calendar year, the Participant shall have no right, directly or indirectly, to designate the calendar year of payment). In accordance with a Participant's Fee Deferral Election under Article III, Section 3, but subject to Sections 2 and 6 of Article III, amounts subject to such Fee Deferral Election in the Deferred Fee Account and Stock Account and subject to such Election in the Restricted Stock Account shall be paid/distributed --

1. Upon a Participant's Termination, including death, as either a lump sum or in installments not exceeding fifteen (15) years; or
2. At a specified time or under a fixed schedule not exceeding fifteen (15) years.

(b) **Medium of Distribution and Default Method.** A Participant's Account shall be paid/distributed in cash. Notwithstanding anything in the foregoing to the contrary, all of a Participant's Stock Units and Restricted Stock Units that are subject to the restrictions on hypothetical investment transfer described in Article III, Section 3(c) shall be paid/distributed to the Participant (or, in the event of the Participant's death, the Participant's Beneficiary(ies) or estate) in whole shares of Common Stock, with any remainder distributed in cash; provided that any shares of Common Stock underlying Restricted Stock Units that were credited to the Plan on or after January 1, 2017 shall be debited against and reduce the share reserve of the stockholder approved equity plan maintain by the Company under which the Restricted Stock Units were granted (or deemed granted) and shall not reduce the share limit in Article I, Section 3(a) of this Plan. The amounts so paid/distributed shall be paid/distributed first under the timing of distributions that applies to the portion of the Participant's Account being paid/distributed.

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

be paid paid/distributed first under the timing of distributions that applies to the portion of the Participant's Account being paid/distributed.

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

1. Such a subsequent Election may not take effect until at least twelve (12) months after it is made;
2. Any delay to the payment/distribution that would take effect because of the subsequent Election is at least to a date five (5) years after the date the payment/distribution otherwise would have begun; and
3. In the case of a payment/distribution that would be made under paragraph (a)2. of this Section 4, such a subsequent Election may not be made less than twelve (12) months before the date of the first scheduled payment.

5. PAYMENT COMMENCEMENT DATE

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

6. CHANGE IN CONTROL

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

ARTICLE IV. MISCELLANEOUS PROVISIONS

1. BENEFICIARY

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

2. INALIENABILITY; UNFUNDED PLAN

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

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

3. GOVERNING LAW

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

4. AMENDMENT AND TERMINATION

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

1. materially increase the number of securities that may be issued under the Plan (except as provided in Article I, Section 3),
2. materially modify the requirements as to eligibility for participation in the Plan, or
3. otherwise materially increase the benefits accruing to Participants under the Plan;

provided that, no amendment by the Committee or Board can directly or indirectly deprive any current or former Participant or Beneficiary of all or any portion of his vested Account which had accrued prior to the amendment, except to the extent required by the Code or other applicable law.

5. COMPLIANCE WITH RULE 16b-3

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

6. COMPLIANCE WITH 409A

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

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

7. EFFECTIVE DATE

The Plan was established by the Company to be effective as of January 1, 2017 and was amended and restated effective as of May 22, 2019.

IN WITNESS WHEREOF, this amendment and restatement of the Plan was executed this 22nd day of May, 2019.

ASHLAND GLOBAL HOLDINGS INC.

By: /s/ Anne T. Schumann
Title: SVP, CHRO & CIO

**ASHLAND GLOBAL HOLDINGS INC.
NONQUALIFIED DEFINED CONTRIBUTION PLAN
(Amended and Restated as of May 22, 2019)**

ASHLAND GLOBAL HOLDINGS INC.
NONQUALIFIED DEFINED CONTRIBUTION PLAN

ARTICLE 1
PURPOSE AND EFFECTIVE DATE

1.1 Purpose. Ashland Global Holdings Inc. hereby establishes the Plan to provide benefits for certain employees that supplements the limitation on compensation imposed by Section 401(a)(17) of the Code (including successor provisions thereto) on the Savings Plan. It is intended that the Plan be maintained primarily for a select group of management or highly compensated employees and be exempt from the Employee Retirement Income Security Act of 1974, as amended.

1.2 Effective Date. The Plan is effective October 1, 2016.

1.3 Restatement. The Plan is hereby amended and restated as of May 22, 2019.

ARTICLE 2
DEFINITIONS

Pronouns used in the Plan are in the masculine gender but include the feminine gender unless the context clearly indicates otherwise. Wherever used herein, the following terms have the meanings set forth below, unless a different meaning is clearly required by the context:

2.1 “**Account**” means an account established for the purpose of recording amounts credited on behalf of a Participant and any income, expenses, gains, losses or distributions included thereon. The Account shall be a bookkeeping entry only and shall be utilized solely as a device for the measurement and determination of the amounts to be paid to a Participant pursuant to the Plan. Separate Accounts shall be established for a Participant by Plan Year and by type of contribution to the Participant.

2.2 “**Ashland**” means Ashland LLC, a wholly-owned subsidiary of the Company.

2.3 “**Base Compensation**” means, with respect to each Plan Year, compensation paid to a Participant that is included in the definition of Compensation for deferral purposes in the Savings Plan without giving effect to any reduction required by Code Section 401(a)(17) and which is not Incentive Compensation.

2.4 “**Base Compensation Deferrals**” means, with respect to each Plan Year, Base Compensation that is deferred into the Deferred Compensation Plan.

2.5 “**Base Contribution**” means, with respect to each Plan Year, the Base Contribution as provided in Section 4.1.

2.6 “**Beneficiary**” means the Participant’s estate.

2.7 “**Board**” means the Board of Directors of the Company.

2.8 “**Cause**”, for Participants with a Change in Control agreement with the Employer, as defined by the Participant’s Change in Control agreement; and for Participants without a Change in Control agreement, the willful and continuous failure of a Participant to substantially perform his or her duties to the Employer (other than any such failure resulting from incapacity due to physical or mental illness), or the willful engaging by a Participant in gross misconduct materially and demonstrably injurious to the Employer or the Company, each to be determined by the Company in its sole discretion.

2.9 “**Change in Control**” shall be deemed to have occurred if:

- (1)** there shall be consummated (A) any consolidation or merger of the Company (a “**Business Combination**”), other than a consolidation or merger of the Company into or with a direct or indirect wholly-owned subsidiary, as a result of which the shareholders of the Company own (directly or indirectly), immediately after the Business Combination, less than fifty percent (50%) of the then outstanding shares of common stock that are entitled to vote generally for the election of directors of the

corporation resulting from such Business Combination, or pursuant to which shares of the Company's Common Stock would be converted into cash, securities or other property, other than a Business Combination in which the holders of the Company's Common Stock immediately prior to the Business Combination have substantially the same proportionate ownership of common stock of the surviving corporation immediately after the Business Combination, or (B) any sale, lease, exchange or transfer (in one transaction or a series of related transactions) of all or substantially all the assets of the Company, provided, however, that no sale, lease, exchange or other transfer of all or substantially all the assets of the Company shall be deemed to occur unless assets constituting at least eighty percent (80%) of the total assets of the Company are transferred pursuant to such sale, lease, exchange or other transfer;

- (2) the shareholders of the Company shall approve any plan or proposal for the liquidation or dissolution of the Company;
- (3) any Person shall become the Beneficial Owner of securities of the Company representing twenty percent (20%) or more of the combined voting power of the Company's then outstanding securities ordinarily (and apart from rights accruing in special circumstances) having the right to vote in the election of directors, as a result of a tender or exchange offer, open market purchases, privately-negotiated purchases or otherwise, without the approval of the Board; or
- (4) at any time during a period of two (2) consecutive years, individuals who at the beginning of such period constituted the Board shall cease for any reason to constitute at least a majority thereof, unless the election or the nomination for election by the Company's shareholders of each new director during such two- (2-) year period was approved by a vote of at least two-thirds (2/3) of the directors then still in office who were directors at the beginning of such two- (2-) year period.

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

2.10 "Code" means the Internal Revenue Code of 1986, as amended.

2.11 "Committee" means the Compensation Committee of the Board and its designees.

- 2.12** “**Company**” means Ashland Global Holdings Inc., and any successor thereto.
- 2.13** “**Deferred Compensation Plan**” means the Ashland Deferred Compensation Plan for Employees, as may be amended, and amended and restated, from time to time.
- 2.14** “**Disabled**” or “**Disability**” means a determination that the Participant is, by reason of any medically determinable physical or mental impairment which can be expected to result in death or can be expected to last for a continuous period of not less than twelve (12) months, receiving income replacement benefits for a period of not less than three months under an accident and health plan covering employees of the Employer. A Participant also will be considered disabled if he is determined (a) to be totally disabled by the Social Security Administration, or (b) to be disabled in accordance with a disability insurance program, provided that the definition of disability applied under such disability insurance program complies with the requirements of Treasury Regulation Section 1.409A-3(i)(4). The Committee or its delegate shall determine whether a Participant has incurred a Disability.
- 2.15** “**Discretionary Contribution**” means, with respect to each Plan Year, the portion of the Employer Contribution as provided in Section 4.2(b).
- 2.16** “**Effective Date**” means October 1, 2016.
- 2.17** “**Eligible Employee**” means an employee of the Employer who is determined to be a member of a select group of management or highly compensated employees within the meaning of Sections 201(2), 301(a)(3) and 401(a)(1) of ERISA, and who are classified in base salary and grades 21 and above.
- 2.18** “**Employer**” means the Company, Ashland and the present and future Related Entities that employ a Participant.
- 2.19** “**Employer Contribution**” means the Employer contributions provided in ARTICLE 4.
- 2.20** “**ERISA**” means the Employee Retirement Income Security Act of 1974, as amended.
- 2.21** “**Excess Base Compensation**” means, with respect to each Plan Year, Base Compensation paid to a Participant that is included in the definition of Compensation in the Savings Plan but that is in excess of the limitation in Code Section 401(a)(17) and which is not Incentive Compensation.
- 2.22** “**Excess Base Compensation Deferrals**” means, with respect to each Plan Year, Excess Base Compensation that is deferred to the Deferred Compensation Plan other than Incentive Compensation Deferrals.
- 2.23** “**Incentive Compensation**” means, with respect to a Plan Year, bonuses paid to a Participant under any applicable incentive compensation plans that are excluded from the definition of “Compensation” in the Savings Plan and which is not Base Compensation.

2.24 “**Incentive Compensation Deferrals**” means Incentive Compensation that is deferred into the Deferred Compensation Plan.

2.25 “**Key Employee**” means a “specified employee” within the meaning of Code Section 409A(a)(2)(B) (i) who satisfies the conditions set forth in Section 0.

2.26 “**Matching Contribution**” means, with respect to each Plan Year, the portion of the Employer Contribution provided in Section 4.2(a).

2.27 “**Participant**” means an Eligible Employee who commences participation in the Plan in accordance with ARTICLE 3.

2.28 “**Period of Service**” means, except as otherwise provided in Section 4.2(b)(iv), a period of employment with the Employer commencing on the date an Employee works at least one hour for which the Employee is paid and ending on the date such Employee has a Separation from Service.

2.29 “**Plan**” means this Ashland Global Holdings Inc. Nonqualified Defined Contribution Plan effective October 1, 2016, and as amended from time to time.

2.30 “**Plan Year**” means each twelve (12) month period beginning January 1st and ending on December 31st, except for the first Plan Year that shall begin on the Effective Date and ends on December 31, 2016.

2.31 “**Related Entities**” means (a) any corporation that is a member of a controlled group of corporations as defined in Code Section 414(b) that includes the Company, and (b) any trade or business that is under “common control” as defined in Code Section 414(c) that includes the Company.

2.32 “**Savings Plan**” means the tax-qualified Ashland LLC Employee Savings Plan, as amended from time to time.

2.33 “**Separation from Service**” and “**Separated from Service**” means a Participant’s termination of employment with the Employer for any reason, including death, that meets the requirements of the definition of “separation from service” set forth in Treasury Regulation Section 1.409A-1(h). For purposes of determining whether a Separation from Service has occurred, the twenty percent (20%) default threshold set forth in Treasury Regulation Section 1.409A-1(h)(1)(ii) shall be utilized.

2.34 “**Valuation Date**” means the last day of each calendar month during a Plan Year, or such other date or dates as determined by the Committee.

ARTICLE 3
PARTICIPATION

3.1 Participation. Each Eligible Employee of the Employer shall be eligible for the Plan immediately.

3.2 Termination of Participation. The Employer may terminate a Participant's participation in the Plan, provided, however, any such termination at the direction of the Employer shall not take effect until the first day of the next Plan Year.

ARTICLE 4
EMPLOYER CONTRIBUTIONS

4.1 Base Contribution.

If a Participant has not Separated from Service in a Plan Year, a Participant's Account will be credited with a Base Contribution in an amount equal to four percent (4%) of the Participant's Incentive Compensation, Excess Base Compensation and Excess Base Compensation Deferrals for the Plan Year.

4.2 Other Employer Contributions.

(a) **Matching Contribution.** If a Participant has not Separated from Service in a Plan Year, a Participant's Account will be credited with a Matching Contribution in an amount equal to four percent (4%) of the Participant's Incentive Compensation, Excess Base Compensation and Excess Base Compensation Deferrals for the Plan Year.

(b) **Discretionary Contributions.** A Discretionary Contribution may be credited to one or more Participants' Accounts in an amount determined solely by the Employer for any Plan Year.

4.3 Crediting Employer Contributions. Each Participant shall be credited with the applicable Employer Contributions in accordance with this ARTICLE 4, as soon as administratively feasible following each Plan Year.

ARTICLE 5
PAYMENT SCHEDULE AND FORM OF PAYMENT

5.1 Payment Schedule and Form of Payment. Amounts credited to a Participant's Account shall be paid to the Participant in a lump sum on or within sixty (60) days following the Participant's Separation from Service other than for Cause (provided that if such sixty (60) day period begins in one calendar year and ends in the next calendar year, the Participant shall not designate the year of payment). Notwithstanding anything in the Plan to the contrary, a Participant who is a Key Employee shall not have the lump sum payment of such amounts credited to his Account until the first business day of the seventh month following his Separation from Service other than for Cause.

5.2 Death Before Payment. If a Participant dies prior to a Separation from Service for any other reason, the amount credited to the deceased Participant's Account as of his date of death shall be paid in a lump sum to the Participant's Beneficiary within sixty (60) days following the Participant's date of death (provided that if such sixty (60) day period begins in one calendar year and ends in the next calendar year, the Beneficiary shall not designate the calendar year of payment).

ARTICLE 6
ACCOUNTS AND CREDITS AND FUNDING

6.1 Contribution Credits to Account. A Participant's Account will be credited with the Employer Contributions credited on his behalf under ARTICLE 4.

6.2 Credits and Debits to Account. The Participant's Account shall be credited (or debited) on each Valuation Date with hypothetical income (or loss) based upon a hypothetical investment in any one or more of the hypothetical investment options available under the Plan, as prescribed by the Committee or its delegate. The crediting or debiting on each Valuation Date of hypothetical income (or loss) shall be made for each respective Account. All hypothetical investments of a Participant's Account shall be valued at fair market value. Additionally, all payments, distributions, investments and investment exchanges allowed and made under the Plan shall be as of the relevant Valuation Date at fair market value.

6.3 Adjustment of Accounts. Each Account maintained for a Participant shall be adjusted for hypothetical credits and any expenses allocable under the terms of the Plan to the Account. The Account shall be adjusted as of each Valuation Date to reflect: (a) the hypothetical credits and expenses described in this ARTICLE 6; (b) amounts credited pursuant to ARTICLE 4; and (c) payments, distributions or withdrawals.

6.4 Establishment of Trust for Funding. The Employer may, but is not required to, establish a trust to hold amounts which the Employer may contribute from time to time to correspond to some or all amounts credited to Participants under this ARTICLE 6. If the Employer establishes a trust, the provisions of Sections 0(a) and (b) shall become operative.

(a) Grantor Trust. Any trust established by the Employer shall be between the Employer and a trustee pursuant to a separate written agreement under which assets are held, administered and managed, subject to the claims of the Employer's creditors in the event of the Employer's insolvency, until paid to the Participant and/or his Beneficiaries. The trust is intended to be treated as a grantor trust under the Code, and it is intended that the establishment of the trust shall not cause the Participant to realize current income on amounts contributed thereto. The Employer must notify the trustee in the event of a lawsuit regarding the Plan or regarding its bankruptcy or insolvency.

(b) Investment of Trust Funds. Any amounts contributed to the trust by the Employer shall be invested by the trustee in accordance with the provisions of the trust and the instructions of the Committee or its delegate.

ARTICLE 7
RIGHT TO BENEFITS

7.1 Vesting. Unless a Participant is terminated for Cause, a Participant shall be one hundred percent (100%) vested in his Accounts upon the earlier of a Change in Control or the Participant's Separation from Service. Notwithstanding the preceding sentence, if a Participant is terminated for Cause, the Participant shall forfeit all rights to the Participant's Account.

7.2 Amount of Benefits. The vested amounts credited to a Participant's Account as determined under ARTICLE 4 shall determine and constitute the basis for the amount payable to the Participant (or, in the event of the Participant's death, to the Participant's Beneficiary) under the Plan.

