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

# FORM 10-Q

(Mark One)

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

**For the quarterly period ended December 31, 2022**

**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 INC.

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

8145 Blazer Drive
Wilmington, Delaware 19808
Telephone Number (302) 995-3000

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 |

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

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.

| | | | |
|---|---|---|---|
| Large Accelerated Filer | ☑ | Accelerated Filer | ☐ |
| Non-Accelerated Filer | ☐ | Smaller Reporting Company | ☐ |
| | | Emerging Growth Company | ☐ |

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

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

At December 31, 2022, there were 54,271,587 shares of Registrant's Common Stock outstanding.

## PART I - FINANCIAL INFORMATION

### ITEM 1. FINANCIAL STATEMENTS

### ASHLAND INC. AND CONSOLIDATED SUBSIDIARIES
### STATEMENTS OF CONSOLIDATED COMPREHENSIVE INCOME (LOSS)

| (In millions except per share data - unaudited) | Three months ended December 31 2022 | Three months ended December 31 2021 |
|---|---|---|
| Sales | $ 525 | $ 512 |
| Cost of sales | 360 | 351 |
| Gross profit | 165 | 161 |
| | | |
| Selling, general and administrative expense | 93 | 82 |
| Research and development expense | 13 | 13 |
| Intangibles amortization expense - Note G | 23 | 24 |
| Equity and other income | 1 | — |
| Operating income | 37 | 42 |
| | | |
| Net interest and other expense (income) | (14) | 5 |
| Other net periodic benefit loss | (1) | — |
| Income from continuing operations before income taxes | 50 | 37 |
| Income tax expense - Note J | 8 | 5 |
| Income from continuing operations | 42 | 32 |
| Income (loss) from discontinued operations (net of income taxes) - Note C | (2) | 16 |
| Net income | $ 40 | $ 48 |
| | | |
| **PER SHARE DATA** | | |
| Basic earnings per share - Note M | | |
| Income from continuing operations | $ 0.77 | $ 0.56 |
| Income (loss) from discontinued operations | (0.03) | 0.29 |
| Net income | $ 0.74 | $ 0.85 |
| | | |
| Diluted earnings per share - Note M | | |
| Income from continuing operations | $ 0.76 | $ 0.55 |
| Income (loss) from discontinued operations | (0.03) | 0.28 |
| Net income | $ 0.73 | $ 0.83 |
| | | |
| **COMPREHENSIVE INCOME** | | |
| Net income | $ 40 | $ 48 |
| Other comprehensive income (loss), net of tax | | |
| Unrealized translation gain (loss) | 82 | (17) |
| Unrealized loss on commodity hedges | (4) | (3) |
| Other comprehensive income (loss) - Note N | 78 | (20) |
| Comprehensive income | $ 118 | $ 28 |

SEE NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS.

**ASHLAND INC. AND CONSOLIDATED SUBSIDIARIES**
**CONDENSED CONSOLIDATED BALANCE SHEETS**

| (In millions - unaudited) | December 31 2022 | September 30 2022 |
|---|---|---|
| **ASSETS** | | |
| **Current assets** | | |
| Cash and cash equivalents | $ 532 | $ 646 |
| Accounts receivable (a) - Note H | 351 | 402 |
| Inventories - Note F | 724 | 629 |
| Other assets | 117 | 91 |
| Total current assets | 1,724 | 1,768 |
| **Noncurrent assets** | | |
| Property, plant and equipment | | |
| Cost | 3,116 | 3,050 |
| Accumulated depreciation | 1,770 | 1,712 |
| Net property, plant and equipment | 1,346 | 1,338 |
| Goodwill - Note G | 1,369 | 1,312 |
| Intangibles - Note G | 959 | 963 |
| Operating lease assets, net - Note I | 107 | 107 |
| Restricted investments - Note E | 343 | 313 |
| Asbestos insurance receivable (b) - Note L | 135 | 138 |
| Deferred income taxes | 20 | 20 |
| Other assets | 256 | 254 |
| Total noncurrent assets | 4,535 | 4,445 |
| **Total assets** | $ 6,259 | $ 6,213 |
| | | |
| **LIABILITIES AND EQUITY** | | |
| **Current liabilities** | | |
| Trade and other payables | $ 246 | $ 265 |
| Accrued expenses and other liabilities | 200 | 269 |
| Current operating lease obligations - Note I | 18 | 19 |
| Total current liabilities | 464 | 553 |
| **Noncurrent liabilities** | | |
| Long-term debt - Note H | 1,316 | 1,270 |
| Asbestos litigation reserve - Note L | 454 | 472 |
| Deferred income taxes | 176 | 176 |
| Employee benefit obligations - Note K | 110 | 103 |
| Operating lease obligations - Note I | 95 | 94 |
| Other liabilities | 326 | 325 |
| Total noncurrent liabilities | 2,477 | 2,440 |
| Commitments and contingencies - Note L | | |
| **Stockholders' equity - Note N** | 3,318 | 3,220 |
| | | |
| **Total liabilities and stockholders' equity** | $ 6,259 | $ 6,213 |

(a) Accounts receivable includes an allowance for credit losses of $4 million at both December 31, 2022 and September 30, 2022.
(b) Asbestos insurance receivable includes an allowance for credit losses of $3 million at both December 31, 2022 and September 30, 2022.

SEE NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS.

## ASHLAND INC. AND CONSOLIDATED SUBSIDIARIES
## STATEMENTS OF CONDENSED CONSOLIDATED CASH FLOWS

| | Three months ended December 31 | |
|---|---|---|
| (In millions - unaudited) | 2022 | 2021 |
| **CASH FLOWS PROVIDED (USED) BY OPERATING ACTIVITIES FROM CONTINUING OPERATIONS** | | |
| Net income | $ 40 | $ 48 |
| Loss (Income) from discontinued operations (net of income taxes) | 2 | (16) |
| Adjustments to reconcile income from continuing operations to cash flows from operating activities: | | |
| Depreciation and amortization | 59 | 60 |
| Original issue discount and debt issuance costs amortization | 1 | 1 |
| Deferred income taxes | 7 | 3 |
| Stock based compensation expense | 7 | 4 |
| Excess tax benefit on stock based compensation | 1 | — |
| Income from restricted investments | (26) | (13) |
| Asset impairments | 4 | — |
| Pension contributions | (1) | (1) |
| Change in operating assets and liabilities (a) | (123) | (72) |
| Total cash flows provided (used) by operating activities from continuing operations | (29) | 14 |
| **CASH FLOWS PROVIDED (USED) BY INVESTING ACTIVITIES FROM CONTINUING OPERATIONS** | | |
| Additions to property, plant and equipment | (23) | (15) |
| Proceeds from disposal of property, plant and equipment | — | 1 |
| Proceeds from settlement of company-owned life insurance contracts | 2 | — |
| Company-owned life insurance payments | (1) | — |
| Funds restricted for specific transactions | (5) | — |
| Reimbursements from restricted investments | — | 7 |
| Proceeds from sale of securities | — | 4 |
| Purchases of securities | — | (4) |
| Total cash flows used by investing activities from continuing operations | (27) | (7) |
| **CASH FLOWS PROVIDED (USED) BY FINANCING ACTIVITIES FROM CONTINUING OPERATIONS** | | |
| Proceeds from short-term debt | — | 11 |
| Cash dividends paid | (18) | (17) |
| Stock based compensation employee withholding taxes paid in cash | (9) | (5) |
| Total cash flows used by financing activities from continuing operations | (27) | (11) |
| **CASH USED BY CONTINUING OPERATIONS** | (83) | (4) |
| Cash provided (used) by discontinued operations | | |
| Operating cash flows | (34) | (8) |
| Investing cash flows | — | (1) |
| Total cash provided by discontinued operations | (34) | (9) |
| Effect of currency exchange rate changes on cash and cash equivalents | 3 | (3) |
| **DECREASE IN CASH AND CASH EQUIVALENTS** | (114) | (16) |
| **CASH AND CASH EQUIVALENTS - BEGINNING OF PERIOD** | 646 | 210 |
| **CASH AND CASH EQUIVALENTS - END OF PERIOD** | $ 532 | $ 194 |

(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. These statements omit certain information and footnote disclosures required for complete annual financial statements and, therefore, should be read in conjunction with the Ashland Inc. and consolidated subsidiaries (Ashland) Annual Report on Form 10-K for the fiscal year ended September 30, 2022. Results of operations for the period ended December 31, 2022 are not necessarily indicative of the expected results for the remaining quarters in the fiscal year.

Ashland is comprised of the following reportable segments: Life Sciences, Personal Care, Specialty Additives and Intermediates. Unallocated and Other includes corporate governance activities and certain legacy matters. For additional information, see Note Q.

### 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, 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, environmental remediation, asbestos litigation, the accounting for goodwill and other intangible assets, and income taxes. 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, 2022. There were no new standards that were either issued or adopted in the current fiscal year that will have a material impact on Ashland's consolidated financial statements.

## NOTE B – DIVESTITURES

***Performance Adhesives***

On February 28, 2022, Ashland completed the sale of its Performance Adhesives business to Arkema, a French société anonyme. Proceeds from the sale were approximately $1.7 billion, net of transaction costs.

The transaction represented a strategic shift in Ashland's business and had a major effect on Ashland's operations and financial results. Accordingly, the operating results and cash flows related to Performance Adhesives 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 Performance Adhesives 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 Performance Adhesives segment 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 zero and $4 million for the three months ended December 31, 2022 and 2021.

***Other manufacturing facility sale***

During the three months ended December 31, 2022, Ashland entered into a definitive sale agreement to sell a Specialty Additives manufacturing facility for less than $1 million. This transaction is expected to close within the next twelve months. The net asset value related to these sites was less than $1 million and $4 million at December 31, 2022 and September 30, 2022, respectively. During the three months ended December 31, 2022, a $4 million impairment charge was recorded within the selling, general and administrative expense caption of the Statement of Consolidated Comprehensive Income (Loss) for this manufacturing facility.

## NOTE C– DISCONTINUED OPERATIONS

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.

Components of amounts reflected in the Statements of Consolidated Comprehensive Income (Loss) related to discontinued operations are presented in the following table for the three months ended December 31, 2022 and 2021.

| | Three months ended December 31 | |
|---|---|---|
| (In millions) | 2022 | 2021 |
| **Income (loss) from discontinued operations (net of tax)** | | |
| Performance Adhesives | $ (1) | $ 17 |
| Distribution | (1) | (1) |
| | $ (2) | $ 16 |

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 Performance Adhesives for the three months ended December 31, 2021. This disclosure was not applicable for the three months ended December 31, 2022 as a result of the sale in fiscal 2022.

| | Three months ended December 31 |
|---|---|
| (In millions) | 2021 |
| **Income (loss) from discontinued operations attributable to Performance Adhesives** | |
| Sales | $ 96 |
| Cost of sales | (67) |
| Selling, general and administrative expense | (5) |
| Research and development expense | (2) |
| Pretax income of discontinued operations | 22 |
| Income tax expense | (5) |
| Income from discontinued operations | $ 17 |

## NOTE D – RESTRUCTURING ACTIVITIES

Ashland periodically implements 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.

**Fiscal 2023 Life Sciences restructuring program**

During December 2022, Ashland implemented a restructuring program within the Nutraceuticals business of the Life Sciences segment. Ashland recorded severance expense of $1 million during the three months ended December 31, 2022. As of December 31, 2022, the severance reserve associated with this program was $1 million.

## NOTE E – FAIR VALUE MEASUREMENTS

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 December 31, 2022.

| (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 | $ 532 | $ 532 | $ 532 | $ — | $ — |
| Restricted investments (a) (b) | 404 | 404 | 404 | — | — |
| Investment of captive insurance company (c) | 10 | 10 | 10 | — | — |
| Foreign currency derivatives (d) | 1 | 1 | — | 1 | — |
| Commodity derivatives (d) | 1 | 1 | — | 1 | — |
| Total assets at fair value | $ 948 | $ 948 | $ 946 | $ 2 | $ — |
| **Liabilities** | | | | | |
| Foreign currency derivatives (e) | $ 1 | $ 1 | $ — | $ 1 | $ — |
| Commodity derivatives (e) | 3 | 3 | — | 3 | — |
| Total liabilities at fair value | $ 4 | $ 4 | $ — | $ 4 | $ — |

(a) Included in restricted investments and $61 million within other current assets in the Condensed Consolidated Balance Sheets.
(b) Includes $259 million related to the Asbestos trust and $145 million related to the Environmental trust.
(c) Included in other noncurrent assets in the Condensed Consolidated Balance Sheets.
(d) Included in accounts receivable in the Condensed Consolidated Balance Sheets.
(e) Included in accrued expenses and other liabilities in the Condensed Consolidated Balance Sheets.

The following table summarizes financial asset instruments subject to recurring fair value measurements as of September 30, 2022.

| (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 | $ 646 | $ 646 | $ 646 | $ — | $ — |
| Restricted investments (a) (b) | 374 | 374 | 374 | — | — |
| Investment of captive insurance company (c) | 9 | 9 | 9 | — | — |
| Foreign currency derivatives (d) | 1 | 1 | — | 1 | — |
| Commodity derivatives (d) | 4 | 4 | — | 4 | — |
| Total assets at fair value | $ 1,034 | $ 1,034 | $ 1,029 | $ 5 | $ — |
| **Liabilities** | | | | | |
| Foreign currency derivatives (e) | $ 9 | $ 9 | $ — | $ 9 | $ — |
| Commodity derivatives (e) | 1 | 1 | — | 1 | — |
| Total liabilities at fair value | $ 10 | $ 10 | $ — | $ 10 | $ — |

(a) Included in restricted investments and $61 million within other current assets in the Condensed Consolidated Balance Sheets.
(b) Includes $245 million related to the Asbestos trust and $129 million related to the Environmental trust.
(c) Included in other noncurrent assets in the Condensed Consolidated Balance Sheets.
(d) Included in accounts receivable in the Condensed Consolidated Balance Sheets.
(e) Included in accrued expenses and other liabilities in the Condensed Consolidated Balance Sheets.

### Restricted investments

Ashland maintains certain investments in a company restricted renewable annual trusts for the purpose of paying future asbestos indemnity and defense costs and future environmental remediation and related litigation costs. The financial instruments are designated as investment securities, classified as Level 1 measurements within the fair value hierarchy. These securities were classified primarily as noncurrent restricted investment assets, with $61 million classified within other current assets, in the Condensed Consolidated Balance Sheets as of December 31, 2022 and September 30, 2022.

The following table presents gross unrealized gains and losses for the restricted securities as of December 31, 2022 and September 30, 2022:

| (In millions) | Adjusted Cost | Gross Unrealized Gain | Gross Unrealized Loss | Fair Value |
|---|---|---|---|---|
| **As of December 31, 2022** | | | | |
| Demand deposit | $ 14 | $ — | $ — | $ 14 |
| Equity mutual fund | 187 | 23 | (12) | 198 |
| Fixed income mutual fund | 234 | — | (42) | 192 |
| Fair value | $ 435 | $ 23 | $ (54) | $ 404 |
| **As of September 30, 2022** | | | | |
| Demand deposit | $ 6 | $ — | $ — | $ 6 |
| Equity mutual fund | 186 | 20 | (25) | 181 |
| Fixed income mutual fund | 234 | — | (47) | 187 |
| Fair value | $ 426 | $ 20 | $ (72) | $ 374 |

The following table presents the investment income, net gains and losses realized, funds restricted for specific transactions, and disbursements related to the investments within the portfolio for the three months ended December 31, 2022 and 2021.

| | Three months ended December 31 | |
|---|---|---|
| (In millions) | 2022 | 2021 |
| Investment income (a) | $ 4 | $ 8 |
| Net gains (losses) (a) | 21 | 4 |
| Funds restricted for specific transactions | 5 | — |
| Disbursements | — | (7) |

(a) Included in the net interest and other expense (income) caption within the Statements of Consolidated Comprehensive Income (Loss).