ARTICLE 8
PAYMENTS OF AMOUNTS CREDITED TO ACCOUNTS

8.1 Method and Timing of Payments. Except as otherwise provided under the Plan, including this ARTICLE 8, payments under the Plan shall be made in accordance with ARTICLE 5 of the Plan.

8.2 Prohibition on Acceleration. Except as otherwise provided in the Plan and except as may be allowed in guidance from the Secretary of the Treasury, distributions/payments from a Participant's Account(s) may not be made earlier than the time such amounts would otherwise be distributed pursuant to the terms of the Plan.

8.3 Key Employees. Unless an exception to Code Section 409A applies to a payment to a Participant, in no event shall a distribution made to a Key Employee from his Accounts due to his Separation from Service occur before the date which is six (6) months after his Separation from Service, or, if earlier, his date of death. For purposes of this Section 8.3, a Key Employee means "specified employee" within the meaning of Section 409A of the Code and using the identification methodology selected by the Company from time to time. This Section 8.3 shall not apply to an accelerated distribution made in accordance with Section 0.

8.4 Permissible Delays in Payment. Distributions may be delayed beyond the date payment would otherwise occur in accordance with the provisions of ARTICLE 5 in any of the following circumstances:

(a) **Payments Subject to Code Section 162(m).** The Employer may delay payment if it reasonably anticipates that its deduction with respect to such payment would not be permitted due to the application of Code Section 162(m); provided, however, that (i) the deduction limitation of Code Section 162(m) shall be applied to all payments to similarly situated Participants on a reasonably consistent basis; (ii) the payment must be made either during the Participant's first taxable year in which the Employer reasonably anticipates, or should reasonably anticipate, that if the payment is made during such year, the deduction of such payment will not be barred by application of Code Section 162(m) or during the period beginning with the date of the Participant's Separation from Service (or, if the Participant is a Key Employee, beginning with the date that is six (6) months after Separation from Service) and ending on the later of the last day of the Employer's taxable year in which the Participant incurs a Separation from Service for the 15th day of the third month following the Participant's Separation from Service (or, if the Participant is a Key Employee, the 15th day of the third month following the date that is six (6) months after Separation from Service); (iii) where any payment to a particular Participant is delayed because of Code Section 162(m), the delay in payment will be treated as a subsequent deferral election under Code Section 409A, unless all scheduled payments to such Participant that could be delayed are also delayed; and (iv) no election may be provided to a Participant with respect to the timing of payment hereunder.

(b) **Payments that would violate Federal Securities Laws or Other Applicable Law.** The Employer may also delay payment if it reasonably anticipates that the

marking of the payment will violate Federal securities laws or other applicable laws provided payment is made at the earliest date on which the Employer reasonably anticipates that the making of the payment will not cause such violation.

(c) **Other Events and Conditions.** The Employer also reserves the right to delay payment upon such other events and conditions as the Secretary of the Treasury may prescribe in generally applicable guidance published in the Internal Revenue Bulletin.

Except as may be otherwise required under Code Section 409A, a payment is treated as made upon the date contemplated under the provisions of the Plan if the payment is made at such date or a later date within the same calendar year or, if later, by the 15th day of the third calendar month following the date contemplated by the Plan. If calculation of the amount of the payment is not administratively practicable due to events beyond the control of the Participant (or Participant's Beneficiary), the payment will be treated as made upon the date contemplated by the Plan if the payment is made during the first calendar year in which the payment is administratively practicable. Similarly, if the funds of the Employer are not sufficient to make the payment at the date specified under the Plan without jeopardizing the solvency of the Employer, the payment will be treated as made upon the date contemplated by the Plan if the payment is made during the first calendar year in which the funds of the Employer are sufficient to make the payment without jeopardizing the solvency of the Employer.

If a payment is not made, in whole or in part, as of the date contemplated by the Plan because the Employer refuses to make such payment, the payment will be treated as made upon the date contemplated by the Plan if the Participant accepts the portion (if any) of the payment that the Employer is willing to make (unless such acceptance will result in forfeiture of the claim to all or part of the remaining account), makes prompt and reasonable, good faith efforts to collect the remaining portion of the payment and any further payment (including payment of a lesser amount that satisfies the obligation to make the payment) is made no later than the end of the first calendar year in which the Employer and the Participant enter into a legally binding settlement of such dispute, the Employer concedes that the amount is payable, or the Employer is required to make such payment pursuant to a final and nonappealable judgment or other binding decision. For purposes of this paragraph, efforts to collect the payment will be presumed not to be prompt, reasonable, good faith efforts, unless the Participant provides notice to the Employer within ninety (90) days of the latest date upon which the payment could have been timely made in accordance with the terms of the Plan and the Treasury Regulations promulgated under Code Section 409A, and unless, if not paid, the Participant takes further enforcement measures within one hundred eighty (180) days after such latest date. For purposes of this paragraph, the Employer is not treated as having refused to make a payment where pursuant to the terms of the Plan the Participant is required to request payment, or otherwise provide information to take any other action, and the Participant has failed to take such action. In addition, for purposes of this paragraph, the Participant is deemed to have requested that a payment not be made, rather than the Employer having refused to make such payment, where the Employer's decision to refuse to make the payment is made by the Participant or a member of the Participant's family (as defined in Code Section 267(c)(4) applied as if the family of an individual includes the spouse of any member of the family), or any person or group of persons over whom the Participant's family member has effective control, or any person any portion of whose compensation is controlled by the Participant or the Participant's family member.

ARTICLE 9
AMENDMENT AND TERMINATION

9.1 Plan Amendment. The Company reserves the sole right to amend the Plan pursuant to a resolution of the Board approving such amendment. An amendment must be in writing and executed by a representative of the Company authorized to take such action. The Company hereby reserves the right to amend the Plan without the consent of the Participants in the future, as required to comply with any present or future law, regulation or rule applicable to the Plan, including, but not limited to Code Section 409A and all applicable guidance promulgated thereunder, and to prevent any Participant from becoming subject to any additional tax or penalty under Code Section 409A. No amendment can directly or indirectly deprive any current or former Participant or Beneficiary of all or any portion of his vested Account which had accrued prior to the amendment, except to the extent required by the Code or other applicable law.

9.2 Retroactive Amendments. An amendment to the Plan made by the Company in accordance with Section 0 may be made effective on a date prior to the first day of the Plan Year in which it is adopted. Any retroactive amendment by the Company shall be subject to the provisions of Section 0.

9.3 Plan Termination. The Plan will terminate automatically as of the date that no amounts remain to be paid/distributed under the Plan.

The Company reserves the right to terminate the Plan and accelerate the time of payment of all amounts to be distributed under the Plan in accordance with the following provisions of this Section 0. The Company may make an irrevocable election to terminate the Plan and distribute all amounts credited to all Participant Accounts within the thirty (30) days preceding or the twelve (12) months following a Change in Control. For this purpose, the Plan will be treated as terminated only if all other arrangements sponsored by the Employer immediately after the time of the Change in Control with respect to which deferrals of compensation are treated as having been deferred under a single plan under Treasury Regulation Section 1.409A-1(c)(2) are terminated and liquidated with respect to each Participant that experienced the Change in Control, so that under the terms of the termination and liquidation all such Participants are required to receive all amounts of compensation deferred under the terminated arrangements within twelve (12) months of the date the Company irrevocably takes all necessary action to terminate and liquidate the Plan and such other arrangements. In addition, the Company reserves the right to terminate the Plan within twelve (12) months of a corporate dissolution taxed under Code Section 331, or with the approval of a bankruptcy court pursuant to Section 503(b)(1)(A) of Title 11 of the United States Code, provided that amounts deferred under the Plan are included in the gross incomes of Participants in the earlier of (a) the taxable year in which the amount is actually or constructively received, or (b) the latest of the following years: (1) the calendar year in which the termination occurs, (2) the first calendar year in which the amount is no longer subject to a substantial risk of forfeiture, or (3) the first calendar year in which payment is administratively practicable. The Company retains the discretion to terminate the Plan if (1) the termination does not occur proximate to a downturn in the financial health of the Company;

(2) all arrangements sponsored by the Employer that would be aggregated with any terminated arrangement under Treasury Regulation Section 1.409A-1(c) if the same service provider participated in all of the arrangements are terminated, (3) no payments other than payments that would be payable under the terms of the arrangements if the termination had not occurred are made within twelve (12) months of the termination of the arrangements, (4) all payments are made within twenty-four (24) months of the termination of the arrangements, and (5) the Employer does not adopt new arrangements that would be aggregated with any terminated arrangement under Treasury Regulation Section 1.409A-1(c), if the same service provider participated in both arrangements, at any time with the three- (3-) year period following the date of termination of the arrangement. The Company also reserves the right to terminate the Plan and accelerate the time of payment of all amounts to be distributed under the Plan under such conditions and events as may be prescribed by the Internal Revenue Service in generally applicable guidance published in the Internal Revenue Bulletin.

9.4 Distribution Upon Termination of the Plan. Except as provided in Section 0, the Plan may not be terminated before the date on which all amounts credited to all Participant Accounts have been paid in accordance with the terms of the Plan.

ARTICLE 10
PLAN ADMINISTRATION

10.1 Powers and Responsibilities of the Company. The Company or its delegate shall be responsible for the general operation and administration of the Plan and for carrying out the provisions thereof. The Company's (or its delegate's) powers and responsibilities include, but are not limited to, the following, which powers and responsibilities shall be exercised in its sole discretion:

- (a) To make and enforce such rules and regulations as it deems, in its sole discretion, necessary or proper for the efficient administration of the Plan;
- (b) To decide all questions concerning the Plan and the eligibility of any person to participate in the Plan, in its sole discretion, subject to review by the Committee or its delegate.
- (c) To administer the claims and review procedures specified in Section 0;
- (d) To compute the amount of benefits which will be payable to any Participant, former Participant or Beneficiary in accordance with the provisions of the Plan in its discretion;
- (e) To determine the person or persons to whom such benefits will be paid in its discretion;
- (f) To authorize the payment of benefits;
- (g) To comply with any applicable reporting and disclosure requirements of Part 1 of Subtitle B of Title 1 of ERISA;
- (h) To appoint such agents, counsel, accountants, and consultants as may be required to assist in administering the Plan;
- (i) To allocate and delegate its responsibilities in its discretion, including the formation of any administrative sub-committee to administer the Plan.

10.2 Powers and Responsibilities of the Committee. The Committee or its delegate shall be responsible (a) for determining the hypothetical investments relating to Participants' Accounts pursuant to ARTICLE 6, and (b) for the review of denied claims pursuant to Section 0(b) in its sole discretion. In the course of reviewing a denied claim, the Committee or its delegate shall have the power to interpret the Plan, in its sole discretion, and its interpretation thereof shall be final, conclusive and binding on all persons claiming benefits under the Plan.

(a) **Claims Procedure.** If any person believes he is being denied any rights or benefits under the Plan, such person may file a claim in writing with the Company. If any such claim is wholly or partially denied, the Company or its delegate will notify such person of its decision in writing. Such notification will contain (i) specific reasons for the denial, (ii) specific reference to pertinent Plan provisions, (iii) a description of any additional material or information necessary for such person to perfect such claim and an explanation of why such material or information is necessary, and (iv) information as to the steps to be taken if the person wishes to submit a request for review, including a statement of the person's right to bring a civil action under Section 502(a) of ERISA following an adverse benefit determination on review. Such notification will be given within ninety (90) days after the claim is received by the Company (or within one hundred eighty (180) days, if special circumstances require an extension of time for processing the claim, and if written notice of such extension and circumstances is given to such person within the initial ninety- (90-) day period). If such notification is not given within such period, the claim will be considered denied as of the last day of such period and such person may request a review of his claim.

(b) **Review Procedure.** Within sixty (60) days after the date on which a person receives a written notification of denial of claim (or, if written notification is not provided, within sixty (60) days of the date denial is considered to have occurred), such person (or his duly authorized representative) may (i) file a written request with the Company for a review of his denied claim and of pertinent documents and (ii) submit written issues and comments to the Company. The Company will provide a review that takes into account all comments, documents, records and other information submitted by the person without regard to whether such information was submitted or considered in the initial benefit determination. The decision on review will be made within sixty (60) days after the request for review is received by the Company (or within one hundred twenty (120) days, if special circumstances require an extension of time for processing the request, such as an election by the Company or its delegate to hold a hearing, and if written notice of such extension and circumstances is given to such person within the initial sixty- (60-) day period). If the decision on review is not made within such period, the claim will be considered denied. The Company or its delegate will notify such person of its decision in writing. Such notification will be written in a manner calculated to be understood by such person and will contain (i) the specific reason or reasons for any adverse benefit determination, (ii) the specific Plan provisions on which any adverse benefit determination is based, (iii) a statement that the person is entitled to receive, upon request and free of charge, reasonable access to, and copies of, all documents, records, and other information relevant to the person's claim for benefits, and (iv) a statement of the person's right to bring a civil action under Section 502(a) of ERISA.

(c) **Exhaustion of Claims and Review Procedures.** Following the exhaustion of the claims procedures set forth herein and in the event of subsequent civil action, the person shall be prohibited from presenting any evidence not considered by or presented to the Company in accordance with the claims procedures hereunder. No cause of action may be brought by a person who has received a claim denial later than two years following the date of such claim denial.

10.4 Plan Administrative Costs. All reasonable costs and expenses (including legal, accounting, and employee communication fees) incurred by the Company in administering the Plan shall be paid by the Company.

ARTICLE 11
MISCELLANEOUS

11.1 Unsecured General Creditor of the Employer. The Plan at all times shall be entirely unfunded. Participants and their Beneficiaries, heirs, successors and assigns shall have no legal or equitable rights, interests or claims in any property or assets of the Employer. For purposes of the payment of benefits under the plan, the assets of the Employer shall be, and shall remain, the general, unpledged, unrestricted assets of the Employer. The Employer's obligation under the Plan shall be merely that of an unfunded and unsecured promise to pay money in the future.

11.2 Employer's Liability. The Employer's liability for the payment of benefits under the Plan shall be defined only by the Plan. The Employer shall have no obligation or liability to a Participant under the Plan except as provided by the Plan.

11.3 Limitation of Rights. Neither the establishment of the Plan, nor any amendment thereof, nor the creation of any fund or account, nor the payment of any benefits, will be construed as giving to the Participant or any other person any legal or equitable right against the Employer or the Committee except as provided herein; and in no event will the terms of employment or service of the Participant be modified or in any way affected hereby.

11.4 Anti-Assignment. Except as otherwise provided in connection with a division of property under a domestic relations proceeding under state law and subject to the terms of the Plan, no right or interest of the Participants shall be subject to involuntary alienation, assignment or transfer of any kind. An eligible employee may voluntarily assign his rights under the Plan. The Employer, the Board, the Committee and any of their delegates shall not review, confirm, guarantee or otherwise comment on the legal validity of any voluntary assignment. Employer and its delegates may review, provide recommendations and approve submitted domestic relations orders using procedures similar to those that apply to qualified domestic relations orders under the qualified pension plans sponsored by the Employer. A domestic relations order intended to assign a benefit hereunder to a former spouse of an eligible employee must be delivered to the Employer. The Employer will review the order to determine if it is qualified. Upon notification by the Employer that the order is qualified, the spouse will be able to elect a distribution of the assigned benefit by the end of the fifth calendar year following the calendar year during which the Employer notifies the former spouse that the order is qualified. In all events, the entire assigned benefit must be distributed by the end of the fifth calendar year following the calendar year during which the Employer notifies the former spouse that the order is qualified. The Employer may prescribe procedures that are consistent with this Section 0 and applicable law to implement benefit assignments pursuant to qualified orders.

11.5 Facility of Payment. If the Employer determines, on the basis of medical reports or other evidence satisfactory to the Employer, that the recipient of any benefit payments under the Plan is incapable of handling his affairs by reason of minority, illness, infirmity or other

incapacity, such payments may be disbursed to a person or institution designated by a court which has jurisdiction over such recipient or a person or institution otherwise having the legal authority under State law for the care and control of such recipient. The receipt by such person or institution of any such payments, and any such payment to the extent thereof, shall discharge the liability of the Employer for the payment of benefits hereunder to such recipient.

11.6 Notices. Any notice or other communication required or permitted to be given in connection with the Plan shall be in writing and shall be deemed to have been duly given (i) upon request, if delivered personally or via courier, (ii) upon confirmation of receipt, if given by facsimile or electronic transmission, and (iii) on the third business day following mailing, if mailed first-class, postage prepaid, registered or certified mail as follows:

(a) If it is sent to the Employer, it will be at the address specified by the Employer; or

(b) If it is sent to a Participant or Beneficiary, it will be at the last address filed with the Employer by the Participant (or Beneficiary).

11.7 Tax Withholding. The Employer shall have the right to deduct from all payments or deferrals made under the Plan any tax required by law to be withheld. If the Employer concludes that tax is owing with respect to any deferral or payment hereunder, the Employer shall withhold such amounts from any payments due the Participant or his Beneficiary, as permitted by law, or otherwise make appropriate arrangements with the Participant or his Beneficiary for satisfaction of such obligation. Tax, for purposes of this Section 0, means any federal, state, local, foreign or any other governmental income tax, employment or payroll tax, excise tax, or any other tax or assessment owing with respect to amounts deferred, any earnings thereon, and any payments made to Participants or Beneficiaries under the Plan.