### Foreign currency derivatives

Ashland conducts business in a variety of foreign currencies. Accordingly, Ashland regularly uses foreign currency derivative instruments to manage exposure on certain transactions denominated in foreign currencies to curtail potential earnings volatility effects on certain assets and liabilities, including short-term inter-company loans, denominated in currencies other than Ashland's functional currency of an entity. These derivative contracts generally require exchange of one foreign currency for another at a fixed rate at a future date and generally have maturities of less than twelve months. All contracts are valued at fair value with net changes in fair value recorded within the selling, general and administrative expense caption. The impacts of these contracts were largely offset by gains and losses resulting from the impact of changes in exchange rates on transactions denominated in non-functional currencies. The following table summarizes the net gains and losses recognized during the three months ended December 31, 2022 and 2021 within the Statements of Consolidated Comprehensive Income (Loss).

| | Three months ended December 31 | |
|---|---|---|
| (In millions) | 2022 | 2021 |
| Foreign currency derivative gains | $ 8 | $ 2 |

The following table summarizes the fair values of the outstanding foreign currency derivatives as of December 31, 2022 and September 30, 2022 included in accounts receivable and accrued expenses and other liabilities of the Condensed Consolidated Balance Sheets.

| (In millions) | December 31 2022 | September 30 2022 |
| --- | --- | --- |
| Foreign currency derivative assets | $ 1 | $ 1 |
| Notional contract values | 147 | 133 |
| | | |
| Foreign currency derivative liabilities | $ 1 | $ 9 |
| Notional contract values | 185 | 535 |

**Commodity derivatives**

To manage its exposure to the market price volatility of natural gas consumed by its U.S. plants during the manufacturing process, Ashland regularly enters into forward contracts that are designated as cash flow hedges.

The following table summarizes the gains and losses recognized during the three months ended December 31, 2022 and 2021, respectively, within the cost of sales caption of the Statements of Consolidated Comprehensive Income (Loss).

| | Three months ended December 31 | |
| --- | --- | --- |
| (In millions) | 2022 | 2021 |
| Commodity derivative gains | $ 1 | $ 2 |

The following table summarizes the fair values of the outstanding commodity derivatives as of December 31, 2022, and September 30, 2022 included in accounts receivable and accrued expenses and other liabilities of the Condensed Consolidated Balance Sheets.

| (In millions) | December 31 2022 | September 30 2022 |
| --- | --- | --- |
| Commodity derivative assets | $ 1 | $ 4 |
| Notional contract values | 6 | 13 |
| | | |
| Commodity derivative liabilities | $ 3 | $ 1 |
| Notional contract values | 16 | 9 |

**Other financial instruments**

At December 31, 2022 and September 30, 2022, Ashland's long-term debt (including the current portion and excluding debt issuance cost discounts) had a carrying value of $1,330 million and $1,284 million, respectively, compared to a fair value of $1,186 million and $1,102 million, respectively. The fair values of long-term debt are based on quoted market prices or, if market prices are not available, the present values of the underlying cash flows discounted at Ashland’s incremental borrowing rates. The carrying value of long-term debt with variable interest approximated fair value.

## NOTE F – INVENTORIES

Inventories are carried at the lower of cost or net realizable value. Inventories are stated at cost using the weighted-average cost method. This method values inventories using average costs for raw materials and most recent production costs for labor and overhead.

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

| (In millions) | December 31 2022 | September 30 2022 |
| --- | --- | --- |
| Finished products | $ 462 | $ 391 |
| Raw materials, supplies and work in process | 262 | 238 |
| | $ 724 | $ 629 |

## NOTE G – GOODWILL AND OTHER INTANGIBLES

### Goodwill

Ashland tests goodwill and other indefinite-lived intangible assets for impairment annually as of July 1 and when events and circumstances indicate an impairment may have occurred.

No indicators of impairment were identified in the three months ended December 31, 2022.

The following is a progression of goodwill by reportable segment for the three months ended December 31, 2022.

| (In millions) | Life Sciences | Personal Care (a) | Specialty Additives (a) | Intermediates (a) | Total |
|---|---|---|---|---|---|
| Balance at September 30, 2022 | $ 787 | $ 118 | $ 407 | $ — | $ 1,312 |
| Currency translation | 35 | 5 | 17 | — | 57 |
| Balance at December 31, 2022 | $ 822 | $ 123 | $ 424 | $ — | $ 1,369 |

(a) As of December 31, 2022 and September 30, 2022, there were accumulated impairments of $356 million, $174 million and $90 million related to the Personal Care, Specialty Additives and Intermediates reportable segments, respectively.

### Other intangible assets

Intangible assets principally consist of trademarks and trade names, intellectual property and customer and supplier relationships. Intangible assets classified as finite are amortized on a straight-line basis over their estimated useful lives. The cost of trademarks and trade names is amortized principally over 3 to 20 years, intellectual property over 3 to 20 years, and customer and supplier relationships over 10 to 24 years.

Ashland annually reviews, as of July 1, indefinite-lived intangible assets for possible impairment or whenever events or changes in circumstances indicate that carrying amounts may not be recoverable.

No indicators of impairment were identified in the three months ended December 31, 2022.

Other intangible assets were comprised of the following as of December 31, 2022 and September 30, 2022.

| | December 31, 2022 | | |
|---|---|---|---|
| (In millions) | Gross carrying amount | Accumulated amortization | Net carrying amount |
| Definite-lived intangibles | | | |
| Trademarks and trade names | $ 98 | $ (39) | $ 59 |
| Intellectual property | 734 | (546) | 188 |
| Customer and supplier relationships | 824 | (390) | 434 |
| Total definite-lived intangibles | 1,656 | (975) | 681 |
| | | | |
| Indefinite-lived intangibles | | | |
| Trademarks and trade names | 278 | — | 278 |
| Total intangible assets | $ 1,934 | $ (975) | $ 959 |

| | September 30, 2022 | | |
|---|---|---|---|
| (In millions) | Gross carrying amount | Accumulated amortization | Net carrying amount |
| Definite-lived intangibles | | | |
| Trademarks and trade names | $ 95 | $ (37) | $ 58 |
| Intellectual property | 718 | (523) | 195 |
| Customer and supplier relationships | 801 | (369) | 432 |
| Total definite-lived intangibles | 1,614 | (929) | 685 |
| Indefinite-lived intangibles | | | |
| Trademarks and trade names | 278 | — | 278 |
| Total intangible assets | $ 1,892 | $ (929) | $ 963 |

Amortization expense recognized on intangible assets was $23 million and $24 million for the three months ended December 31, 2022 and 2021, respectively, and is included in the intangibles amortization expense caption of the Statements of Consolidated Comprehensive Income (Loss). Estimated amortization expense for future periods is $92 million in 2023 (includes three months actual and nine months estimated), $78 million in 2024, $73 million in 2025, $70 million in 2026 and $50 million in 2027. 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 AND OTHER FINANCING ACTIVITIES

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

| (In millions) | December 31, 2022 | September 30, 2022 |
|---|---|---|
| 3.375% Senior Notes, due 2031 | $ 450 | $ 450 |
| 2.00% Senior Notes, due 2028 (Euro 500 million principal) | 534 | 489 |
| 6.875% notes, due 2043 | 282 | 282 |
| 6.50% junior subordinated notes, due 2029 | 61 | 60 |
| Other (a) | (11) | (11) |
| Total debt | 1,316 | 1,270 |
| Short-term debt (includes current portion of long-term debt) | — | — |
| Long-term debt (less current portion) | $ 1,316 | $ 1,270 |

(a) Other includes $14 million of debt issuance costs as of December 31, 2022 and September 30, 2022, respectively.