11.8 Indemnification. To the fullest extent allowed by law, the Company shall indemnify and hold harmless each member of the Committee and each employee, officer, or director of the Employer to whom is delegated duties, responsibilities, and authority with respect to the Plan against all claims, liabilities, fines and penalties, and all expenses reasonably incurred by or imposed upon him (including but not limited to reasonable attorneys' fees) which arise as a result of his actions or failure to act in connection with the operation and administration of the Plan to the extent lawfully allowable and to the extent that such claim, liability, fine, penalty, or expense is not paid for by liability insurance purchased or paid for by the Employer. Notwithstanding the foregoing, the Company shall not indemnify any person for any such amount incurred through any settlement or compromise of any action unless the Company consents in writing to such settlement or compromise.

11.9 Permitted Acceleration of Payment. The Company or its delegate, in its sole discretion, may accelerate the time in which payment shall be made under the Plan to: (a) an individual other than the Participant as may be necessary to fulfill a domestic relations order within the meaning of Code Section 414(p)(1)(B), (b) the extent reasonably necessary to avoid the violation of an applicable federal, state, local, or foreign ethics law or conflicts of interest law (including where such payment is reasonably necessary to permit the Participant to participate in activities in the normal course of his position in which the Participant would otherwise not be

able to participate under an applicable rule), determined in accordance with Treasury Regulation Section 1.409A-3(j)(4)(iii)(B), (c) pay the FICA tax imposed under Code Sections 3101, 3121(a) and 3121(v)(2) on compensation deferred under the Plan, (d) pay the income tax at source on wages imposed under Code Section 3401 or the corresponding withholding provisions of the applicable, state, local or foreign tax laws as a result of the payment of any FICA tax described in clause (c), and to pay the additional income tax at source on wages attributable to the pyramiding Code Section 3401 wages and taxes, (e) pay state, local, or foreign tax obligations arising from participation in the Plan that apply to an amount deferred under the Plan before the amount is paid or made available to the Participant, (f) pay the income tax at source on wages imposed under Code Section 3401 as a result of the payment described in clause (e) and to pay the additional income tax at source on wages imposed under Code Section 3401 attributable to such additional Code Section 3401 wages and taxes, (g) satisfy the debt of a Participant to the Employer where such debt is incurred in the ordinary course of the service relationship between the Participant and the Employer, as applicable, the entire amount of the reduction in any Plan year does not exceed \$5,000, and the reduction is made at the same time and in the same amount as the debt otherwise would have been due and collected from the Participant, and (h) pay the amount required to be included in gross income as a result of the failure of the Plan to comply with the requirements of Code Section 409A. The total payment under clauses (c) and (d) shall, in no event, exceed the aggregate of the FICA tax and the income tax withholding related to such FICA tax. The total payment under clause (e) shall, in no event, exceed the amount of such taxes due as a result of participation in the Plan. The total payment under clauses (e) and (f) shall, in no event, exceed the aggregate of the state, local, and foreign tax amount, and the income tax withholding related to such state, local, and foreign tax amount. The total payment under clause (h) shall, in no event, exceed the amount required to be included in income as a result of the failure to comply with requirements of Code Section 409A.

11.10 No Guarantee or Employment or Participation. Nothing in the Plan shall interfere with or limit in any way the right of the Employer to terminate any Participant's employment at any time and for any reason, nor confer upon any Participant any right to continue in the employ of the Employer. No employee of the Employer shall have a right to be selected as a Participant under the Plan or, if selected, to continue to participate for any Plan Year.

11.11 Unclaimed Benefit. Each Participant shall keep the Employer informed of his current address. The Employer shall not be obligated to search for the whereabouts of any person. If the location of a Participant is not made known to the Employer within three (3) years after the date on which payment of the Participant's vested Account is scheduled to be made, payment may be made as though the Participant had died at the end of the three- (3-) year period. If within one additional year after such three- (3-) year period has elapsed, or, within three (3) years after the actual death of a Participant, the Employer is unable to locate the Beneficiary of the Participant, then the Employer shall have no further obligation to pay any benefit hereunder to such Participant or Beneficiary or any other person and such benefit shall be irrevocably forfeited.

11.12 Governing Law. The Plan will be construed, administered and enforced according to the laws of the State of Delaware without regard to principles of conflicts of law to the extent not otherwise preempted by ERISA.

11.13 **Erroneous Payment.** Any amount paid under this Plan in error to a Participant or to a Participant's Beneficiary shall be returned to the Employer. A payment made in error does not create on the part of the recipient a legally binding right to such payment.

11.14 **Effective Date.** The Plan was approved by the Compensation Committee of the Board of Directors of Ashland Inc. and established by the Company to be effective as of October 1, 2016.

[signature page immediately follows]

IN WITNESS WHEREOF, Ashland Global Holdings Inc. has caused its duly authorized representative to execute the Plan, this 22nd day of May, 2019.

ASHLAND GLOBAL HOLDINGS INC.

By: /s/ Anne T. Schumann

Print Name: Anne T. Schumann

Title: SVP, CHRO & CIO

ASHLAND GLOBAL HOLDINGS INC.
SUPPLEMENTAL DEFINED CONTRIBUTION PLAN
FOR CERTAIN EMPLOYEES

(Amended and Restated as of May 22, 2019)

Ashland Global Holdings Inc.
Supplemental Defined Contribution Plan for Certain Employees

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ARTICLE 1. PURPOSE AND EFFECTIVE DATE

1.1 **Purpose**

. The purpose of this Plan is to provide benefits for certain employees that supplements the limitation on compensation imposed by Section 401(a)(17) of the Code (including successor provisions thereto) on the Savings Plan. It is intended that the Plan be maintained primarily for a select group of management or highly compensated employees and be exempt from the Employee Retirement Income Security Act of 1974, as amended.

1.2 **Restatement**

. The Ashland Global Holdings Inc. Supplemental Defined Contributions Plan for Certain Employees was amended and restated on January 1, 2015, and further amended on September 30, 2016, and is hereby further amended and restated as of May ____22, 2019.

1.3 **Effective Date**

. This Plan is effective January 1, 2015 except where a special effective date is indicated herein.

1.4 **Assignment and Assumption.** The Plan was assumed by Ashland Global Holdings Inc. pursuant to the Assignment and Assumption Agreement, dated September 16, 2016 by and between Ashland Inc. and Ashland Global Holdings Inc.

ARTICLE 2. DEFINITIONS

Pronouns used in the Plan are in the masculine gender but include the feminine gender unless the context clearly indicates otherwise. Wherever used herein, the following terms have the meanings set forth below, unless a different meaning is clearly required by the context:

2.1 “Account”

means an account established for the purpose of recording amounts credited on behalf of a Participant and any income, expenses, gains, losses or distributions included thereon. The Account shall be a bookkeeping entry only and shall be utilized solely as a device for the measurement and determination of the amounts to be paid to a Participant pursuant to the Plan. Separate Accounts shall be established for a Participant by Plan Year and by type of contribution to the Participant.

2.2 “Ashland”

means Ashland Global Holdings Inc. and all of its present or future subsidiaries.

2.3 “Base Compensation”

means compensation paid to a Participant that is included in the definition of Compensation for deferral purposes in the Savings Plan without giving effect to any reduction required by Code Section 401(a)(17) and which is not Incentive Compensation.

2.4 “Base Compensation Deferrals”

means Base Compensation that is deferred into the Deferred Compensation Plan.

2.5 “Basic Retirement Contribution”

means the Basic Retirement Contribution as defined in the Savings Plan.

2.6 “Beneficiary”

means the persons, trusts, estates or other entities designated in writing by a Participant, or otherwise entitled to receive benefits under the Plan upon the death of a Participant. If a Participant fails to designate a Beneficiary, then the Participant’s Beneficiary shall be the Participant’s spouse or, if the Participant does not have a spouse on the Participant’s date of death, the Participant’s estate.

2.7 “Board”

means the Board of Directors of Ashland Global Holdings Inc.

2.8 “Cause”

, for Participants without a Change in Control agreement with Ashland, as defined by Section 3.02 of the SERP, and, for Participants with a Change in Control agreement with Ashland, as defined by the Participant’s Change in Control agreement.

2.9 “Change in Control”

shall be deemed to occur (1) upon approval of the shareholders of Ashland (or if such approval is not required, upon the approval of the Board) of (A) any consolidation or merger of Ashland (a “Business Combination”), other than a consolidation or merger of Ashland into or with a direct or indirect wholly-owned subsidiary, in which the shareholders of Ashland own, directly or indirectly, less than 50% of the then outstanding membership interests or shares of the Business Combination that are entitled to vote generally for the election of directors of the Business Combination or pursuant to which shares of Ashland would be converted into cash, securities or other property, other than a merger of Ashland in which the holders of the Ashland shares immediately prior to the merger have

substantially the same proportionate ownership of membership interests of the surviving company immediately after the merger, (B) any sale, lease, exchange, or other transfer (in one transaction or a series of related transactions) of all or substantially all the assets of Ashland, provided, however, that no sale, lease, exchange or other transfer of all or substantially all the assets of Ashland shall be deemed to occur unless assets constituting 80% of the total assets of Ashland are transferred pursuant to such sale, lease exchange or other transfer, or (C) adoption of any plan or proposal for the liquidation or dissolution of Ashland, (2) when any person (as defined in Section 3(a)(9) or 13(d) of the Exchange Act), other than Ashland or any subsidiary or employee benefit plan or trust maintained by Ashland, shall become the beneficial owner (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of more than 25% of Ashland's shares outstanding at the time, without the approval of the Board, or (3) at any time during a period of two consecutive years, individuals who at the beginning of such period constituted the Board shall cease for any reason to constitute at least a majority thereof, unless the election or the nomination for election by Ashland's shareholders of each new director during such two-year period was approved by a vote of at least two-thirds of the directors then still in office who were directors at the beginning of such two-year period.

2.10 "Code"

means the Internal Revenue Code of 1986, as amended.

2.11 "Committee"

means the Compensation Committee of the Board and its designees.

2.12 "Credited Service"

means a period of employment with the Employer or a Related Employer for which credit is given under the Employer's Adjusted Service Date policy in effect when the Employee suffers a Separation from Service.

2.13 "Deferred Compensation Plan"

means the Ashland Global Holdings Inc. Deferred Compensation Plan for Employees, as may be amended from time to time.

2.14 "Disabled" or "Disability"

means a determination by Ashland that the Participant is, by reason of any medically determinable physical or mental impairment which can be expected to result in death or can be expected to last for a continuous period of not less than 12 months, receiving income replacement benefits for a period of not less than three months under an accident and health plan covering employees of the Ashland or any Related Employer. A Participant also will be considered disabled if he is determined (a) to be totally disabled by the Social Security Administration, or (b) to be disabled in accordance with a disability insurance program, provided that the definition of disability applied under such disability insurance program complies with the requirements of Treasury Regulation Section 1.409A-3(i)(4). The Committee or its delegate shall determine whether a Participant has incurred a Disability.

2.15 "Effective Date"

means January 1, 2015 except where a special effective date is indicated herein.

2.16 "Effective Retirement Date"

means:

(a) **In General.** The Effective Retirement Date of an Employee that is a Participant under this Plan is when:

- (1) the Participant has at least five years of Credited Service; and
- (2) attained the first day of the month following the date the Participant incurred a Separation from Service –
- (i) on or after the date the sum of the Participant’s Age and Credited Service is 80; or
- (ii) on or after the date the Participant attains Age 55.

(b) **Change in Control.** The Effective Retirement Date in the event of a Change in Control of a Participant who has a Change in Control agreement with Ashland shall be the first day of the month following (i) such Participant’s termination for reasons other than Cause or (ii) such Participant’s resignation for “Good Reason” (as that term is defined in the applicable Change in Control agreement). The Effective Retirement Date in the event of a Change in Control of a Participant who does not have a Change in Control agreement, shall be the first day of the month following such Participant’s termination for reasons other than Cause.

2.17 “Election”

means a Participant’s delivery of a notice of election, in writing or electronically, to defer payment of all or a portion of his Employer Contributions.

2.18 “Eligible Employee”

means an employee of Ashland who is determined by the Employer to be a member of a select group of management or highly compensated employees within the meaning of Sections 201(2), 301(a)(3) and 401(a)(1) of ERISA, and who are classified in base salary and grades 21 and above and are not eligible for the SERP as of the Effective Date.

2.19 “Employer”

means Ashland Global Holdings Inc., or any successor entity thereto.

2.20 “Employer Contribution”

means the contributions provided in ARTICLE 4.

2.21 “ERISA”

means the Employee Retirement Income Security Act of 1974, as amended.

2.22 “Excess Base Compensation”

means compensation paid to a Participant that is included in the definition of Compensation in the Savings Plan but that is in excess of the limitation in Code Section 401(a)(17) and which is not Incentive Compensation.

2.23 “Excess Base Compensation Deferrals”

means compensation that is deferred to the Deferred Compensation Plan other than Incentive Compensation Deferrals.

2.24 “Grandfathered Employee”

means the Grandfathered Employee as defined in the Savings Plan.

2.25 “Hercules Employee”

means the Hercules Employee as defined in the Savings Plan.

2.26 “Incentive Compensation”

means bonuses paid to Eligible Employees under any applicable incentive compensation plans that are excluded from the definition of Compensation in the Savings Plan and which is not Base Compensation.

2.27 “Incentive Compensation Deferrals”

means Incentive Compensation that is deferred into the Deferred Compensation Plan.

2.28 “Key Employee”

means a “specified employee” within the meaning of Code Section 409A(a)(2)(B)(i) who satisfies the conditions set forth in Section 8.5.

2.29 “Participant”

means an Eligible Employee who commences participation in the Plan in accordance with ARTICLE 3.

2.30 “Performance Retirement Contribution”

means the Performance Retirement Contribution as defined in the Savings Plan.

2.31 “Period of Service”

means a period of employment with the Employer or a Related Employer commencing on the date an Employee works at least one hour for which the Employee is paid and ending on the date such Employee suffers a Separation from Service.

2.32 “Plan”

means this Ashland Global Holdings Inc. Supplemental Defined Contribution Plan for Certain Employees, as amended from time to time.

2.33 “Plan Year”

means each 12 month period ending on December 31st.

2.34 “Related Employer”

means the Employer and (a) any corporation that is a member of a controlled group of corporations as defined in Code Section 414(b) that includes the Employer, and (b) any trade or business that is under Common Control as defined in Code Section 414(c) that includes the Employer.

2.35 “Savings Plan”

means the Ashland Inc. Employee Savings Plan, as amended from time to time.

2.36 “Separation from Service”

means a Participant’s termination of employment with the Employer or Related Employer for any reason other than death that meets the requirements of the definition of “separation from service” set forth in Treasury Regulation Section 1.409A-1(h). For purposes of determining whether a Separation from Service has occurred, the 20% default threshold set forth in Treasury Regulation Section 1.409A-1(h)(1)(ii) shall be utilized.

2.37 “SERP”

means the Ashland Inc. Supplemental Early Retirement Plan for Certain Employees, as amended from time to time.

2.38 “Substitute Contribution”

means the Employer Contribution provided in Section 4.1.

2.39 “Unforeseeable Emergency”

means a severe financial hardship of the Participant resulting from an illness or accident of the Participant, the Participant’s spouse, the



Participant's Beneficiary, or the Participant's dependent (as defined in Code Section 152, without regard to Section 152(b)(1), (b)(2) and (d)(1)(B)); loss of the Participant's property due to casualty (including the need to rebuild a home following damage to a home not otherwise covered by insurance, for example, not as a result of a natural disaster); or other similar extraordinary and unforeseeable circumstances arising as a result of events beyond the control of the Participant. The purchase of a home and the payment of college tuition are not unforeseeable emergencies.

2.40 "Valuation Date"

means each business day of the Plan Year.

ARTICLE 3. PARTICIPATION

3.1 Participation

. Each Eligible Employee of the Employer shall be eligible for the Plan immediately. An Eligible Employee shall execute an Election in the form and manner as deemed appropriate by the Committee or its delegate as provided in the Deferred Compensation Plan detailing the timing of distribution of any portion of the Participant's Account attributable to Employer Contributions. In the event an Eligible Employee fails to complete an Election with respect to Employer Contributions, such amount shall be paid in the means as detailed in ARTICLE 5.

3.2 Termination of Participation

. The Employer may terminate a Participant's participation in the Plan, provided, however, any such termination at the direction of the Employer shall not take effect until the first day of the next Plan Year.

ARTICLE 4. EMPLOYER CONTRIBUTIONS

4.1 Substitute Contribution.

(a) **Substitute Contribution.** The Employer will credit a Participant's Account with a Substitute Contribution in an amount equal to 4% of the Participant's Incentive Compensation, Excess Base Compensation and Excess Base Compensation Deferrals for the Plan Year.

(b) **Special Effective Date.** This Section 4.1 shall be retroactively effective as of January 1, 2011. No Participant benefit is reduced as a result of this retroactive special effective date, and no matching contributions have accrued or will accrue under this Plan.

(c) **Freeze of Substitute Contribution.** Notwithstanding the foregoing provisions of this Section 4.1, no Substitute Contributions shall be credited to Participants' Accounts with respect to Participants' post-September 30, 2016, Incentive Compensation, Excess Base Compensation and Excess Base Compensation Deferrals.

4.2 Other Employer Contributions.

(a) **Performance Retirement Contribution.** To the extent the Employer makes a Performance Retirement Contribution under the Savings Plan for a Plan Year, the Employer shall credit each Participant's Account with a contribution equal to the declared Performance Retirement Contribution under the Savings Plan percentage multiplied by the Participant's Incentive Compensation, Excess Base Compensation and Excess Base Compensation Deferrals for the Plan Year. Notwithstanding the foregoing, a Performance Retirement Contribution will only be credited to a Participant's Account if the Participant has not Separated from Service in the Plan Year. The foregoing Performance Retirement Contribution provision shall only apply to Participants' pre-October 1, 2016, Incentive Compensation, Excess Base Compensation and Excess Base Compensation Deferrals.

(b) **Basic Retirement Contributions.**

(i) **Basic Retirement Contribution for Participants Eligible for the Savings Plan on or after January 1, 2011.** The Employer shall credit to the Account of each Participant who is either (A)(1) a Hercules Employee, or (2) who became eligible for the Savings Plan on or after January 1, 2011, and (B) who is not a Grandfathered Employee, an amount equal to the Basic Retirement Contribution based on percentage of the Participant's Incentive Compensation, Excess Base Compensation and Excess Base Compensation Deferrals determined in accordance with the following tables:

<u>Period of Service</u>	<u>Percentage of Applicable Compensation</u>
0-10 Years	1.5%
11-20 Years	3.0%
21 or more Years	4.5%

(ii) **Basic Retirement Contribution for Participants Eligible for the Savings Plan as of December 31, 2010.** The Employer shall credit to the Account of each Participant who was eligible for the Savings Plan as of December 31, 2010 and who is not a Grandfathered Employee an amount equal to a Basic Retirement Contribution based on percentage of the Participant's Incentive Compensation, Excess Base Compensation and Excess Base Compensation Deferrals determined in accordance with the following tables:

<u>Period of Service</u>	<u>Percentage of Applicable Compensation</u>
0-10 Years	1.5%
11-20 Years	3.0%
21 or more Years	4.5%

plus, a transition contribution equal to:

<u>Age as of January 1, 2011</u>	<u>Percentage of Applicable Compensation</u>
40-44	2.0%
45-49	3.0%
50-54	4.0%
55 or greater	5.0%

(iii) Any Participant other than described in subsections (i) or (ii) immediately above, shall not be entitled to a Basic Retirement Contribution under the Plan.

(iv) A Participant shall only be eligible to receive a Basic Retirement Contribution under one subsection of this Section 4.2(b) during any given Plan Year. For purposes of this Section 4.2(b), Period of Service shall be determined in accordance with the provisions of the Savings Plan.

(v) Notwithstanding the foregoing, a Basic Retirement Contribution will only be credited to a Participant's Account if the Participant has not Separated from Service in the Plan Year.

(vi) Notwithstanding the foregoing, no Basic Retirement Contributions shall be credited to Participants' Accounts with respect to Participants' post-September 30, 2016, Incentive Compensation, Excess Base Compensation and Excess Base Compensation Deferrals.

(c) **Discretionary Profit Sharing Contributions.** The Discretionary Profit Sharing Contribution may be made by the Employer for the benefit of one or more Participants in an amount determined solely by Employer for any Plan Year. Notwithstanding the foregoing, no Discretionary Profit Sharing Contributions shall be made after September 30, 2016.

4.3 Crediting Employer Contributions

. Each Participant shall be credited with the applicable Employer Contributions in accordance with this ARTICLE 4, as soon as administratively feasible following each Plan Year.

ARTICLE 5. PAYMENT SCHEDULE AND FORM OF PAYMENT

5.1 Payment Schedule and Form of Payment

. The Participant's benefit under the Plan shall be distributed in accordance with the Deferred Compensation Plan on the Participant's Effective Retirement Date (or as soon thereafter as reasonably possible), and held pursuant to the terms of that the Deferred Compensation Plan. Notwithstanding anything in the Plan to the contrary, a Participant who is a Key Employee shall not have the distribution of his benefit which is made on account of Separation from Service commence on a date earlier than the first day of the seventh month following his Separation from Service.

5.2 Time of Distribution or Transfer

. Subject to the required delay of a distribution of a Plan benefit for an eligible employee who is a Key Employee, the transfer of a benefit provided in this Section shall be paid by the later of (a) the end of the calendar year in which occurs the Effective Retirement Date or (b) the 15th day of the third calendar month following such date.

5.3 Death Before Payment

. If a Participant dies before his Effective Retirement Date, the benefit that would have been paid to such Participant had he or she survived to his Effective Retirement Date shall be transferred to the Deferred Compensation Plan and paid to the Beneficiary designated by such Participant under the terms of that plan.

ARTICLE 6. ACCOUNTS AND CREDITS AND FUNDING

6.1 Contribution Credits to Account

. A Participant's Account will be credited with the Employer Contributions credited on his behalf under ARTICLE 4. Separate Accounts shall be maintained for each Participant and for each type of contribution.

6.2 Earnings Credits to Account

. The Participant's Account shall be credited (or debited) on each Valuation Date with income (or loss) based upon a hypothetical investment in any one or more of the investment options available under the Plan, as prescribed by the Committee or its delegate, for the particular Compensation credited. The crediting or debiting on each Valuation Date of income (or loss) shall be made for the each respective Account. All investments of a Participant's Account shall be valued at fair market value. Additionally, all distributions, investments and investment exchanges allowed and made under the Plan shall be as of the relevant Valuation Date at fair market value.

6.3 Adjustment of Accounts

. Each Account maintained for a Participant shall be adjusted for interest credits and any expenses allocable under the terms of the Plan to the Account. The Account shall be adjusted as of each Valuation Date to reflect: (a) the interest credits and expenses described in this ARTICLE 6; (b) amounts credited pursuant to ARTICLE 4; and (c) distributions or withdrawals.

6.4 Establishment of Trust for Funding

. The Employer may but is not required to establish a trust to hold amounts which the Employer may contribute from time to time to correspond to some or all amounts credited to Participants under this ARTICLE 6. If the Employer establishes a trust, the provisions of Sections 6.4(a) and (b) shall become operative.

(a) **Grantor Trust.** Any trust established by the Employer shall be between the Employer and a trustee pursuant to a separate written agreement under which assets are held, administered and managed, subject to the claims of the Employer's creditors in the event of the Employer's insolvency, until paid to the Participant and/or his Beneficiaries. The trust is intended to be treated as a grantor trust under the Code, and it is intended that the establishment of the trust shall not cause the Participant to realize current income on amounts contributed thereto. The Employer must notify the trustee in the event of a lawsuit regarding the Plan or regarding its bankruptcy or insolvency.

(b) **Investment of Trust Funds.** Any amounts contributed to the trust by the Employer shall be invested by the trustee in accordance with the provisions of the trust and the instructions of the Committee or its delegate.

ARTICLE 7. RIGHT TO BENEFITS

7.1 Vesting

. Unless a Participant is terminated for Cause, a Participant shall have a 100% nonforfeitable right to his Accounts representing Employer Contributions upon to earlier of a Change In Control or the attainment of five years of Credited Service. Notwithstanding the preceding sentence, if a Participant is terminated for Cause, the Participant shall forfeit all rights to his Accounts representing Employer Contributions.

7.2 Amount of Benefits

. The vested amounts credited to a Participant's Account as determined under ARTICLE 4 shall determine and constitute the basis for the value of benefits payable to the Participant under the Plan.

ARTICLE 8. DISTRIBUTION OF BENEFITS

8.1 Method and Timing of Distributions

. Except as otherwise provided under the Plan, including this ARTICLE 8, distributions under the Plan shall be made in accordance with ARTICLE 5 of the Plan.

8.2 Unforeseeable Emergency

. A Participant or a Participant's legal representative may submit an application for a distribution from the Participant's Accounts because of an Unforeseeable Emergency. The amount of the distribution shall not exceed the amount necessary to satisfy the needs of the Unforeseeable Emergency. Such distribution shall include an amount to pay taxes reasonably anticipated as a result of the distribution. The amount allowed as a distribution under this Section shall take into account the extent to which the Unforeseeable Emergency may be relieved by reimbursement, insurance or liquidation of the Participant's assets (but only to the extent such liquidation would itself not cause a severe financial hardship). The distribution shall be made in a single sum and paid as soon as practicable after the application for the distribution on account of the Unforeseeable Emergency is approved. The provisions of this Section 8.2 shall be interpreted and administered in accordance with applicable guidance that may be issued by the Treasury.

8.3 Disability

. A Participant or a Participant's legal representative may submit an application for a distribution from the Participant's Accounts because of the Participant's Disability. The distribution shall be made in a single sum and paid as soon as practicable after the application for the distribution on account of the Participant's Disability is approved. The provisions of this Section shall be interpreted and administered in accordance with applicable guidance that may be issued by the Secretary of the Treasury. If such guidance should allow an election of a period of distribution at the time of the application for a distribution on account of the Participant's Disability then the Plan shall allow such elections.

8.4 Prohibition on Acceleration

. Except as otherwise provided in the Plan and except as may be allowed in guidance from the Secretary of the Treasury, distributions from a Participant's Compensation Account(s) may not be made earlier than the time such amounts would otherwise be distributed pursuant to the terms of the Plan.

8.5 Key Employees

. In no event shall a distribution made to a Key Employee from his Accounts due to his Separation from Service occur before the date which is six months after his Separation from Service, or, if earlier, his date of death. For purposes of this Section 8.5, a Key Employee means a "specified employee" within the meaning of Section 409A of the Code and using the identification methodology selected by the Company from time to time. Installment distributions to a Key Employee that are delayed due to the application of the requirements of this Section 8.5 shall commence as of the earliest date permitted by Code Section 409A. This Section 8.5 shall not apply to any of the following distributions: (i) a distribution upon the Participant's Disability in accordance with Section 8.3 or upon a Change in Control, provided that the Participant's Separation from Service did not precede such Disability or Change in Control; or (ii) an accelerated distribution made in accordance with Section 11.9.

. Distributions may be delayed beyond the date payment would otherwise occur in accordance with the provisions of ARTICLE 5 in any of the following circumstances:

(a) **Payments Subject to Code Section 162(m).** The Employer may delay payment if it reasonably anticipates that its deduction with respect to such payment would not be permitted due to the application of Code Section 162(m); provided, however, that (i) the deduction limitation of Code Section 162(m) shall be applied to all payments to similarly situated Participants on a reasonably consistent basis; (ii) the payment must be made either during the Participant's first taxable year in which the Employer reasonably anticipates, or should reasonably anticipate, that if the payment is made during such year, the deduction of such payment will not be barred by application of Code Section 162(m) or during the period beginning with the date of the Participant's Separation from Service (or, if the Participant is a Key Employee, beginning with the date that is six months after Separation from Service) and ending on the later of the last day of the Employer's taxable year in which the Participant incurs a Separation from Service for the 15th day of the third month following the Participant's Separation from Service (or, if the Participant is a Key Employee, the 15th day of the third month following the date that is six months after Separation from Service); (iii) where any payment to a particular Participant is delayed because of Code Section 162(m), the delay in payment will be treated as a subsequent deferral election under Code Section 409A, unless all scheduled payments to such Participant that could be delayed are also delayed; and (iv) no election may be provided to a Participant with respect to the timing of payment hereunder.

(b) **Payments that would violate Federal Securities Laws or Other Applicable Law.** The Employer may also delay payment if it reasonably anticipates that the marking of the payment will violate Federal securities laws or other applicable laws provided payment is made at the earliest date on which the Employer reasonably anticipates that the making of the payment will not cause such violation.

(c) **Other Events and Conditions.** The Employer also reserves the right to delay payment upon such other events and conditions as the Secretary of the Treasury may prescribe in generally applicable guidance published in the Internal Revenue Bulletin.

Except as may be otherwise required under Code Section 409A, a payment is treated as made upon the date contemplated under the provisions of the Plan if the payment is made at such date or a later date within the same calendar year or, if later, by the 15th day of the third calendar month following the date contemplated by the Plan. If calculation of the amount of the payment is not administratively practicable due to events beyond the control of the Participant (or Participant's Beneficiary), the payment will be treated as made upon the date contemplated by the Plan if the payment is made during the first calendar year in which the payment is administratively practicable. Similarly, if the funds of the Employer are not sufficient to make the payment at the date specified under the Plan without jeopardizing the solvency of the Employer, the payment will be treated as made upon the date contemplated by the Plan if the payment is made during the first calendar year in which the funds of the Employer are sufficient to make the payment without jeopardizing the solvency of the Employer.

If a payment is not made, in whole or in part, as of the date contemplated by the Plan because the Employer refuses to make such payment, the payment will be treated as made upon the date contemplated by the Plan if the Participant accepts the portion (if any) of the payment that the Employer is willing to make (unless such acceptance will result in forfeiture of the claim to all or part of the remaining account), makes prompt and reasonable, good faith efforts to collect the remaining portion of the payment and any further payment (including payment of a lesser amount that satisfies the obligation to make the payment) is made no later than the end of the first calendar year in which the Employer and the Participant enter into a legally binding settlement of such dispute, the Employer concedes that the amount is payable, or the Employer is required to make such payment pursuant to a final and nonappealable judgment or other binding decision. For purposes of this paragraph, efforts to collect the payment will be presumed not to be prompt, reasonable, good faith efforts, unless the Participant provides notice to the Employer within 90 days of the latest date upon which the payment could have been timely made in accordance with the terms of the Plan and the Treasury Regulations promulgated under Code Section 409A, and unless, if not paid, the Participant takes further enforcement measures within 180 days after such latest date. For purposes of this paragraph, the Employer is not treated as having refused to make a payment where pursuant to the terms of the Plan the Participant is required to request payment, or otherwise provide information to take any other action, and the Participant has failed to take such action. In addition, for purposes of this paragraph, the Participant is deemed to have requested that a payment not be made, rather than the Employer having refused to make such payment, where the Employer's decision to refuse to make the payment is made by the Participant or a member of the Participant's family (as defined in Code Section 267(c)(4) applied as if the family of an individual includes the spouse of any member of the family), or any person or group of persons over whom the Participant's family member has effective control, or any person any portion of whose compensation is controlled by the Participant or the Participant's family member.

ARTICLE 9. AMENDMENT AND TERMINATION

9.1 Amendment by Employer

. The Employer reserves the sole right to amend the Plan pursuant to a resolution of the Board. An amendment must be in writing and executed by a representative of the Employer authorized to take such action. The Employer hereby reserves the right to amend the Plan without the consent of the Participants in the future, as required to comply with any present or future law, regulation or rule applicable to the Plan, including, but not limited to Code Section 409A and all applicable guidance promulgated thereunder, and to prevent any Participant from becoming subject to any additional tax or penalty under Code Section 409A. No amendment can directly or indirectly deprive any current or former Participant or Beneficiary of all or any portion of his vested Account which had accrued prior to the amendment, except to the extent required by the Code or other applicable law.

9.2 Retroactive Amendments

. An Amendment made by the Employer in accordance with Section 9.1 may be made effective on a date prior to the first day of the Plan Year in which it is adopted. Any retroactive amendment by the Employer shall be subject to the provisions of Section 9.1.

9.3 Plan Termination

. The Plan will terminate automatically as of the date that no amounts remain to be distributed under the Plan.

The Employer reserves the right to terminate the Plan and accelerate the time of payment of all amounts to be distributed under the Plan in accordance with the following provisions of this Section 9.3. The Employer may make an irrevocable election to terminate the Plan and distribute all amounts credited to all Participant Accounts within the 30 days preceding or the 12 months following a Change in Control. For this purpose, the Plan will be treated as terminated only if all other arrangements sponsored by the Employer or any Related Employer immediately after the time of the Change in Control with respect to which deferrals of compensation are treated as having been deferred under a single plan under Treasury Regulation Section 1.409A-1(c)(2) are terminated and liquidated with respect to each Participant that experienced the Change in Control, so that under the terms of the termination and liquidation all such Participants are required to receive all amounts of compensation deferred under the terminated arrangements within 12 months of the date the Employer irrevocably takes all necessary action to terminate and liquidate the Plan and such other arrangements. In addition, the Employer reserves the right to terminate the Plan within 12 months of a corporate dissolution taxed under Code Section 331, or with the approval of a bankruptcy court pursuant to Section 503(b)(1)(A) of Title 11 of the United States Code, provided that amounts deferred under the Plan are included in the gross incomes of Participants in the earlier of (a) the taxable year in which the amount is actually or constructively received, or (b) the latest of the following years: (1) the calendar year in which the termination occurs, (2) the first calendar year in which the amount is no longer subject to a substantial risk of forfeiture, or (3) the first calendar year in which payment is administratively practicable. The Employer retains the discretion to terminate the Plan if (1) the termination does not occur proximate to a downturn in the financial health of the Employer; (2) all arrangements sponsored by the Employer or any related Employer that would be aggregated with any terminated arrangement under Treasury Regulation Section 1.409A-1(c) if the same service provider participated in all of the arrangements are terminated, (3) no payments other than payments that would be payable under the terms of the arrangements if the termination had not

occurred are made within 12 months of the termination of the arrangements, (4) all payments are made within 24 months of the termination of the arrangements, and (5) neither the Employer nor any Related Employer adopts a new arrangements that would be aggregated with any terminated arrangement under Treasury Regulation Section 1.409A-1(c), if the same service provider participated in both arrangements, at any time with the three year period following the date of termination of the arrangement. The Employer also reserves the right to terminate the Plan and accelerate the time of payment of all amounts to be distributed under the Plan under such conditions and events as may be prescribed by the Commissioner in generally applicable guidance published in the Internal Revenue Bulletin.