The scheduled aggregate maturities of long-term debt by year (including the current portion and excluding debt issuance costs) are as follows as of December 31, 2022: zero in the next 4 years and $4 million in 2027.

### Accounts Receivable Facilities and Off-Balance Sheet Arrangements

*U.S. Accounts Receivable Sales Program*

Ashland continues to maintain its U.S. Accounts Receivable Sales Program entered into during fiscal 2021. Ashland accounts for the receivables transferred to buyers as sales. Ashland recognizes any gains or losses based on the excess of proceeds received net of buyer’s discounts and fees compared to the carrying value of the assets. Proceeds received, net of buyer’s discounts and fees, are recorded within the operating activities of the Statements of Condensed Consolidated Cash Flows. Losses on sale of assets, including related transaction expenses are recorded within the net interest and other expense (income) caption of the Statements of Consolidated Comprehensive Income (Loss). Ashland regularly assesses its servicing obligations and records them as assets or liabilities when appropriate. Ashland also monitors its obligation with regards to the limited guarantee and records the resulting guarantee liability when warranted. When applicable, Ashland discloses the amount of the receivable that serves as over-collateralization as a restricted asset.

Ashland recognized a loss of less than $1 million within the Statements of Consolidated Comprehensive Income (Loss) for the three months ended December 31, 2022 and 2021, respectively, within the net interest and other expense (income) caption associated with sales under the program. Ashland has recorded $90 million of sales at December 31, 2022 against the buyer’s limit, which was $100 million at December 31, 2022 compared to $110 million of sales at September 30, 2022 against the buyer's limit, which was $125 million at September 30, 2022. Ashland transferred $115 million and $136 million in receivables to the special purpose entity (SPE) as of December 31, 2022 and September 30, 2022, respectively. Ashland recorded liabilities related to its service obligations and limited guarantee as of December 31, 2022 and September 30, 2022 of less than $1 million. As of December 31, 2022, the year-to-date gross cash proceeds received for receivables transferred and derecognized was $49 million, of which $68 million was collected, which includes collections from the sales in prior year transferred to the buyer. The difference of $19 million represents the impact of a net reduction in accounts receivable sales volume during the current year.

*Foreign Accounts Receivable Securitization Facility*

Ashland continues to maintain its Foreign 2018 Accounts Receivable Securitization Facility. Ashland accounts for the Foreign 2018 Accounts Receivable Securitization Facility as secured borrowings, and the receivables sold pursuant to the facility are included in the Consolidated Balance Sheets as accounts receivable. At December 31, 2022 and September 30, 2022, the outstanding amounts of accounts receivable transferred by Ashland were $158 million and $162 million, respectively, and there were zero borrowings (denominated in multiple currencies) under the facility in both periods.

**Available borrowing capacity and liquidity**

The borrowing capacity remaining under the 2022 Credit Agreement which included the $600 million Revolving Credit Facility was $581 million due to an outstanding balance of zero, as well as a reduction of $19 million for letters of credit outstanding as of December 31, 2022. Ashland's total borrowing capacity at December 31, 2022 was $687 million, which included $106 million of available capacity from the foreign 2018 Accounts Receivable Securitization Facility.

Additionally, Ashland had zero available liquidity under its current U.S. Accounts Receivable Sales Program as of December 31, 2022.

**Covenants related to current Ashland debt agreements**

Ashland's debt contains usual and customary representations, warranties and affirmative and negative covenants, including financial covenants for leverage and interest coverage ratios, limitations on liens, additional subsidiary indebtedness, restrictions on subsidiary distributions, investments, mergers, sale of assets and restricted payments and other customary limitations. As of December 31, 2022, Ashland is in compliance with all debt agreement covenant restrictions.

The maximum consolidated net leverage ratio permitted under Ashland's current credit agreement (the 2022 Credit Agreement) is 4.0. At December 31, 2022, Ashland’s calculation of the consolidated net leverage ratio was 1.3.

The minimum required consolidated interest coverage ratio under the 2022 Credit Agreement during its entire duration is 3.0. At December 31, 2022, Ashland’s calculation of the interest coverage ratio was 10.8.

## NOTE I – LEASING ARRANGEMENTS

The components of lease cost recognized within the Statements of Consolidated Comprehensive Income (Loss) were as follows:

| | | Three months ended December 31 | |
|---|---|---|---|
| (In millions) | Location | 2022 | 2021 |
| **Lease cost:** | | | |
| Operating lease cost | Selling, General & Administrative | $ 3 | $ 3 |
| Operating lease cost | Cost of Sales | 3 | 4 |
| Variable lease cost | Selling, General & Administrative | 1 | 1 |
| Variable lease cost | Cost of Sales | 2 | 1 |
| Short-term leases | Cost of Sales | 1 | 1 |
| Total lease cost | | $ 10 | $ 10 |

Right-of-use assets exchanged for new operating lease obligations was $2 million and $1 million for the three months ended December 31, 2022 and 2021, respectively.

The following table provides cash paid for amounts included in the measurement of operating lease liabilities:

| | Three months ended December 31 | |
|---|---|---|
| (In millions) | 2022 | 2021 |
| Operating cash flows from operating leases | $ 7 | $ 7 |

## NOTE J – INCOME TAXES

### 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 16% for the three months ended December 31, 2022.

The current quarter tax rate was impacted by jurisdictional income mix, as well as net $1 million from favorable tax discrete items.

### Prior fiscal year

The overall effective tax rate was 13% for the three months ended December 31, 2021. The quarter tax rate was impacted by jurisdictional income mix, as well as $3 million from favorable tax discrete items.

### Unrecognized tax benefits

Changes in unrecognized tax benefits are summarized as follows for the three months ended December 31, 2022.

| (In millions) | |
|---|---|
| **Balance at October 1, 2022** | $ 84 |
| Increases related to positions taken in the current year | 1 |
| **Balance at December 31, 2022** | $ 85 |

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 $25 million and $35 million. 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 K - EMPLOYEE BENEFIT PLANS

### Plan contributions

For the three months ended December 31, 2022, Ashland contributed $1 million to its non-U.S. pension plans and zero to its U.S. pension plans. Ashland does not expect to contribute to its U.S. pension plans and expects to make additional contributions of approximately $3 million to its non-U.S. pension plans during the remainder of fiscal 2023.

### Components of net periodic benefit loss (income)

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

| | Pension benefits | | Other postretirement benefits | |
|---|---|---|---|---|
| (In millions) | 2022 | 2021 | 2022 | 2021 |
| **Three months ended December 31** | | | | |
| Service cost | $ 1 | $ 1 | $ — | $ — |
| Interest cost | 3 | 2 | — | — |
| Expected return on plan assets | (2) | (2) | — | — |
| Total net periodic benefit loss | $ 2 | $ 1 | $ — | $ — |

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 Income (Loss). All other components are recorded within the other net periodic benefit loss caption on the Statements of Consolidated Comprehensive Income (Loss), which netted to $1 million and zero for the three months ended December 31, 2022 and 2021, respectively.

## NOTE L – LITIGATION, CLAIMS AND CONTINGENCIES

### Asbestos litigation

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

To assist in developing and annually updating independent reserve estimates for future asbestos claims and related costs given various assumptions for Ashland and Hercules asbestos claims, Ashland retained third party actuarial experts Gnarus. The methodology used by Gnarus to project future asbestos costs is based largely on recent experience, including claim-filing and settlement rates, disease mix, 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, Gnarus 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. The amount and timing of settlements and number of open claims can fluctuate from period to period. A summary of Ashland asbestos claims activity, excluding Hercules claims, follows.

| | Three months ended December 31 | | Years ended September 30 | | |
|---|---|---|---|---|---|
| (In thousands) | 2022 | 2021 | 2022 | 2021 | 2020 |
| Open claims - beginning of year | 44 | 46 | 46 | 49 | 53 |
| New claims filed | 1 | — | 2 | 2 | 2 |
| Claims settled | — | — | (1) | (1) | (1) |
| Claims dismissed | (1) | (1) | (3) | (4) | (5) |
| Open claims - end of period | 44 | 45 | 44 | 46 | 49 |

*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. Ashland reviews this estimate and related assumptions quarterly and annually updates the results of a non-inflated, non-discounted approximate 40-year model developed with the assistance of Gnarus.

During the most recent update completed during 2022, it was determined that the liability for Ashland asbestos-related claims should be increased by $16 million. Total reserves for asbestos claims were $292 million at December 31, 2022 compared to $305 million at September 30, 2022.

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

| | Three months ended December 31 | | Years ended September 30 | | |
|---|---|---|---|---|---|
| (In millions) | 2022 | 2021 | 2022 | 2021 | 2020 |
| Asbestos reserve - beginning of year | $ 305 | $ 320 | $ 320 | $ 335 | $ 352 |
| Reserve adjustment | — | — | 16 | 12 | 13 |
| Amounts paid | (13) | (13) | (31) | (27) | (30) |
| Asbestos reserve - end of period (a) | $ 292 | $ 307 | $ 305 | $ 320 | $ 335 |

(a) Included $29 million classified in accrued expenses and other liabilities on the Condensed Consolidated Balance Sheets as of December 31, 2022 and September 30, 2022.

*Ashland asbestos-related receivables*

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

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

At December 31, 2022, Ashland’s receivable for recoveries of litigation defense and claim settlement costs from insurers amounted to $99 million (excluding the Hercules receivable for asbestos claims discussed below) compared to $101 million at September 30, 2022. During fiscal year 2022, the annual update of the model used for purposes of valuing the asbestos reserve and its impact on valuation of future recoveries from insurers was completed. This model update resulted in a $7 million increase in the receivable for probable insurance recoveries.

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

| | Three months ended December 31 | | Years ended September 30 | | |
|---|---|---|---|---|---|
| (In millions) | 2022 | 2021 | 2022 | 2021 | 2020 |
| Insurance receivable - beginning of year | $ 101 | $ 100 | $ 100 | $ 103 | $ 123 |
| Receivable adjustment (a) | — | — | 7 | 6 | 1 |
| Insurance settlement | — | — | — | — | (10) |
| Amounts collected | (2) | (1) | (6) | (9) | (11) |
| Insurance receivable - end of period (b) | $ 99 | $ 99 | $ 101 | $ 100 | $ 103 |

(a) 2021 includes a $2 million reserve adjustment related to allowances for credit losses as a result of Ashland's adoption of the new credit measurement standard. The total allowance for credit losses was $2 million as of December 31, 2022 and September 30, 2022.

(b) Includes $12 million classified in accounts receivable on the Condensed Consolidated Balance Sheets as of December 31, 2022 and September 30, 2022.

*Hercules asbestos-related litigation*

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

| | Three months ended December 31 | | Years ended September 30 | | |
|---|---|---|---|---|---|
| (In thousands) | 2022 | 2021 | 2022 | 2021 | 2020 |
| Open claims - beginning of year | 11 | 12 | 12 | 12 | 13 |
| New claims filed | — | 1 | 1 | 1 | 1 |
| Claims dismissed | — | (1) | (2) | (1) | (2) |
| Open claims - end of period | 11 | 12 | 11 | 12 | 12 |

*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. Ashland reviews this estimate, and related assumptions quarterly and annually updates the results of a non-inflated, non-discounted approximate 40-year model developed with the assistance of Gnarus. As a result of the most recent annual update of this estimate, completed during fiscal year 2022, it was determined that the liability for Hercules asbestos-related claims should be increased by $15 million. Total reserves for asbestos claims were $209 million at December 31, 2022 compared to $213 million at September 30, 2022.

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

| | Three months ended December 31 | | Years ended September 30 | | |
|---|---|---|---|---|---|
| (In millions) | 2022 | 2021 | 2022 | 2021 | 2020 |
| Asbestos reserve - beginning of year | $ 213 | $ 217 | $ 217 | $ 229 | $ 252 |
| Reserve adjustments | — | — | 15 | 8 | (3) |
| Amounts paid | (4) | (6) | (19) | (20) | (20) |
| Asbestos reserve - end of period (a) | $ 209 | $ 211 | $ 213 | $ 217 | $ 229 |

(a) Included $18 million classified in accrued expenses and other liabilities on the Condensed Consolidated Balance Sheets as of December 31, 2022 and September 30, 2022.

*Hercules asbestos-related receivables*

For the Hercules asbestos-related obligations, certain reimbursement obligations pursuant to coverage-in-place agreements with insurance carriers exist. As a result, any increases in the asbestos reserve have been partially offset by probable insurance recoveries. Ashland has estimated the value of probable insurance recoveries associated with its asbestos reserve based on management's interpretations and estimates surrounding the available or applicable insurance coverage, including an assumption that all solvent insurance carriers remain solvent. The estimated receivable consists exclusively of solvent domestic insurers.

As of December 31, 2022, Ashland's receivable for recoveries of litigation defense and claims costs from insurers with respect to Hercules amounted to $51 million compared to $52 million at September 30, 2022. During fiscal year 2022, 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 an increase of $7 million in the receivable for probable insurance recoveries.

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

| | Three months ended December 31 | | Years ended September 30 | | |
|---|---|---|---|---|---|
| (In millions) | 2022 | 2021 | 2022 | 2021 | 2020 |
| Insurance receivable - beginning of year | $ 52 | $ 47 | $ 47 | $ 47 | $ 49 |
| Receivable adjustment (a) | — | — | 7 | 1 | (2) |
| Amounts collected | (1) | — | (2) | (1) | — |
| Insurance receivable - end of period (b) | $ 51 | $ 47 | $ 52 | $ 47 | $ 47 |

(a) 2021 includes a $1 million reserve adjustment related to allowances for credit losses as a result of Ashland's adoption of the new credit measurement standard. The total allowance for credit losses was $1 million as of December 31, 2022 and September 30, 2022.

(b) Includes $3 million classified in accounts receivable on the Condensed Consolidated Balance Sheets as of December 31, 2022 and September 30, 2022.

*Asbestos litigation cost projection*

Projecting future asbestos costs is subject to numerous variables that are difficult to predict. In addition to the uncertainties surrounding the number of claims that might be received, other variables include the type and severity of the disease alleged by each claimant and the related costs incurred in resolving those claims, mortality rates, dismissal rates, uncertainties surrounding the litigation process from jurisdiction to jurisdiction and from case to case. Furthermore, any predictions with respect to these variables are subject to even greater uncertainty as the projection period lengthens. In light of these inherent uncertainties, Ashland believes that the asbestos reserves for Ashland and Hercules represent the best estimate within a range of possible outcomes. As a part of the process to develop these estimates of future asbestos costs, a range of long-term cost models was developed. These models are based on national studies that predict the number of people likely to develop asbestos-related diseases and are heavily influenced by assumptions regarding long-term inflation rates for indemnity payments and legal defense costs, as well as other variables mentioned previously. Ashland has currently estimated in various models ranging from approximately 40 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 $456 million for the Ashland asbestos-related litigation (current reserve of $292 million) and approximately $317 million for the Hercules asbestos-related litigation (current reserve of $209 million), depending on the combination of assumptions selected in the various models. If actual experience is worse than projected, relative to the number of claims filed, the severity of alleged disease associated with those claims or costs incurred to resolve those claims, or actuarial refinement or improvements to the assumptions used within these models are initiated, Ashland may need to further increase the estimates of the costs associated with asbestos claims and these increases could be material over time.