9.4 Distribution Upon Termination of the Plan

. Except as provided in Section 9.3, the Plan may not be terminated before the date on which all amounts credited to all Participant Accounts have been distributed in accordance with the terms of the Plan.

ARTICLE 10. PLAN ADMINISTRATION

10.1 Powers and Responsibilities of the Employer

. The Employer shall be responsible for the general operation and administration of the Plan and for carrying out the provisions thereof. The Employer's powers and responsibilities include, but are not limited to, the following, which powers and responsibilities shall be exercised in its sole discretion:

- (a) To make and enforce such rules and regulations as it deems, in its sole discretion, necessary or proper for the efficient administration of the Plan;
- (b) To decide all questions concerning the Plan and the eligibility of any person to participate in the Plan, in its sole discretion, subject to review by the Committee or its delegate.
- (c) To administer the claims and review procedures specified in Section 10.3;
- (d) To compute the amount of benefits which will be payable to any Participant, former Participant or Beneficiary in accordance with the provisions of the Plan in its discretion;
- (e) To determine the person or persons to whom such benefits will be paid in its discretion;
- (f) To authorize the payment of benefits;
- (g) To comply with any applicable reporting and disclosure requirements of Part 1 of Subtitle B of Title 1 of ERISA;
- (h) To appoint such agents, counsel, accountants, and consultants as may be required to assist in administering the Plan;
- (i) To allocate and delegate its responsibilities in its discretion, including the formation of any administrative sub-committee to administer the Plan.

10.2 Powers and Responsibilities of the Committee

. The Committee or its delegate shall be responsible (a) for determining the interest rate to credit to Participant's Accounts pursuant to Section 6.3, and (b) for the review of denied claims pursuant to Section 10.3(b) in its sole discretion. In the course of reviewing a denied claim, the Committee or its delegate shall have the power to interpret the Plan, in its sole discretion, and its interpretation thereof shall be final, conclusive and binding on all persons claiming benefits under the Plan.

10.3 Claims and Review Procedures.

(a) **Claims Procedure.** If any person believes he is being denied any rights or benefits under the Plan, such person may file a claim in writing with the Company. If any such claim is wholly or partially denied, the Company or its delegate will notify such person of its decision in writing. Such notification will contain (i) specific reasons for the denial, (ii) specific reference to pertinent Plan provisions, (iii) a description of any additional material or

information necessary for such person to perfect such claim and an explanation of why such material or information is necessary, and (iv) information as to the steps to be taken if the person wishes to submit a request for review, including a statement of the person's right to bring a civil action under Section 502(a) of ERISA following a denial on review. Such notification will be given within 90 days after the claim is received by the Company (or within 180 days, if special circumstances require an extension of time for processing the claim, and if written notice of such extension and circumstances is given to such person within the initial 90 day period). If such notification is not given within such period, the claim will be considered denied as of the last day of such period and such person may request a review of his claim.

(b)

Disability Claims Procedure. Notwithstanding Section 10.3(a) above, the following will apply with regard to claims for a benefit which require a determination of Disability (a "Disability Claim"), other than those Disability Claims determined under the Plan solely by reference to whether the person is entitled to disability-based benefits under the Social Security Act or under a long term disability plan of the Company. The Company will notify the person of the Company's determination within a reasonable period of time, but in any event within 45 days after receipt of the Disability Claim by the Company. The Company may extend the period for making the benefit determination by 30 days if it determines that such an extension is necessary due to matters beyond the control of the Plan and if it notifies the person, prior to the expiration of the initial 45 day period, of circumstances requiring the extension of time and the date by which the Company expects to render a decision. The Company may further extend the period for making the benefit determination by 30 days if it determines that such an extension is necessary due to matters beyond the control of the Plan and if it notifies the person, prior to the expiration of the first 30 day extension period, of the circumstances requiring the extension of time and the date by which the Company expects to render a decision. Any notice of extension under this 10.3(b) shall include the standards on which entitlement to a disability-based benefit is based, the unresolved issues that prevent a decision on the Disability Claim, and the additional information needed to resolve those issues for which the person will be afforded at least 45 days within which to provide the specified information. Any denial related to a Disability Claim shall be written in a manner calculated to be understood by the person and shall include the following: (i) the specific reason or reasons for any denial, (ii) the specific Plan provisions on which any denial is based, (iii) a description of any further material or information which is necessary for the person to perfect his or her claim and an explanation of why the material or information is needed, (iv) a statement of the person's right to seek review of the denial, including a statement of the person's right to bring a civil action under Section 502(a) of ERISA, (v) a discussion of the denial, including an explanation of the basis for disagreeing with or not the following: (a) the views presented by the person to the Plan of health care professionals treating the person and vocational professionals who evaluated the person, (b) the views of medical or vocational experts whose advice was obtained on behalf of the Plan in connection with a person's claim denial, without regard to whether the advice was relied upon in making the benefit determination, and (c) a disability determination regarding the person presented by the person to the Plan made by the Social Security Administration, (vi) if the denial is based on a medical necessity or experimental treatment or similar exclusion or limit, either an explanation of the scientific or clinical judgment for the determination, applying the terms of the Plan to the person's medical circumstances, or a statement that such explanation will be provided free of charge upon request, (vii) either the specific internal rules, guidelines, protocols, standards or other similar criteria of

the Plan relied upon in making the denial or a statement that such rules, guidelines, protocols, standards or other similar criteria do not exist, and (viii) a statement that the person is entitled to receive, upon request and free of charge, reasonable access to, and copies of, all documents, records, and other information relevant to the person's Disability Claim.

(c) **Review Procedure.** Within 60 days after the date on which a person receives a written notification of denial of claim (or, if written notification is not provided, within 60 days of the date denial is considered to have occurred), such person (or his duly authorized representative) may (i) file a written request with the Company for a review of his denied claim and of pertinent documents and (ii) submit written issues and comments to the Company. The Company will provide a review that takes into account all comments, documents, records and other information submitted by the person without regard to whether such information was submitted or considered in the initial benefit determination. The decision on review will be made within 60 days after the request for review is received by the Company (or within 120 days, if special circumstances require an extension of time for processing the request, such as an election by the Company or its delegate to hold a hearing, and if written notice of such extension and circumstances is given to such person within the initial 60 day period). If the decision on review is not made within such period, the claim will be considered denied. The Company or its delegate will notify such person of its decision in writing. Such notification will be written in a manner calculated to be understood by such person and will contain (i) the specific reason or reasons for any denial, (ii) the specific Plan provisions on which any denial is based, (iii) a statement that the person is entitled to receive, upon request and free of charge, reasonable access to, and copies of, all documents, records, and other information relevant to the person's claim for benefits, and (iv) a statement of the person's right to bring a civil action under Section 502(a) of ERISA.

(d) **Review Procedure for Disability Claim Denial.** Notwithstanding Section 10.3(c) above, the following will apply with regard to appeals of Disability Claims, other than those Disability Claims determined under the Plan solely by reference to whether the person is entitled to disability based benefits under the Social Security Act or under a long term disability plan of the Company. An appeal of a Disability Claim must be brought within 180 days after receipt of the notice of the claim denial. Within 60 days after the Company receives a properly filed request for review, the Company shall conduct such review and advise the person in writing of its decision on review, unless special circumstances require an extension of time for conducting the review. If an extension of time for conducting the review is required, the Company shall provide the person with written notice of the extension before the expiration of the initial 60-day period, specifying the circumstances requiring an extension and the date by which such review shall be completed (which date shall not be later than 120 days after the date on which the Company received the request for review). In such a review, the Company (i) will not afford deference to the initial determination made by the Company and will designate an individual to conduct the review process who is neither the individual who made the denial that is the subject of the appeal nor the subordinate of such individual; (ii) in the case of an appeal of any denial that is based in whole or in part on a medical judgment, will consult with a health care professional who has appropriate training and expertise in the field of medicine involved in the medical judgment, and who was neither consulted in connection with the denial that is the subject of the appeal, nor the subordinate of any such individual; (iii) will identify any medical

or vocational experts whose advice was obtained on behalf of the Plan in connection with a person's claim denial, without regard as to whether the advice was relied upon in making the benefit determination; and (iv) will provide the person, free of charge, with (a) any new or additional evidence considered, relied upon, or generated by the Plan in connection with the Disability Claim and (b) the rationale for the determination on review. Such evidence and rationale shall be provided as soon as possible and sufficiently in advance of the date on which the written notice of the denial is required to be provided to give the person a reasonable opportunity to respond prior to that date. Any denial related to a Disability Claim shall be written in a manner calculated to be understood by the person and shall include the following: (i) the specific reason or reasons for any denial, (ii) the specific Plan provisions on which any denial is based, (iii) a statement that the person is entitled to receive, upon request and free of charge, reasonable access to, and copies of, all documents, records, and other information relevant to the person's claim for benefits, (iv) a statement of the person's right to bring a civil action under Section 502(a) of ERISA, (v) a discussion of the denial, including an explanation of the basis for disagreeing with or not the following: (a) the views presented by the person to the Plan of health care professionals treating the person and vocational professionals who evaluated the person, (b) the views of medical or vocational experts whose advice was obtained on behalf of the Plan in connection with a person's claim denial, without regard to whether the advice was relied upon in making the benefit determination, and (c) a disability determination regarding the person presented by the person to the Plan made by the Social Security Administration, (vi) if the denial is based on a medical necessity or experimental treatment or similar exclusion or limit, either an explanation of the scientific or clinical judgment for the determination, applying the terms of the Plan to the person's medical circumstances, or a statement that such explanation will be provided free of charge upon request, and (vii) either the specific internal rules, guidelines, protocols, standards or other similar criteria of the Plan relied upon in making the denial or a statement that such rules, guidelines, protocols, standards or other similar criteria do not exist.

(e) **Exhaustion of Claims and Review Procedures.** Following the exhaustion of the claims procedures set forth herein and in the event of subsequent civil action, the person shall be prohibited from presenting any evidence not considered by or presented to the Company in accordance with the claims procedures hereunder. No cause of action may be brought by a person who has received a claim denial later than two years following the date of such claim denial.

10.4 Plan Administrative Costs

. All reasonable costs and expenses (including legal, accounting, and employee communication fees) incurred by the Employer or Employer in administering the Plan shall be paid by the Plan, to the extent not paid by the Employer.

ARTICLE 11. MISCELLANEOUS

11.1 Unsecured General Creditor of the Employer

. The Plan at all times shall be entirely unfunded. Participants and their Beneficiaries, heirs, successors and assigns shall have no legal or equitable rights, interests or claims in any property or assets of the Employer or any Related Employer. For purposes of the payment of benefits under the plan, the assets of the Employer or of any Related Employer shall be, and shall remain, the general, unpledged, unrestricted assets of the Employer or of such Related Employer, respectively. The Employer's obligation under the Plan shall be merely that of an unfunded and unsecured promise to pay money in the future.

11.2 Employer's Liability

. The Employer's liability for the payment of benefits under the Plan shall be defined only by the Plan and by the Elections entered into between a Participant and the Employer. The Employer shall have no obligation or liability to a Participant under the Plan except as provided by the Plan and an Election.

11.3 Limitation of Rights

. Neither the establishment of the Plan, nor any amendment thereof, nor the creation of any fund or account, nor the payment of any benefits, will be construed as giving to the Participant or any other person any legal or equitable right against the Employer, the Committee or any Related Employer except as provided herein; and in no event will the terms of employment or service of the Participant be modified or in any way affected hereby.

11.4 Anti-Assignment

. Except as otherwise provided in connection with a division of property under a domestic relations proceeding under state law and subject to Section 9(iii), no right or interest of the eligible employees or retirees under this Plan shall be subject to involuntary alienation, assignment or transfer of any kind. An eligible employee may voluntarily assign his rights under the Plan. Employer, the Board, the Committee and any of their delegates shall not review, confirm, guarantee or otherwise comment on the legal validity of any voluntary assignment. Employer and its delegates may review, provide recommendations and approve submitted domestic relations orders using procedures similar to those that apply to qualified domestic relations orders under the qualified pension plans sponsored by Employer. A domestic relations order intended to assign a benefit hereunder to a former spouse of an eligible employee must be delivered to the Employer. Employer will review the order to determine if it is qualified. Upon notification by the Employer that the order is qualified, the spouse will be able to elect a distribution of the assigned benefit by the end of the fifth calendar year following the calendar year during which the Employer notifies the former spouse that the order is qualified. In all events, the entire assigned benefit must be distributed by the end of the fifth calendar year following the calendar year during which the Employer notifies the former spouse that the order is qualified. Notwithstanding anything in the Plan to the contrary, if an assigned benefit is equal to or less than the adjusted Code section 402(g) limit it shall be distributed to the former spouse as soon as administratively possible. The Employer may prescribe procedures that are consistent with this Section 11.4 and applicable law to implement benefit assignments pursuant to qualified orders.

11.5 Facility of Payment

. If the Employer determines, on the basis of medical reports or other evidence satisfactory to the Employer, that the recipient of any benefit payments under

the Plan is incapable of handling his affairs by reason of minority, illness, infirmity or other incapacity, the Employer may disburse such payments to a person or institution designated by a court which has jurisdiction over such recipient or a person or institution otherwise having the legal authority under State law for the care and control of such recipient. The receipt by such person or institution of any such payments, and any such payment to the extent thereof, shall discharge the liability of the Employer for the payment of benefits hereunder to such recipient.

11.6 Notices

. Any notice or other communication required or permitted to be given in connection with the Plan shall be in writing and shall be deemed to have been duly given (i) upon request, if delivered personally or via courier, (ii) upon confirmation of receipt, if given by facsimile or electronic transmission, and (iii) on the third business day following mailing, if mailed first-class, postage prepaid, registered or certified mail as follows:

(a) If it is sent to the Employer or a Related Employer, it will be at the address specified by the Employer; or

(b) If it is sent to a Participant or Beneficiary, it will be at the last address filed with the Employer by the Participant (or Beneficiary).

11.7 Tax Withholding

. The Employer shall have the right to deduct from all payments or deferrals made under the Plan any tax required by law to be withheld. If the Employer concludes that tax is owing with respect to any deferral or payment hereunder, the Employer shall withhold such amounts from any payments due the Participant or his Beneficiary, as permitted by law, or otherwise make appropriate arrangements with the Participant or his Beneficiary for satisfaction of such obligation. Tax, for purposes of this Section 11.7, means any federal, state, local, foreign or any other governmental income tax, employment or payroll tax, excise tax, or any other tax or assessment owing with respect to amounts deferred, any earnings thereon, and any payments made to Participants or Beneficiaries under the Plan.

11.8 Indemnification

. To the fullest extent allowed by law, the Employer shall indemnify and hold harmless each member of the Committee and each employee, officer, or director of the Employer or any Related Employer to whom is delegated duties, responsibilities, and authority with respect to the Plan against all claims, liabilities, fines and penalties, and all expenses reasonably incurred by or imposed upon him (including but not limited to reasonable attorneys' fees) which arise as a result of his actions or failure to act in connection with the operation and administration of the Plan to the extent lawfully allowable and to the extent that such claim, liability, fine, penalty, or expense is not paid for by liability insurance purchased or paid for by the Employer or any Related Employer. Notwithstanding the foregoing, the Employer shall not indemnify any person for any such amount incurred through any settlement or compromise of any action unless the Employer consents in writing to such settlement or compromise.

11.9 Permitted Acceleration of Payment

. The Employer, in its sole discretion, may accelerate the time in which payment shall be made under the Plan to: (a) an individual other than the Participant as may be necessary to fulfill a domestic relations order within the meaning of Code Section 414(p)(1)(B), (b) the extent reasonably necessary to avoid the violation of an applicable federal, state, local, or foreign ethics law or conflicts of interest law (including where

such payment is reasonably necessary to permit the Participant to participate in activities in the normal course of his position in which the Participant would otherwise not be able to participate under an applicable rule), determined in accordance with Treasury Regulation Section 1.409A-3(j)(4)(iii)(B), (c) pay the FICA tax imposed under Code Sections 3101, 3121(a) and 3121(v)(2) on compensation deferred under the Plan, (d) pay the income tax at source on wages imposed under Code Section 3401 or the corresponding withholding provisions of the applicable, state, local or foreign tax laws as a result of the payment of any FICA tax described in clause (c), and to pay the additional income tax at source on wages attributable to the pyramiding Code Section 3401 wages and taxes, (e) pay state, local, or foreign tax obligations arising from participation in the Plan that apply to an amount deferred under the Plan before the amount is paid or made available to the Participant, (f) pay the income tax at source on wages imposed under Code Section 3401 as a result of the payment described in clause (e) and to pay the additional income tax at source on wages imposed under Code Section 3401 attributable to such additional Code Section 3401 wages and taxes, (g) satisfy the debt of a Participant to the Employer or any Related Employer where such debt is incurred in the ordinary course of the service relationship between the Participant and the Employer or Related Employer, as applicable, the entire amount of the reduction in any Plan year does not exceed \$5,000, and the reduction is made at the same time and in the same amount as the debt otherwise would have been due and collected from the Participant, and (h) pay the amount required to be included in gross income as a result of the failure of the Plan to comply with the requirements of Code Section 409A. The total payment under clauses (c) and (d) shall, in no event, exceed the aggregate of the FICA tax and the income tax withholding related to such FICA tax. The total payment under clause (e) shall, in no event, exceed the amount of such taxes due as a result of participation in the Plan. The total payment under clauses (e) and (f) shall, in no event, exceed the aggregate of the state, local, and foreign tax amount, and the income tax withholding related to such state, local, and foreign tax amount. The total payment under clause (h) shall, in no event, exceed the amount required to be included in income as a result of the failure to comply with requirements of Code Section 409A.

11.10 No Guarantee or Employment or Participation

. Nothing in the Plan shall interfere with or limit in any way the right of the Employer to terminate any Participant's employment at any time and for any reason, nor confer upon any Participant any right to continue in the employ of the Employer or any Related Employer. No employee of the Employer shall have a right to be selected as a Participant under the Plan or, if selected, to continue to participate for any Plan Year.

11.11 Unclaimed Benefit

. Each Participant shall keep the Employer informed of his current address and the current address of his Beneficiary. The Employer shall not be obligated to search for the whereabouts of any person. If the location of a Participant is not made known to the Employer within three years after the date on which payment of the Participant's vested Account is scheduled to be made (or to commence), payment may be made as though the Participant had died at the end of the three-year period. If within one additional year after such three-year period has elapsed, or, within three years after the actual death of a Participant, the Employer is unable to locate the Beneficiary of the Participant, then the Employer shall have no further obligation to pay any benefit hereunder to such Participant or Beneficiary or any other person and such benefit shall be irrevocably forfeited.

11.12 Governing Law

. The Plan will be construed, administered and enforced according to the laws of the State of Delaware without regard to principles of conflicts of law to the extent not otherwise preempted by ERISA.

11.13 Erroneous Payment

. Any amount paid under this Plan in error to a Participant or to a Participant's Beneficiary shall be returned to the Employer. A payment made in error does not create on the part of the recipient a legally binding right to such payment.

[signature page immediately follows]

IN WITNESS WHEREOF, Ashland Global Holdings Inc. has caused its duly authorized representative to execute the Plan, this 22nd day of May, 2019.

ASHLAND GLOBAL HOLDINGS INC.

By: /s/Anne T. Schumann

Printed Name: Anne T. Schumann__

Title: SVP, CHRO & CIO



RESTRICTED STOCK AGREEMENT

Name of Participant: _____

Name of Plan: Ashland Global Holdings Inc. 2018 Omnibus Incentive Compensation Plan

Total Number of Restricted Shares of Ashland Global Holdings Inc. Common Stock: _____

Vesting Dates: _____ shares of Restricted Stock on _____, 20__

_____ shares of Restricted Stock on _____, 20__

_____ shares of Restricted Stock on _____, 20__

Date of Award: _____, 20__

Ashland Global Holdings Inc. (“Ashland”) hereby grants to the above-named Participant (the “Participant”) _____ shares of Ashland common stock, par value \$0.01 per share, subject to certain restrictions (the “Restricted Stock”), as an award (the “Award”) pursuant to the Ashland Global Holdings Inc. 2018 Omnibus Incentive Compensation Plan (the “Plan”) and this Restricted Stock Agreement (this “Agreement”), in order to provide the Participant with an additional incentive to continue his or her services to Ashland and its Affiliates and to continue to work for the best interests of Ashland and its Affiliates.

Ashland confirms this Award to the Participant, as a matter of separate agreement and not in lieu of salary or any other compensation for services, of the number of shares of Restricted Stock set forth above, subject to and upon all the terms, provisions and conditions contained herein and in the Plan. Capitalized terms used but not defined in this Agreement shall have the meanings given to such terms in the Plan.

This Award will be evidenced by entry on the books of Ashland’s transfer agent, Wells Fargo Bank, N.A. Each entry in respect of shares of Restricted Stock shall be designated in the name of the Participant and shall bear the following legend:

“The transferability of this certificate and the shares of stock represented hereby are subject to the terms and conditions (including forfeitures) contained in the Plan and the Agreement entered into between the registered owner and Ashland Global Holdings Inc.”

Following acceptance of this Award by the Participant, as provided for hereunder, the applicable number of shares of Restricted Stock set forth above will become vested on the applicable vesting date set forth above (the applicable “Vesting Date”); provided that, except as otherwise provided below or as otherwise determined by the Committee, in the event the Participant ceases to be a

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director, officer, employee or consultant of Ashland or its Affiliates for any reason prior to a Vesting Date, all shares of Restricted Stock which have not vested prior to such cessation shall be forfeited. Notwithstanding the foregoing, the Committee may, in its sole discretion, provide for accelerated vesting of the Award or any portion thereof at any time and for any reason.

If the Participant's employment by the Company is terminated due to the Participant's death, Disability or Retirement, prior to a vesting date, the remaining unvested shares of Restricted Stock will be pro-rated through the last day worked and the vesting would be accelerated. Such pro-ration shall be calculated by a method determined by the Committee in its sole discretion. For purposes of this Award Agreement, "Retirement" shall mean a termination of service for any reason, other than a termination of service for cause, Disability, or death, after attaining age 55 and having at least ten (10) years of credited service with the Company or any Affiliate.

The Award shall be treated in accordance with Section 8 of the Plan in the event of a Change of Control prior to a Vesting Date and while the Award remains outstanding. Notwithstanding the foregoing, if provision is made in connection with a Change of Control for the assumption of the Award or the substitution for the Award of new awards, in each case within the meaning of Section 8 of the Plan, then the Award shall continue to vest subject to the Participant's continued service as a director, officer, employee or consultant of Ashland or its Affiliates through the applicable Vesting Date; provided that any outstanding unvested shares of Restricted Stock will immediately vest upon the termination of such service by Ashland or its applicable Affiliate without "Cause" (as defined below) or by the Participant for "Good Reason" (as defined below) (and not as a result of the Participant's Disability or death) during the one-year period commencing on the date of the Change of Control. For purposes of this Agreement, "Cause" shall mean (i) the willful and continued failure of the Participant to substantially perform his or her duties with Ashland or its applicable Affiliate (other than such failure resulting from the Participant's incapacity due to physical or mental illness), (ii) the willful engaging by the Participant in gross misconduct materially injurious to Ashland or its applicable Affiliate or (iii) the Participant's conviction of or the entering of a plea of *nolo contendere* (or similar plea under the law of a jurisdiction outside the United States) to the commission of a felony (or a similar crime or offense under the law of a jurisdiction outside the United States). For purposes of this Agreement, "Good Reason" shall mean the occurrence of any of the following without the Participant's consent (x) a 15% or greater reduction in the Participant's base salary as in effect as of immediately prior to such Change of Control or (y) the relocation of the Participant's principal work location to a location outside a 50-mile radius from the Participant's principal work location as of the date of such Change of Control, except for required business travel to the extent substantially consistent with the Participant's business travel obligations as of immediately prior to such Change of Control. Notwithstanding the foregoing, Good Reason shall not exist unless: (a) the Participant provides Ashland or its applicable Affiliate with written notice of the act(s) alleged to constitute Good Reason within thirty (30) days of the Participant's knowledge of the occurrence of such act(s), (b) Ashland or its applicable Affiliate fails to cure such acts within thirty (30) days of receipt of such notice and (c) the Participant exercises the Participant's right to terminate his or her employment for Good Reason within sixty (60) days thereafter.

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While this Award is outstanding, on each date that cash dividends are paid to holders of Shares, the Participant will be credited with a whole number of additional shares of Restricted Stock equal to (1) the product of the number of outstanding shares of Restricted Stock held by the Participant as of the date of record for such dividend times the per share cash dividend amount, divided by (2) the Fair Market Value (as defined in the Plan) per Share on the dividend payment date (with all fractional Shares, if any, resulting from such calculation being canceled as of such date). Such additional shares of Restricted Stock will be subject to all the terms and conditions of this Agreement and the Plan and to the same vesting conditions and restrictions as the underlying shares of Restricted Stock to which they relate. Except for such restrictions described above, the Participant will have all rights of a shareholder with respect to the shares of Restricted Stock.

The shares of Restricted Stock and the Participant's rights under this Agreement may not be sold, assigned, alienated, attached, transferred, pledged or otherwise encumbered.

Nothing contained in this Agreement or in the Plan shall confer upon the Participant any right to continue in the employment of, or remain in the service of, Ashland or any of its Affiliates.

Information about the Participant and the Participant's participation in the Plan may be collected, recorded and held, used and disclosed by and among Ashland, its Affiliates and any third party Plan administrators as necessary for the purpose of managing and administering the Plan. The Participant understands that such processing of this information may need to be carried out by Ashland and its Affiliates and by third party administrators whether such persons are located within the Participant's country or elsewhere, including the United States of America. By accepting this Award, the Participant consents to the processing of information relating to the Participant and the Participant's participation in the Plan in any one or more of the ways referred to above.

The Participant consents and agrees to electronic delivery of any documents that Ashland may elect to deliver (including, but not limited to, prospectuses, prospectus supplements, grant or award notifications and agreements, account statements, annual and quarterly reports, and all other forms of communications) in connection with this and any other award made or offered under the Plan. The Participant understands that, unless earlier revoked by the Participant by giving written notice to Ashland Global Holdings Inc. at 50 E. RiverCenter Blvd., Covington, KY 41011 Attention: Shea Blackburn, this consent shall be effective for the duration of the Award. The Participant also understands that the Participant shall have the right at any time to request that Ashland deliver written copies of any and all materials referred to above at no charge.

This Award is granted under, and is subject to all the terms and conditions of, the Plan. In consideration of this Award, the Participant agrees that during the Participant's employment and the twenty-four (24) month period following the Participant's termination of employment with Ashland or its Affiliates for any reason, without the written consent of Ashland, the Participant will not:

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(i) engage directly or indirectly in any manner or capacity as principal, agent, partner, officer, director, employee or otherwise in any business or activity competitive with the business conducted by Ashland or any of its Affiliates; or

(ii) perform any act or engage in any activity that is detrimental to the best interests of Ashland or any of its Affiliates, including, without limitation:

(a) solicit or encourage any existing or former employee, director, contractor, consultant, customer or supplier of Ashland or any of its Affiliates to terminate his, her or its relationship with Ashland or any of its Affiliates for any reason; or

(b) disclose proprietary or confidential information of Ashland or any of its Affiliates to third parties or use any such proprietary or confidential information for the benefit of anyone other than Ashland and its Affiliates;

provided, however, that this Agreement shall not prohibit the Participant in any way from (1) filing and, as provided for under Section 21F of the Securities Exchange Act of 1934, maintaining the confidentiality of a claim with the Securities and Exchange Commission (the “SEC”); (2) providing proprietary or confidential information to the SEC, or providing the SEC with information that would otherwise violate clause (ii) above, to the extent permitted by Section 21F of the Securities Exchange Act of 1934; (3) cooperating, participating or assisting in an SEC investigation or proceeding without notifying Ashland or (4) receiving a monetary award as set forth in Section 21F of the Securities Exchange Act of 1934. Furthermore, the Participant is advised that the Participant shall not be held criminally or civilly liable under any Federal or state trade secret law for the disclosure of any proprietary or confidential information that constitutes a trade secret to which the Defend Trade Secrets Act (18 U.S.C. Section 1833(b)) applies that is made (A) in confidence to a Federal, state or local government official, either directly or indirectly, or to an attorney, in each case, solely for the purpose of reporting or investigating a suspected violation of law or (B) in a complaint or other document filed in a lawsuit or proceeding, if such filings are made under seal. The Participant understands that if he or she makes a disclosure of proprietary or confidential information that is covered above, he or she is not required to inform Ashland, in advance or otherwise, that such disclosure(s) has been made. The restrictions in this paragraph are referred to herein as the “Participant Covenants”.

Notwithstanding any other provision of the Plan or this Agreement to the contrary, but subject to any applicable laws to the contrary, the Participant agrees that in the event the Participant fails to comply or otherwise breaches any of the Participant Covenants either during the Participant’s employment or within twenty-four (24) months following the Participant’s termination of employment with Ashland or its Affiliates for any reason Ashland may: (x) cancel this Award, (y) eliminate or reduce the amount of any compensation, benefit, or payment otherwise payable by Ashland or any of its Affiliates (either directly or under any employee benefit or compensation plan, agreement, or arrangement), except to the extent such compensation, benefit or payment constitutes deferred compensation under Section 409A of the Internal Revenue Code and such elimination or reduction would trigger a tax or penalty under Section 409A of the Code, to or on behalf of the Participant in an amount up to the total amount paid (or the closing stock price of

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Shares on the payment date multiplied by the number of Shares awarded) or payable to the Participant under this Agreement and/or (z) require the Participant to pay Ashland an amount up to the total amount paid (or the closing stock price of Shares on the payment date multiplied by the number of Shares awarded) to the Participant under this Agreement; in each case together with the amount of Ashland’s court costs, attorney fees, and other costs and expenses incurred in connection therewith; provided that the actions described in clauses (x), (y) and (z) shall not be taken with respect to the Award at any time following the third anniversary of the vesting of the Award (or the applicable portion thereof).

This Award of Restricted Stock is subject to the Participant’s on-line acceptance of the terms and conditions of this Agreement through the Fidelity website. The right to the Restricted Stock under the Plan shall expire if not accepted by _____.

By accepting the terms and conditions of this Agreement, the Participant acknowledges receipt of a copy of the Plan, Prospectus, and Ashland’s most recent Annual Report and Proxy Statement (the “Prospectus Information”). The Participant represents that he or she is familiar with the terms and provisions of the Prospectus Information and hereby accepts this Award on the terms and conditions set forth herein and in the Plan, and acknowledges that he or she has had the opportunity to obtain independent legal advice at his or her expense prior to accepting this Award.

IN WITNESS WHEREOF, Ashland Global Holdings Inc. has caused this instrument to be executed and delivered effective as of the day and year first above written.

ASHLAND GLOBAL HOLDINGS INC.

By: _____
 Name: _____
 Title: _____

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STOCK APPRECIATION RIGHT (SAR) AWARD (STOCK-SETTLED)

Name of Participant: _____

Name of Plan: Ashland Global Holdings Inc. 2018 Omnibus Incentive Compensation Plan

Total Number of SARs: _____

Grant Price Per Share: \$

Date of SAR Award: _____, 20__

Vesting Schedule: _____ SARs on _____, 20__

_____ SARs on _____, 20__

_____ SARs on _____, 20__

Expiration Date: _____, 20__

Ashland Global Holdings Inc. ("Ashland") hereby grants to the above-named Participant (the "Participant") this Stock Appreciation Right ("SAR") award (the "Award") pursuant to the Ashland Global Holdings Inc. 2018 Omnibus Incentive Compensation Plan (the "Plan") and this SAR Agreement (this "Agreement"), in order to provide the Participant with an additional incentive to continue his or her services to Ashland and its Affiliates and to continue to work for the best interests of Ashland and its Affiliates. This Award represents the contingent right (as set forth herein) of the Participant to receive a number of Shares with an aggregate Fair Market Value equal to the product of (1) the excess of the Fair Market Value per Share at the time a SAR is exercised over the grant price per Share of the SAR (as set forth above), multiplied by (2) the number of SARs exercised. Fractional Shares relating to such exercise entitle the Participant to a cash payment in lieu of such fractional Share (as set forth below). To the extent vested, this Award may be exercised, as provided in the Plan, until the Expiration Date or such earlier date that the Award expires pursuant to the Plan or in accordance with this Agreement.

Ashland confirms this Award to the Participant, as a matter of separate agreement and not in lieu of salary or any other compensation for services, of the number of SARs set forth above, subject to and upon all the terms, provisions and conditions contained herein and in the Plan. Capitalized terms used but not defined in this Agreement shall have the meanings given to such terms in the Plan.