**Environmental remediation and asset retirement obligations**

Ashland is subject to various federal, state and local environmental laws and regulations that require environmental assessment or remediation efforts (collectively environmental remediation) at multiple locations. At December 31, 2022, such locations included 59 sites where Ashland has been identified as a potentially responsible party under Superfund or similar state laws, 109 current and former operating facilities and about 1225 service station properties, of which 17 are being actively remediated.

Ashland’s reserves for environmental remediation and related environmental litigation amounted to $206 million at December 31, 2022 compared to $211 million at September 30, 2022, of which $157 million at December 31, 2022 and September 30, 2022 was classified in other noncurrent liabilities on the Condensed Consolidated Balance Sheets. The remaining reserves were classified in accrued expenses and other liabilities on the Condensed Consolidated Balance Sheets.

The following table provides a reconciliation of the changes in the environmental remediation reserves during the three months ended December 31, 2022 and 2021.

| | Three months ended December 31 | |
|---|---|---|
| (In millions) | 2022 | 2021 |
| Reserve - beginning of period | $ 211 | $ 207 |
| Disbursements | (13) | (13) |
| Revised obligation estimates and accretion | 8 | 3 |
| Reserve - end of period | $ 206 | $ 197 |

The total reserves for environmental remediation reflect Ashland’s estimates of the most likely costs that will be incurred over an extended period to remediate identified conditions for which the costs are reasonably estimable, without regard to any third-party recoveries. Engineering studies, historical experience and other factors are used to identify and evaluate remediation alternatives and their related costs in determining the estimated reserves for environmental remediation. Ashland continues to discount certain environmental sites and regularly adjusts its reserves as environmental remediation continues. Ashland has estimated the value of its probable insurance recoveries associated with its environmental reserve based on management’s interpretations and estimates surrounding the available or applicable insurance coverage. At December 31, 2022 and September 30, 2022, Ashland’s recorded receivable for these probable insurance recoveries was $20 million and $21 million, of which $17 million at December 31, 2022 and September 30, 2022 was 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 ended December 31, 2022 and 2021.

| | Three months ended December 31 | |
|---|---|---|
| (In millions) | 2022 | 2021 |
| Environmental expense | $ 8 | $ 3 |
| Legal expense | 1 | 1 |
| Total expense | 9 | 4 |
| | | |
| Insurance receivable | — | — |
| Total expense, net of receivable activity (a) | $ 9 | $ 4 |

(a) Net expense of $1 million for the three months ended December 31, 2022 and 2021 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 (loss) from discontinued operations caption of the Statements of Consolidated Comprehensive Income (loss).

Environmental remediation reserves are subject to 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 and the extent of required cleanup efforts under existing environmental regulations. 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 $460 million. The largest reserve for any site is 13% of the remediation reserve.

**Other legal proceedings and claims**

In addition to the matters described above, there are other various claims, lawsuits and administrative proceedings pending or threatened against Ashland and its current and former subsidiaries. Such actions are with respect to commercial matters, product liability, toxic tort liability, and other environmental matters, which seek remedies or damages, some of which are for substantial amounts. While Ashland cannot predict with certainty the outcome of such actions, it believes that adequate reserves have been recorded and losses already recognized with respect to such actions were immaterial as of December 31, 2022. There is a reasonable possibility that a loss exceeding amounts already recognized may be incurred related to these actions; however, Ashland believes that such potential losses were immaterial as of December 31, 2022.

## NOTE M – 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 at December 31, 2022 and 2021, respectively. The majority of these shares are for warrants with a strike price of $128.66. Earnings per share is reported under the treasury stock method.

| | Three months ended December 31 | |
|---|---|---|
| (In millions, except per share data) | 2022 | 2021 |
| **Numerator** | | |
| Numerator for basic and diluted EPS - Income (loss) from continuing operations | $ 42 | $ 32 |
| **Denominator** | | |
| Denominator for basic EPS - Weighted-average common shares outstanding | 54 | 57 |
| Share based awards convertible to common shares | 1 | 1 |
| Denominator for diluted EPS - Adjusted weighted-average shares and assumed conversions | 55 | 58 |
| **EPS from continuing operations** | | |
| Basic | $ 0.77 | $ 0.56 |
| Diluted | 0.76 | 0.55 |

## NOTE N – EQUITY ITEMS

### Stockholder dividends

Dividends of 33.5 cents and 30.0 cents per share were paid in the first quarters of fiscal 2023 and 2022, respectively.

### 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.

| | 2022 | | | 2021 | | |
|---|---|---|---|---|---|---|
| (In millions) | Before tax | Tax (expense) benefit | Net of tax | Before tax | Tax (expense) benefit | Net of tax |
| **Three months ended December 31** | | | | | | |
| Other comprehensive income (loss) | | | | | | |
| Unrealized translation gain (loss) | $ 83 | $ (1) | $ 82 | $ (18) | $ 1 | $ (17) |
| Unrealized loss on commodity hedges | (5) | 1 | (4) | (4) | 1 | (3) |
| Total other comprehensive income (loss) | $ 78 | $ — | $ 78 | $ (22) | $ 2 | $ (20) |

**Summary of stockholders’ equity**

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

| | Three months ended December 31 | |
|---|---|---|
| (In millions) | 2022 | 2021 |
| **Common stock and paid in capital** | | |
| Balance, beginning of period | $ 136 | $ 328 |
| Common shares issued under stock incentive and other plans (a) | (2) | — |
| Balance, end of period | 134 | 328 |
| **Retained earnings** | | |
| Balance, beginning of period | 3,653 | 2,796 |
| Net income | 40 | 48 |
| Regular dividends | (18) | (17) |
| Balance, end of period | 3,675 | 2,827 |
| **Accumulated other comprehensive income (loss)** | | |
| Balance, beginning of period | (569) | (372) |
| Unrealized translation gain (loss) | 82 | (17) |
| Unrealized loss on commodity hedges | (4) | (3) |
| Balance, end of period | (491) | (392) |
| Total stockholders' equity | $ 3,318 | $ 2,763 |
| Cash dividends declared per common share | $ 0.335 | $ 0.300 |

(a) Common shares issued were 127,577 shares and 94,715 for the three months ended December 31, 2022 and 2021, respectively. Includes $9 million and $5 million associated with stock based compensation employee withholding taxes for the three months ended December 31, 2022 and 2021, respectively.

## NOTE O – STOCK INCENTIVE PLANS

The components of Ashland’s pre-tax stock-based compensation expense included in continuing operations are as follows:

| | Three months ended December 31 | |
|---|---|---|
| (In millions) | 2022 (a) | 2021 (b) |
| Nonvested stock awards | 3 | 4 |
| Performance share awards | 5 | 2 |
| | $ 8 | $ 6 |

(a) Included $1 million of expense related to cash-settled nonvested restricted stock awards during the three months ended December 31, 2022.
(b) Included $2 million of expense related to cash-settled nonvested restricted stock awards during the three months ended December 31, 2021.

## NOTE P – REVENUE

### Disaggregation of revenue

Ashland disaggregates its revenue by segment and geographical region as Ashland believes these categories best depict how management reviews the financial performance of its operations. Ashland includes only U.S. and Canada in its North America designation and includes Europe, the Middle East and Africa in its Europe designation. See the following tables for details. See Note Q for additional information.