Following acceptance of this Award by the Participant, as provided for hereunder, the applicable number of SARs set forth above will become vested and exercisable on the applicable vesting date

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set forth above (the applicable “Vesting Date”); provided that, except as otherwise provided below or as otherwise determined by the Committee, in the event the Participant ceases to be a director, officer, employee or consultant of Ashland or its Affiliates (i) all SARs which have not vested prior to such cessation shall be forfeited, (ii) in the event such cessation is a result of the Participant’s Disability or death, all SARs which have vested prior to such cessation shall expire, without payment, upon the Expiration Date (as set forth above) to the extent not exercised prior to such expiration, and (iii) in the event the Participant ceases to be a director, officer, employee or consultant of Ashland or one of its Affiliates for any reason other than as a result of the Participant’s Disability or death, all SARs which have vested prior to such cessation shall expire, without payment, upon the earlier of (x) the Expiration Date (as set forth above) and (y) the three-month anniversary of such cessation, to the extent not exercised prior to such expiration; provided that in no event may a SAR be exercisable after the tenth anniversary of the date the SAR is granted.

Notwithstanding the foregoing, the Committee may, in its sole discretion, provide for accelerated vesting of the Award or any portion thereof at any time and for any reason.

If the Participant’s employment by the Company is terminated due to the Participant’s death, Disability or Retirement, prior to a vesting date, the remaining unvested SARs will be pro-rated through the last day worked and the vesting would be accelerated. Such pro-ration shall be calculated by a method determined by the Committee in its sole discretion. For purposes of this Award Agreement, “Retirement” shall mean a termination of service for any reason, other than a termination of service for cause, Disability, or death, after attaining age 55 and having at least ten (10) years of credited service with the Company or any Affiliate.

The Award shall be treated in accordance with Section 8 of the Plan in the event of a Change of Control prior to a Vesting Date and while the Award remains outstanding. Notwithstanding the foregoing, if provision is made in connection with a Change of Control for the assumption of the Award or the substitution for the Award of new awards, in each case within the meaning of Section 8 of the Plan, then the Award shall continue to vest subject to the Participant’s continued service as a director, officer, employee or consultant of Ashland or its Affiliates through the applicable Vesting Date; provided that any outstanding unvested SARs will immediately vest and become exercisable upon the cessation of such service by Ashland or its applicable Affiliate without “Cause” (as defined below) or by the Participant for “Good Reason” (as defined below) (and not as a result of the Participant’s Disability or death) during the one-year period commencing on the date of the Change of Control, in which case such vested SARs shall expire, without payment, upon the earlier of (x) the Expiration Date (as set forth above) and (y) the three-month anniversary of such cessation, to the extent not exercised prior to such expiration. For purposes of this Agreement, “Cause” shall mean (i) the willful and continued failure of the Participant to substantially perform his or her duties with Ashland or its applicable Affiliate (other than such failure resulting from the Participant’s incapacity due to physical or mental illness), (ii) the willful engaging by the Participant in gross misconduct materially injurious to Ashland or its applicable Affiliate, or (iii) the Participant’s conviction of or the entering of a plea of nolo contendere (or similar plea under the law of a jurisdiction outside the United States) to the commission of a felony (or a similar crime or offense under the law of a jurisdiction outside the United States). For

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purposes of this Agreement, "Good Reason" shall mean the occurrence of any of the following without the Participant's consent, (x) a 15% or greater reduction in the Participant's base salary as in effect as of immediately prior to such Change of Control or (y) the relocation of the Participant's principal work location to a location outside a 50 mile radius from the Participant's principal work location as of the date of such Change of Control, except for required business travel to the extent substantially consistent with the Participant's business travel obligations as of immediately prior to such Change of Control. Notwithstanding the foregoing, Good Reason shall not exist unless: (a) the Participant provides Ashland or its applicable Affiliate with written notice of the act(s) alleged to constitute Good Reason within thirty (30) days of the Participant's knowledge of the occurrence of such act(s), (b) Ashland or its applicable Affiliate fails to cure such acts within thirty (30) days of receipt of such notice and (c) the Participant exercises the Participant's right to terminate his or her employment for Good Reason within sixty (60) days thereafter.

The Shares (and cash payment related to any fractional Shares) which the Participant is entitled to receive upon exercise of any SARs pursuant to this Agreement will be delivered or paid, as applicable, within thirty (30) days after such exercise, subject to tax deductions and withholding as set forth in Section 9(d) of the Plan.

The SARs and the Participant's rights under this Agreement may not be sold, assigned, alienated, attached, transferred, pledged or otherwise encumbered.

Nothing contained in this Agreement or in the Plan shall confer upon the Participant any right to continue in the employment of, or remain in the service of, Ashland or any of its Affiliates.

Information about the Participant and the Participant's participation in the Plan may be collected, recorded and held, used and disclosed by and among Ashland, its Affiliates and any third party Plan administrators as necessary for the purpose of managing and administering the Plan. The Participant understands that such processing of this information may need to be carried out by Ashland and its Affiliates and by third party administrators whether such persons are located within the Participant's country or elsewhere, including the United States of America. By accepting this Award, the Participant consents to the processing of information relating to the Participant and the Participant's participation in the Plan in any one or more of the ways referred to above.

The Participant consents and agrees to electronic delivery of any documents that Ashland may elect to deliver (including, but not limited to, prospectuses, prospectus supplements, grant or award notifications and agreements, account statements, annual and quarterly reports, and all other forms of communications) in connection with this and any other award made or offered under the Plan. The Participant understands that, unless earlier revoked by the Participant by giving written notice to Ashland Global Holdings Inc. at 50 E. RiverCenter Blvd., Covington, KY 41011 Attention: Shea Blackburn, this consent shall be effective for the duration of the Award. The Participant also understands that the Participant shall have the right at any time to request that Ashland deliver written copies of any and all materials referred to above at no charge.

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This Award is granted under, and is subject to all the terms and conditions of, the Plan. In consideration of this Award, the Participant agrees that during the Participant's employment and the twenty-four (24) month period following the Participant's termination of employment with Ashland or its Affiliates for any reason, without the written consent of Ashland, the Participant will not:

(i) engage directly or indirectly in any manner or capacity as principal, agent, partner, officer, director, employee or otherwise in any business or activity competitive with the business conducted by Ashland or any of its Affiliates; or

(ii) perform any act or engage in any activity that is detrimental to the best interests of Ashland or any of its Affiliates, including, without limitation:

(a) solicit or encourage any existing or former employee, director, contractor, consultant, customer or supplier of Ashland or any of its Affiliates to terminate his, her or its relationship with Ashland or any of its Affiliates for any reason; or

(b) disclose proprietary or confidential information of Ashland or any of its Affiliates to third parties or use any such proprietary or confidential information for the benefit of anyone other than Ashland and its Affiliates;

provided, however, that this Agreement shall not prohibit the Participant in any way from (1) filing and, as provided for under Section 21F of the Securities Exchange Act of 1934, maintaining the confidentiality of a claim with the Securities and Exchange Commission (the "SEC"); (2) providing proprietary or confidential information to the SEC, or providing the SEC with information that would otherwise violate clause (ii) above, to the extent permitted by Section 21F of the Securities Exchange Act of 1934; (3) cooperating, participating or assisting in an SEC investigation or proceeding without notifying Ashland; or (4) receiving a monetary award as set forth in Section 21F of the Securities Exchange Act of 1934. Furthermore, the Participant is advised that the Participant shall not be held criminally or civilly liable under any Federal or state trade secret law for the disclosure of any proprietary or confidential information that constitutes a trade secret to which the Defend Trade Secrets Act (18 U.S.C. Section 1833(b)) applies that is made (A) in confidence to a Federal, state or local government official, either directly or indirectly, or to an attorney, in each case, solely for the purpose of reporting or investigating a suspected violation of law; or (B) in a complaint or other document filed in a lawsuit or proceeding, if such filings are made under seal. The Participant understands that if he or she makes a disclosure of proprietary or confidential information that is covered above, he or she is not required to inform Ashland, in advance or otherwise, that such disclosure(s) has been made. The restrictions in this paragraph are referred to herein as the "Participant Covenants".

Notwithstanding any other provision of the Plan or this Agreement to the contrary, but subject to any applicable laws to the contrary, the Participant agrees that in the event the Participant fails to comply or otherwise breaches any of the Participant Covenants either during the Participant's employment or within twenty-four (24) months following the Participant's termination of employment with Ashland or its Affiliates for any reason Ashland may: (x) cancel this Award; (y)

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eliminate or reduce the amount of any compensation, benefit, or payment otherwise payable by Ashland or any of its Affiliates (either directly or under any employee benefit or compensation plan, agreement, or arrangement), except to the extent such compensation, benefit or payment constitutes deferred compensation under Section 409A of the Internal Revenue Code and such elimination or reduction would trigger a tax or penalty under Section 409A of the Code, to or on behalf of the Participant in an amount up to the total amount paid (or the closing stock price of Shares on the payment date multiplied by the number of Shares awarded) or payable to the Participant under this Agreement; and/or (z) require the Participant to pay Ashland an amount up to the total amount paid (or the closing stock price of Shares on the payment date multiplied by the number of Shares awarded) to the Participant under this Agreement; in each case together with the amount of Ashland’s court costs, attorney fees, and other costs and expenses incurred in connection therewith; provided that the actions described in clauses (x), (y) and (z) shall not be taken with respect to the Award at any time following the third anniversary of the vesting of the Award (or the applicable portion thereof).

This Award of SARs is subject to the Participant’s on-line acceptance of the terms and conditions of this Agreement through the Fidelity website. The right to the SARs under the Plan shall expire if not accepted by _____.

By accepting the terms and conditions of this Agreement, the Participant acknowledges receipt of a copy of the Plan, Prospectus, and Ashland’s most recent Annual Report and Proxy Statement (the “Prospectus Information”). The Participant represents that he or she is familiar with the terms and provisions of the Prospectus Information and hereby accepts this Award on the terms and conditions set forth herein and in the Plan, and acknowledges that he or she had the opportunity to obtain independent legal advice at his or her expense prior to accepting this Award.

IN WITNESS WHEREOF, Ashland Global Holdings Inc. has caused this instrument to be executed and delivered effective as of the day and year first above written.

ASHLAND GLOBAL HOLDINGS INC.

By: _____
 Name: _____
 Title: _____

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RESTRICTED STOCK UNIT AGREEMENT

Name of Participant: _____

Name of Plan: Ashland Global Holdings Inc. 2018 Omnibus Incentive Compensation Plan

Total Number of Restricted Stock Units: _____

Vesting Dates: _____ RSUs on _____, 20__

_____ RSUs on _____, 20__

_____ RSUs on _____, 20__

Date of Award: _____, 20__

Ashland Global Holdings Inc. ("Ashland") hereby grants to the above-named Participant (the "Participant") _____ Restricted Stock Units (the "Award") pursuant to the Ashland Global Holdings Inc. 2018 Omnibus Incentive Compensation Plan (the "Plan") and this Restricted Stock Unit Agreement (this "Agreement"), in order to provide the Participant with an additional incentive to continue his or her services to Ashland and its Affiliates and to continue to work for the best interests of Ashland and its Affiliates. Each Restricted Stock Unit represents the contingent right (as set forth herein) of the Participant to receive a Share in accordance with this Agreement.

Ashland confirms this Award to the Participant, as a matter of separate agreement and not in lieu of salary or any other compensation for services, of the number of Restricted Stock Units ("RSUs") set forth above, subject to and upon all the terms, provisions and conditions contained herein and in the Plan. Capitalized terms used but not defined in this Agreement shall have the meanings given to such terms in the Plan.

Following acceptance of this Award by the Participant, as provided for hereunder, the applicable number of RSUs set forth above will become vested on the applicable vesting date set forth above (the applicable "Vesting Date"); provided that, except as otherwise provided below or as otherwise determined by the Committee, in the event the Participant ceases to be a director, officer, employee or consultant of Ashland or its Affiliates for any reason prior to a Vesting Date, all RSUs which have not vested prior to such cessation shall be forfeited. Notwithstanding the foregoing, the Committee may, in its sole discretion, provide for accelerated vesting of the Award or any portion thereof at any time and for any reason.

If the Participant's employment by the Company is terminated due to the Participant's death, Disability or Retirement, prior to a vesting date, the remaining unvested RSUs will be pro-rated

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through the last day worked and the vesting would be accelerated. Such pro-ration shall be calculated by a method determined by the Committee in its sole discretion. For purposes of this Award Agreement, "Retirement" shall mean a termination of service for any reason, other than a termination of service for cause, Disability, or death, after attaining age 55 and having at least ten (10) years of credited service with the Company or any Affiliate.

The Award shall be treated in accordance with Section 8 of the Plan in the event of a Change of Control prior to a Vesting Date and while the Award remains outstanding. Notwithstanding the foregoing, if provision is made in connection with a Change of Control for the assumption of the Award or the substitution for the Award of new awards, in each case within the meaning of Section 8 of the Plan, then the Award shall continue to vest subject to the Participant's continued service as a director, officer, employee or consultant of Ashland or its Affiliates through the applicable Vesting Date; provided that any outstanding unvested RSUs will immediately vest upon the termination of such service by Ashland or its applicable Affiliate without "Cause" (as defined below) or by the Participant for "Good Reason" (as defined below) (and not as a result of the Participant's Disability or death) during the one-year period commencing on the date of the Change of Control. For purposes of this Agreement, "Cause" shall mean (i) the willful and continued failure of the Participant to substantially perform his or her duties with Ashland or its applicable Affiliate (other than such failure resulting from the Participant's incapacity due to physical or mental illness), (ii) the willful engaging by the Participant in gross misconduct materially injurious to Ashland or its applicable Affiliate, or (iii) the Participant's conviction of or the entering of a plea of nolo contendere (or similar plea under the law of a jurisdiction outside the United States) to the commission of a felony (or a similar crime or offense under the law of a jurisdiction outside the United States). For purposes of this Agreement, "Good Reason" shall mean the occurrence of any of the following without the Participant's consent, (x) a 15% or greater reduction in the Participant's base salary as in effect as of immediately prior to such Change of Control or (y) the relocation of the Participant's principal work location to a location outside a 50-mile radius from the Participant's principal work location as of the date of such Change of Control, except for required business travel to the extent substantially consistent with the Participant's business travel obligations as of immediately prior to such Change of Control. Notwithstanding the foregoing, Good Reason shall not exist unless: (a) the Participant provides Ashland or its applicable Affiliate with written notice of the act(s) alleged to constitute Good Reason within thirty (30) days of the Participant's knowledge of the occurrence of such act(s), (b) Ashland or its applicable Affiliate fails to cure such acts within thirty (30) days of receipt of such notice and (c) the Participant exercises the Participant's right to terminate his or her employment for Good Reason within sixty (60) days thereafter.

The Shares underlying any RSUs that become vested in accordance with this Agreement will be delivered within thirty (30) days after such RSUs become vested as provided herein, subject to tax deductions and withholding as set forth in Section 9(d) of the Plan.

While this Award is outstanding, on each date that cash dividends are paid to holders of Shares, the Participant will be credited with a number of additional RSUs equal to (1) the product of the number of outstanding RSUs held by the Participant as of the date of record for such dividend times the per share cash dividend amount, divided by (2) the closing stock price of Shares on the

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NYSE Composite Tape on the date of record for such dividend. Such additional RSUs will be subject to all the terms and conditions of this Agreement and the Plan and to the same vesting conditions and restrictions as the underlying RSUs to which they relate; provided that, notwithstanding any other provision of this Agreement or the Plan to the contrary, in the event the Participant is credited with any fractional RSUs as a result of this paragraph prior to a Vesting Date, such fractional RSUs shall not vest as of such Vesting Date, but shall instead be treated as an RSU that is scheduled to vest on the subsequent Vesting Date; provided, further, that any fractional RSUs that remain outstanding on the final Vesting Date (or such other date on which all remaining outstanding RSUs become vested in accordance with this Agreement) shall be rounded up to a whole RSU and shall vest in accordance with this Agreement.

The RSUs and the Participant's rights under this Agreement may not be sold, assigned, alienated, attached, transferred, pledged, or otherwise encumbered.

Nothing contained in this Agreement or in the Plan shall confer upon the Participant any right to continue in the employment of, or remain in the service of, Ashland or any of its Affiliates.

Information about the Participant and the Participant's participation in the Plan may be collected, recorded and held, used and disclosed by and among Ashland, its Affiliates and any third party Plan administrators as necessary for the purpose of managing and administering the Plan. The Participant understands that such processing of this information may need to be carried out by Ashland and its Affiliates and by third party administrators whether such persons are located within the Participant's country or elsewhere, including the United States of America. By accepting this Award, the Participant consents to the processing of information relating to the Participant and the Participant's participation in the Plan in any one or more of the ways referred to above.

The Participant consents and agrees to electronic delivery of any documents that Ashland may elect to deliver (including, but not limited to, prospectuses, prospectus supplements, grant or award notifications and agreements, account statements, annual and quarterly reports, and all other forms of communications) in connection with this and any other award made or offered under the Plan. The Participant understands that, unless earlier revoked by the Participant by giving written notice to Ashland Global Holdings Inc. at 50 E. RiverCenter Blvd., Covington, KY 41011 Attention: Shea Blackburn, this consent shall be effective for the duration of the Award. The Participant also understands that the Participant shall have the right at any time to request that Ashland deliver written copies of any and all materials referred to above at no charge.