Sales by geography

| (In millions) | Three months ended December 31 2022 | Three months ended December 31 2021 |
|---|---|---|
| **Life Sciences** | | |
| North America | $ 47 | $ 53 |
| Europe | 74 | 55 |
| Asia Pacific | 60 | 46 |
| Latin America & other | 26 | 16 |
| | $ 207 | $ 170 |

| (In millions) | Three months ended December 31 2022 | Three months ended December 31 2021 |
|---|---|---|
| **Personal Care** | | |
| North America | $ 42 | $ 41 |
| Europe | 51 | 57 |
| Asia Pacific | 28 | 32 |
| Latin America & other | 17 | 17 |
| | $ 138 | $ 147 |

| (In millions) | Three months ended December 31 2022 | Three months ended December 31 2021 |
|---|---|---|
| **Specialty Additives** | | |
| North America | $ 53 | $ 52 |
| Europe | 48 | 55 |
| Asia Pacific | 35 | 41 |
| Latin America & other | 7 | 8 |
| | $ 143 | $ 156 |

| (In millions) | Three months ended December 31 2022 | Three months ended December 31 2021 |
|---|---|---|
| **Intermediates** | | |
| North America | $ 34 | $ 32 |
| Europe | 9 | 10 |
| Asia Pacific | 8 | 9 |
| Latin America & other | 3 | 2 |
| | $ 54 | $ 53 |

### 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 $322 million and $369 million as of December 31, 2022 and September 30, 2022, respectively. See Note H for additional information on Ashland's program to sell certain receivables on a revolving basis to third party banks up to an aggregate purchase limit (U.S Accounts Receivable Sales Program).

## NOTE Q – REPORTABLE SEGMENT INFORMATION

Ashland determines its reportable segments based on how operations are managed internally for the products and services sold to customers, including how the results are reviewed by the chief operating decision maker, which includes determining resource allocation methodologies used for reportable segments. Operating income and EBITDA are the primary measures of performance that are 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.

**Reportable segment business descriptions**

Life Sciences is comprised of pharmaceuticals, nutrition, nutraceuticals, agricultural chemicals, diagnostic films (formerly known as advanced materials) and fine chemicals. Pharmaceutical solutions include controlled release polymers, disintegrants, film coatings, solubilizers, and tablet binders. Nutrition solutions include thickeners, stabilizers, emulsifiers and additives for enhancing mouthfeel, controlling moisture migration, reducing oil uptake and controlling color. Nutraceutical solutions include products for weight management, joint comfort, stomach and intestinal health, sports nutrition and general wellness, and provide custom formulation, toll processing and particle engineering solutions. Customers include pharmaceutical, food, beverage, nutraceuticals and supplements manufacturers, hospitals and radiologists and industrial manufacturers.

Personal Care is comprised of biofunctionals, microbial protectants (preservatives), skin care, sun care, oral care, hair care and household. These businesses have a broad range of natural, nature-derived, biodegradable, and high-performance ingredients for customer-driven solutions to help protect, renew, moisturize and revitalize skin and hair, and provide solutions for toothpastes, mouth washes and rinses, denture cleaning and care for teeth. Household supplies nature-derived rheology ingredients, biodegradable surface wetting agents, performance encapsulates, and specialty polymers for household, industrial and institutional cleaning products. Customers include formulators at large multinational branded consumer products companies and smaller, independent boutique companies.

Specialty Additives is comprised of rheology and performance-enhancing additives serving the architectural coatings, construction, energy, automotive and various industrial markets. Solutions include coatings additives for architectural paints, finishes and lacquers, cement and gypsum based dry mortars, ready-mixed joint compounds, synthetic plasters for commercial and residential construction, and specialty materials for industrial applications. Products include rheology modifiers (cellulosic and associative thickeners), foam control agents, surfactants and wetting agents, pH neutralizers, advanced ceramics used in catalytic converters, and environmental filters, ingredients that aid the manufacturing process of ceramic capacitors, plasma display panels and solar cells, ingredients for textile printing, thermoplastic metals and alloys for welding. Products help improve desired functional outcomes through rheology modification and control, water retention, workability, adhesive strength, binding power, film formation, deposition and suspension and emulsification. Customers include global paint manufacturers, electronics and automotive manufacturers, textile mills, the construction industry, and welders.

Intermediates is comprised of the production of 1,4 butanediol (BDO) and related derivatives, including 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 Life Sciences, Personal Care, and Specialty Additives for use as a raw material.

Unallocated and Other generally includes items such as certain significant company-wide restructuring activities, corporate governance costs and legacy costs or activities 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, certain corporate governance costs and other costs or activities 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 loss caption on the Statements of Consolidated Comprehensive Income (Loss). Ashland refines its expense allocation methodologies to the reportable segments from time to time as internal accounting practices are improved, more refined information becomes available and the industry or market changes. Significant revisions to Ashland's methodologies are adjusted for all segments on a retrospective basis.

The following table presents various financial information for each reportable segment for the three months ended December 31, 2022 and 2021.

| | Three months ended December 31 | |
|---|---|---|
| (In millions - unaudited) | 2022 | 2021 |
| **SALES** | | |
| *Life Sciences* | $ 207 | $ 170 |
| *Personal Care* | 138 | 147 |
| *Specialty Additives* | 143 | 156 |
| *Intermediates* | 54 | 53 |
| *Intersegment sales* (a) | (17) | (14) |
| | $ 525 | $ 512 |
| **OPERATING INCOME (LOSS)** | | |
| *Life Sciences* | $ 34 | $ 21 |
| *Personal Care* | 11 | 15 |
| *Specialty Additives* | 1 | 17 |
| *Intermediates* | 20 | 16 |
| *Unallocated and other* | (29) | (27) |
| | $ 37 | $ 42 |
| **DEPRECIATION EXPENSE** | | |
| *Life Sciences* | $ 10 | $ 8 |
| *Personal Care* | 9 | 9 |
| *Specialty Additives* | 14 | 16 |
| *Intermediates* | 3 | 3 |
| | $ 36 | $ 36 |
| **AMORTIZATION EXPENSE** | | |
| *Life Sciences* | $ 7 | $ 7 |
| *Personal Care* | 12 | 12 |
| *Specialty Additives* | 4 | 5 |
| *Intermediates* | — | — |
| | $ 23 | $ 24 |
| **EBITDA** (b) | | |
| *Life Sciences* | $ 51 | $ 36 |
| *Personal Care* | 32 | 36 |
| *Specialty Additives* | 19 | 38 |
| *Intermediates* | 23 | 19 |
| *Unallocated and other* | (29) | (27) |
| | $ 96 | $ 102 |

| (In millions - unaudited) | December 31 2022 | September 30 2022 |
|---|---|---|
| **TOTAL ASSETS** | | |
| *Life Sciences* | $ 1,944 | $ 1,905 |
| *Personal Care* | 1,078 | 1,073 |
| *Specialty Additives* | 1,621 | 1,567 |
| *Intermediates* | 169 | 170 |
| *Unallocated and other* | 1,447 | 1,498 |
| | $ 6,259 | $ 6,213 |

(a) Intersegment sales from Intermediates are accounted for at prices that approximate fair value. All other intersegment sales are accounted for at cost.

(b) Excludes income (loss) from discontinued operations and other net periodic benefit loss. See the Statement of Consolidated Comprehensive Income (Loss) for applicable amounts excluded.