This Award is granted under, and is subject to all the terms and conditions of, the Plan. In consideration of this Award, the Participant agrees that during the Participant's employment and the twenty-four (24) month period following the Participant's termination of employment with Ashland or its Affiliates for any reason, without the written consent of Ashland, the Participant will not:

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(i) engage directly or indirectly in any manner or capacity as principal, agent, partner, officer, director, employee or otherwise in any business or activity competitive with the business conducted by Ashland or any of its Affiliates; or

(ii) perform any act or engage in any activity that is detrimental to the best interests of Ashland or any of its Affiliates, including, without limitation:

(a) solicit or encourage any existing or former employee, director, contractor, consultant, customer or supplier of Ashland or any of its Affiliates to terminate his, her or its relationship with Ashland or any of its Affiliates for any reason; or

(b) disclose proprietary or confidential information of Ashland or any of its Affiliates to third parties or use any such proprietary or confidential information for the benefit of anyone other than Ashland and its Affiliates;

provided, however, that this Agreement shall not prohibit the Participant in any way from (1) filing and, as provided for under Section 21F of the Securities Exchange Act of 1934, maintaining the confidentiality of a claim with the Securities and Exchange Commission (the "SEC"); (2) providing proprietary or confidential information to the SEC, or providing the SEC with information that would otherwise violate clause (ii) above, to the extent permitted by Section 21F of the Securities Exchange Act of 1934; (3) cooperating, participating or assisting in an SEC investigation or proceeding without notifying Ashland; or (4) receiving a monetary award as set forth in Section 21F of the Securities Exchange Act of 1934. Furthermore, the Participant is advised that the Participant shall not be held criminally or civilly liable under any Federal or state trade secret law for the disclosure of any proprietary or confidential information that constitutes a trade secret to which the Defend Trade Secrets Act (18 U.S.C. Section 1833(b)) applies that is made (A) in confidence to a Federal, state or local government official, either directly or indirectly, or to an attorney, in each case, solely for the purpose of reporting or investigating a suspected violation of law; or (B) in a complaint or other document filed in a lawsuit or proceeding, if such filings are made under seal. The Participant understands that if he or she makes a disclosure of proprietary or confidential information that is covered above, he or she is not required to inform Ashland, in advance or otherwise, that such disclosure(s) has been made. The restrictions in this paragraph are referred to herein as the "Participant Covenants".

Notwithstanding any other provision of the Plan or this Agreement to the contrary, but subject to any applicable laws to the contrary, the Participant agrees that in the event the Participant fails to comply or otherwise breaches any of the Participant Covenants either during the Participant's employment or within twenty-four (24) months following the Participant's termination of employment with Ashland or its Affiliates for any reason Ashland may: (x) cancel this Award, (y) eliminate or reduce the amount of any compensation, benefit, or payment otherwise payable by Ashland or any of its Affiliates (either directly or under any employee benefit or compensation plan, agreement, or arrangement), except to the extent such compensation, benefit or payment constitutes deferred compensation under Section 409A of the Internal Revenue Code and such elimination or reduction would trigger a tax or penalty under Section 409A of the Code, to or on behalf of the Participant in an amount up to the total amount paid (or the closing stock price of

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Shares on the payment date multiplied by the number of Shares awarded) or payable to the Participant under this Agreement; and/or (z) require the Participant to pay Ashland an amount up to the total amount paid (or the closing stock price of Shares on the payment date multiplied by the number of Shares awarded) to the Participant under this Agreement; in each case together with the amount of Ashland’s court costs, attorney fees, and other costs and expenses incurred in connection therewith; provided that the actions described in clauses (x), (y) and (z) shall not be taken with respect to the Award at any time following the third anniversary of the vesting of the Award (or the applicable portion thereof).

This Award of RSUs is subject to the Participant’s on-line acceptance of the terms and conditions of this Agreement through the Fidelity website. The right to the RSUs under the Plan shall expire if not accepted by _____.

By accepting the terms and conditions of this Agreement, the Participant acknowledges receipt of a copy of the Plan, Prospectus, and Ashland’s most recent Annual Report and Proxy Statement (the “Prospectus Information”). The Participant represents that he or she is familiar with the terms and provisions of the Prospectus Information and hereby accepts this Award on the terms and conditions set forth herein and in the Plan, and acknowledges that he or she has had the opportunity to obtain independent legal advice at his or her expense prior to accepting this Award.

IN WITNESS WHEREOF, Ashland Global Holdings Inc. has caused this instrument to be executed and delivered effective as of the day and year first above written.

ASHLAND GLOBAL HOLDINGS INC.

By: _____

Name: _____

Title: _____

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STOCK-SETTLED PERFORMANCE UNIT AGREEMENT

Name of Participant: _____

Name of Plan: Ashland Global Holdings Inc. 2018 Omnibus Incentive Compensation Plan

Total Number of Stock-Settled Performance Units: _____

Three-Year Performance Period: _____

Date of Award: _____

Vesting Date of Award: _____

Ashland Global Holdings Inc. (“Ashland”) hereby grants an award of _____ Stock-Settled Performance Units (the “Award”) to the above-named Participant (the “Participant”) pursuant to the Ashland Global Holdings Inc. 2018 Omnibus Incentive Compensation Plan (the “Plan”) (Attachment 1) and this Stock-Settled Performance Unit Agreement (“Agreement”) in order to provide the Participant with an additional incentive to continue his or her services to Ashland and to continue to work for the best interests of Ashland. This Award is granted under, and subject to, all the terms and conditions of the Long-Term Incentive Plan Program Memorandum (“LTIP”) (Attachment 2) and the Plan. Capitalized terms used but not defined in this Agreement shall have the meanings given such terms in the Plan or the LTIP, as applicable.

In consideration of this Award, the Participant agrees that during the Participant’s employment and the twenty-four (24)-month period following the Participant’s termination of employment with Ashland or its Affiliates for any reason, without the written consent of Ashland, the Participant will not:

(i) engage directly or indirectly in any manner or capacity as principal, agent, partner, officer, director, employee or otherwise in any business or activity competitive with the business conducted by Ashland or any of its Affiliates; or

(ii) perform any act or engage in any activity that is detrimental to the best interests of Ashland or any of its Affiliates, including, without limitation:

(a) solicit or encourage any existing or former employee, director, contractor, consultant, customer or supplier of Ashland or any of its Affiliates to terminate his, her or its relationship with Ashland or any of its Affiliates for any reason; or

(b) disclose proprietary or confidential information of Ashland or any of its Affiliates to third parties or use any such proprietary or confidential information for the benefit of anyone other than Ashland and its Affiliates;

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provided, however, that this Agreement shall not prohibit the Participant in any way from (1) filing and, as provided for under Section 21F of the Securities Exchange Act of 1934, maintaining the confidentiality of a claim with the Securities and Exchange Commission (the “SEC”); (2) providing proprietary or confidential information to the SEC, or providing the SEC with information that would otherwise violate clause (ii) above, to the extent permitted by Section 21F of the Securities Exchange Act of 1934; (3) cooperating, participating or assisting in an SEC investigation or proceeding without notifying Ashland; or (4) receiving a monetary award as set forth in Section 21F of the Securities Exchange Act of 1934. Furthermore, the Participant is advised that the Participant shall not be held criminally or civilly liable under any Federal or state trade secret law for the disclosure of any proprietary or confidential information that constitutes a trade secret to which the Defend Trade Secrets Act (18 U.S.C. Section 1833(b)) applies that is made (A) in confidence to a Federal, state or local government official, either directly or indirectly, or to an attorney, in each case, solely for the purpose of reporting or investigating a suspected violation of law; or (B) in a complaint or other document filed in a lawsuit or proceeding, if such filings are made under seal. The Participant understands that if he or she makes a disclosure of proprietary or confidential information that is covered above, he or she is not required to inform Ashland, in advance or otherwise, that such disclosure(s) has been made. The restrictions in this paragraph are referred to herein as the “Participant Covenants”.

Notwithstanding any other provision of the Plan or this Agreement to the contrary, but subject to any applicable laws to the contrary, the Participant agrees that in the event the Participant fails to comply or otherwise breaches any of the Participant Covenants either during the Participant’s employment or within twenty-four (24) months following the Participant’s termination of employment with Ashland or its Affiliates for any reason Ashland may: (x) cancel this Award; (y) eliminate or reduce the amount of any compensation, benefit, or payment otherwise payable by Ashland or any of its Affiliates (either directly or under any employee benefit or compensation plan, agreement, or arrangement), except to the extent such compensation, benefit or payment constitutes deferred compensation under Section 409A of the Internal Revenue Code and such elimination or reduction would trigger a tax or penalty under Section 409A of the Code, to or on behalf of the Participant in an amount up to the total amount paid (or the closing stock price of Shares on the payment date multiplied by the number of Shares awarded) or payable to the Participant under this Agreement; and/or (z) require the Participant to pay Ashland an amount up to the total amount paid (or the closing stock price of Shares on the payment date multiplied by the number of Shares awarded) to the Participant under this Agreement; in each case together with the amount of Ashland’s court costs, attorney fees, and other costs and expenses incurred in connection therewith; provided that the actions described in clauses (x), (y) and (z) shall not be taken with respect to the Award at any time following the third anniversary of the vesting of the Award (or the applicable portion thereof).

Following acceptance of this Award by the Participant, as provided for hereunder, and based upon the attainment of the Performance Goals outlined in the LTIP, this Award will become vested on the vesting date set forth above (the “Vesting Date”); provided that, except as otherwise provided below or as otherwise determined by the Committee, this Award shall be forfeited in the event the

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Participant ceases to be a director, officer, employee or consultant of Ashland or its Affiliates for any reason prior to the Vesting Date. Notwithstanding the foregoing, the Committee may, in its sole discretion, provide for accelerated vesting of the Award or any portion thereof at any time and for any reason.

If the Participant's employment by the Company is terminated due to the Participant's death, Disability or Retirement, prior to a vesting date, the remaining unvested Performance Units will be pro-rated through the last day worked and the vesting would be accelerated. Such pro-ration shall be calculated by a method determined by the Committee in its sole discretion. For purposes of this Award Agreement, "Retirement" shall mean a termination of service for any reason, other than a termination of service for cause, Disability, or death, after attaining age 55 and having at least ten (10) years of credited service with the Company or any Affiliate.

In the event of a Change of Control prior to the Vesting Date and while the Award remains outstanding, if provision is made in connection with such Change of Control for the assumption of the Award or the substitution for the Award of new Awards, in each case within the meaning of Section 8 of the Plan, then the Award shall be converted into a number of time-based, stock settled restricted stock units, with such number determined based upon actual achievement of the Performance Goals outlined in the LTIP through the date of such Change of Control, as determined by the Committee in its sole discretion (without pro-ration with respect to the portion of the performance period elapsed prior to such Change of Control), and such restricted stock units shall continue to vest, subject to the Participant's continued service as a director, officer, employee or consultant of Ashland or its Affiliates or the applicable surviving or resulting entity through the Vesting Date; provided that, in the event that the Participant's service as a director, officer, employee, consultant of Ashland or its Affiliates or the applicable surviving or resulting entity is terminated by Ashland or its Affiliates or the applicable surviving or resulting entity without "Cause" (as defined below) or by the Participant for "Good Reason" (as defined below) (and not as a result of the Participant's Disability or death), in each case during the one (1)-year period beginning on the date of such Change of Control, then such restricted stock units shall immediately vest in full upon the date of such termination.

In the event of a Change of Control prior to the Vesting Date and while the Award remains outstanding, if provision is not made in connection with such Change of Control for the assumption or the Award or the substitution for the Award of new Awards, in each case within the meaning of Section 8 of the Plan, then the Award will immediately vest in full (i.e., without pro-ration with respect to the portion of the performance period elapsed prior to such Change of Control) upon the date of such Change of Control, based upon actual achievement of the Performance Goals through the date of such Change of Control, as determined by the Committee in its sole discretion.

For purposes of this Agreement, "Cause" shall mean (i) the willful and continued failure of the Participant to substantially perform his or her duties with Ashland or its applicable Affiliate (other than such failure resulting from the Participant's incapacity due to physical or mental illness), (ii) the willful engaging by the Participant in gross misconduct materially injurious to Ashland or its applicable Affiliate, or (iii) the Participant's conviction of or the entering of a plea of *nolo*

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contendere (or similar plea under the law of a jurisdiction outside the United States) to the commission of a felony (or a similar crime or offense under the law of a jurisdiction outside the United States). For purposes of this Agreement, "Good Reason" shall mean the occurrence of any of the following without the Participant's consent (x) a fifteen percent (15%) or greater reduction in the Participant's base salary as in effect as of immediately prior to such Change of Control or (y) the relocation of the Participant's principal work location to a location outside a fifty (50)-mile radius from the Participant's principal work location as of the date of such Change of Control, except for required business travel to the extent substantially consistent with the Participant's business travel obligations as of immediately prior to such Change of Control. Notwithstanding the foregoing, Good Reason shall not exist unless: (a) the Participant provides Ashland or its applicable Affiliate with written notice of the act(s) alleged to constitute Good Reason within thirty (30) days of the Participant's knowledge of the occurrence of such act(s), (b) Ashland or its applicable Affiliate fails to cure such acts within thirty (30) days of receipt of such notice, and (c) the Participant exercises the Participant's right to terminate his or her employment for Good Reason within sixty (60) days thereafter.

Based upon the attainment of the Performance Goals outlined in the LTIP, the Award will be paid to the Participant in Shares within 30 days following the vesting of the Award as provided herein, subject to tax deductions and withholding as set forth in Section 9(d) of the Plan.

Ashland confirms this Award to the Participant, as a matter of separate agreement and not in lieu of salary or any other compensation for services, of the number of Stock-Settled Performance Units set forth above, subject to and upon all the terms, provisions and conditions contained herein and in the LTIP and the Plan. Copies of the Plan and the related Prospectus are available for the Participant's review on Fidelity's website.

Nothing contained in this Agreement, the LTIP or in the Plan shall confer upon the Participant any right to continue in the employment of, or remain in the service of, Ashland or its Affiliates.

Information about the Participant and the Participant's participation in the Plan may be collected, recorded and held, used and disclosed by and among Ashland, its Affiliates and any third-party Plan administrators as necessary for the purpose of managing and administering the Plan. The Participant understands that such processing of this information may need to be carried out by Ashland, its Affiliates and by third-party administrators whether such persons are located within the Participant's country or elsewhere, including the United States of America. By accepting this Award, the Participant consents to the processing of information relating to the Participant and the Participant's participation in the Plan in any one or more of the ways referred to above.

The Participant consents and agrees to electronic delivery of any documents that Ashland may elect to deliver (including, but not limited to, prospectuses, prospectus supplements, grant or award notifications and agreements, account statements, annual and quarterly reports, and all other forms of communications) in connection with this and any other award made or offered under the Plan. The Participant understands that, unless earlier revoked by the Participant by giving written notice to: Ashland Global Holdings Inc., Attn: Shea Blackburn, 50 E. RiverCenter Blvd., Covington, KY

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41011, this consent shall be effective for the duration of the Award. The Participant also understands that the Participant shall have the right at any time to request that Ashland deliver written copies of any and all materials referred to above at no charge.

Please contact Shea Blackburn (859) 815-3720; swblackburn@ashland.com if you have any questions.

This Award of Stock-Settled Performance Units is subject to the Participant’s online acceptance of the terms and conditions of this Agreement through the Fidelity website. The right to the Stock-Settled Performance Units under the Plan shall expire if not accepted by _____.

By accepting the terms and conditions of this Agreement, the Participant acknowledges receipt of a copy of the Plan, Prospectus, and Ashland’s most recent Annual Report and Proxy Statement (the “Prospectus Information”). The Participant represents that he or she is familiar with the terms and provisions of the Prospectus Information and hereby accepts this Award on the terms and conditions set forth herein and in the Plan, and acknowledges that he or she has had the opportunity to obtain independent legal advice at his or her expense prior to accepting this Award.

IN WITNESS WHEREOF, Ashland Global Holdings Inc. has caused this instrument to be executed and delivered effective as of the day and year first above written.

ASHLAND GLOBAL HOLDINGS INC.

By: _____
Name: _____
Title: _____

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CERTIFICATIONS

I, William A. Wulfsohn, certify that:

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

Date: July 31, 2019

/s/ William A. Wulfsohn

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

CERTIFICATIONS

I, J. Kevin Willis, certify that:

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

Date: July 31, 2019

/s/ J. Kevin Willis

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

ASHLAND GLOBAL HOLDINGS INC.

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

In connection with the Quarterly Report of Ashland Global Holdings Inc. (the "Company") on Form 10-Q for the period ended June 30, 2019, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned, William A. Wulfsohn, Chief Executive Officer of the Company, and J. Kevin Willis, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

/s/ William A. Wulfsohn

William A. Wulfsohn
Chief Executive Officer
July 31, 2019

/s/ J. Kevin Willis

J. Kevin Willis
Chief Financial Officer
July 31, 2019