## FORWARD-LOOKING STATEMENTS

This Quarterly Report on 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. Ashland may from time to time make forward-looking statements in its Annual Report to Stockholders, 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 and expected effects of the COVID-19 pandemic on Ashland's business, 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, cost savings and economic conditions (such as prices, supply and demand, cost of raw materials, and the ability to recover raw-material cost increases through price increases), and risks and uncertainties associated with the following: the impact of acquisitions and/or divestitures Ashland has made or may make (including the 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); execution risks associated with our growth strategies; the competitive nature of our business; severe weather, natural disasters, public health crises (including the COVID-19 pandemic), cyber events and legal proceedings and claims (including product recalls, environmental and asbestos matters); the effects of the COVID-19 pandemic and the ongoing Ukraine and Russia conflict on the geographies in which Ashland operates, the end markets Ashland serves and on Ashland's supply chain and customers; and 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 of its most recent Form 10-K filed with SEC. Various risks and uncertainties may cause actual results to differ materially from those stated, projected or implied by any forward-looking statements. The extent and duration of the COVID-19 pandemic on our business and operations remains uncertain. Factors that influence the impact on our business and operations include the duration and extent of the pandemic, the extent of imposed or recommended containment and mitigation measures, and the general economic consequences of the pandemic. 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 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 global additives and specialty ingredients company with a conscious and proactive mindset for environment, social and governance (ESG). The Company serves customers in a wide range of consumer and industrial markets, including architectural coatings, construction, energy, food and beverage, nutraceuticals, personal care and pharmaceutical. With approximately 3,900 employees worldwide, Ashland serves customers in more than 100 countries.

Ashland's sales generated outside of North America was 70% and 68% for the three months ended December 31, 2022 and 2021, respectively. Sales by region expressed as a percentage of total consolidated sales for the three months ended December 31 were as follows:

| | Three months ended December 31 | |
|---|---|---|
| Sales by Geography | 2022 | 2021 |
| North America (a) | 30 % | 32 % |
| Europe | 35 % | 35 % |
| Asia Pacific | 25 % | 25 % |
| Latin America & other | 10 % | 8 % |
| | 100 % | 100 % |

(a) Ashland includes only U.S. and Canada in its North America designation and includes Europe, the Middle East and Africa in its Europe designation.

### Reportable segments

Ashland's reportable segments include Life Sciences, Personal Care, Specialty Additives and Intermediates. Unallocated and Other includes corporate governance activities and certain legacy matters. The contribution to sales by each reportable segment expressed as a percentage of total consolidated sales for the three months ended December 31 was as follows:

| | Three months ended December 31 | |
|---|---|---|
| Sales by Reportable Segment | 2022 | 2021 |
| Life Sciences | 40 % | 33 % |
| Personal Care | 26 % | 29 % |
| Specialty Additives | 27 % | 30 % |
| Intermediates | 7 % | 8 % |
| | 100 % | 100 % |

## KEY DEVELOPMENTS

### Business results current quarter

Ashland recorded net income of $40 million (income of $42 million in continuing operations and a loss of $2 million in discontinued operations) and net income of $48 million (income of $32 million in continuing operations and $16 million in discontinued operations) in the current and prior year quarters, respectively. Ashland's EBITDA of $93 million decreased by $25 million for the current quarter, while Ashland's Adjusted EBITDA of $108 million increased by $2 million for the current quarter, each compared to the prior year quarter (see U.S. GAAP reconciliation below under consolidated review). The increase was primarily driven by improved pricing and mix, substantially offset by increased plant, manufacturing and shipping costs, unfavorable foreign currency exchange, and lower sales volumes.

Life Sciences experienced strong global demand for pharmaceutical ingredients, while Specialty Additives and Personal Care experienced weaker demand driven primarily by the impact of COVID-19 on the China re-opening, the general economic slowdown in Europe and significant distributor destocking in China and Europe.

Additionally operating costs within Specialty Additives was impacted by planned plant maintenance shutdowns plus COVID-19 dynamics which resulted in an extended unplanned plant shutdown at the company's Nanjing, China, facility late in the quarter.

**Uncertainty relating to the Ukraine and Russia conflict**

Business disruptions, including those related to the ongoing conflict between Ukraine and Russia continue to impact businesses around the globe. While it is impossible to predict the effects of the conflict such as possible escalating geopolitical tensions (including the imposition of existing and additional sanctions by the U.S and the European Union on Russia), worsening macroeconomic and general business conditions, supply chain interruptions and unfavorable energy markets, the impact could be material. Ashland is closely monitoring the situation and maintains business continuity plans that are intended to continue operations or mitigate the effects of events that could disrupt its business.

Ashland does not have manufacturing operations in Russia, Ukraine, or Belarus. Ashland sells (or previously sold) additives and specialty ingredients to manufacturers in these countries for their use in pharmaceuticals, personal care, and coatings applications. Sales to Russia and Belarus were previously limited and our products were primarily used in products and applications that are essential to the population's wellbeing and currently support our customers' humanitarian efforts. We have sales controls in place to ensure that future potential sales into the region are only to support critical pharmaceutical or personal hygiene products which are essential for the general population and in accordance with any applicable sanctions. Sales to Ukraine, Russia, and Belarus represent less than 1% of total consolidated sales and less than 1% of total consolidated assets (related to accounts receivable).

**Uncertainty relating to the COVID-19 pandemic**

Ashland continues to closely monitor the impact of the COVID-19 pandemic on all aspects of its business and geographies, including how it will impact customers, employees, suppliers, vendors, business partners and distribution channels. Ashland is unable to predict the impact that the COVID-19 pandemic will have on its future financial position and operating results due to numerous uncertainties. These uncertainties include the severity of the virus, the duration of the outbreak, governmental, business or other actions, impacts on Ashland’s supply chain, the effect on customer demand, or changes to Ashland’s operations. The health of Ashland’s workforce and its ability to meet staffing needs throughout the critical functions cannot be predicted and is vital to operations. Further, the impacts of a potential worsening of global economic conditions and the continued disruptions to, and volatility in, the credit and financial markets, consumer spending as well as other unanticipated consequences remain unknown. In addition, Ashland cannot predict the impact that the COVID-19 pandemic will have on its customers, vendors, suppliers and other business partners; however, any material effect on these parties could adversely impact Ashland.

Ashland continues to successfully navigate the uncertain environment associated with the COVID-19 pandemic. Through the first quarter of fiscal 2023, Ashland has not experienced any additional major operating surprises related to the COVID-19 pandemic, continues to maintain supply chains in a challenging environment, had strong safety performance in the face of unprecedented pressures and improved operating discipline across each of its businesses. Ashland's businesses continued to show resiliency in the face of difficult economic circumstances. While sales were up in the quarter period-over-period, the COVID-19 impact related to the China re-opening did negatively impact demand during the current quarter for both the Specialty Additives and Personal Care business segments. Additionally Specialty Additives was also impacted by extended unplanned plant shutdowns at its Nanjing, China, facility as a result of these same dynamics. Ashland’s overall liquidity remains strong and Ashland is more than able to meet its operating cash needs and other investing and financing cash requirements at this time, including those necessary to grow the business as economic conditions improve.

The situation surrounding the COVID-19 pandemic remains fluid, and Ashland is actively managing its response in collaboration with customers, government officials, team members and business partners. For further information regarding the impact of the COVID-19 pandemic on the Company, please see Item 1A, Risk Factors in Ashland's most recent Form 10-K filed with the SEC.

## RESULTS OF OPERATIONS – CONSOLIDATED REVIEW

***Consolidated review***

*Net income*

Ashland's net income is primarily affected by results within operating income, net interest and other expense (income), income taxes, discontinued operations and other significant events or transactions that are unusual or nonrecurring.

Key financial results for the three months ended December 31, 2022 and 2021 included the following:

- Ashland's net income amounted to $40 million compared to $48 million for the three months ended December 31, 2022 and 2021, respectively, or income of $0.73 and $0.83 diluted earnings per share, respectively.
- Discontinued operations, which are reported net of taxes, resulted in a loss of $2 million and income of $16 million during the three months ended December 31, 2022 and 2021, respectively.
- Income from continuing operations, which excludes results from discontinued operations, amounted to income of $42 million and $32 million for the three months ended December 31, 2022 and 2021, respectively.
- The effective income tax rates were an expense of 16% and 13% for the three months ended December 31, 2022 and 2021, respectively, and were significantly impacted by certain tax discrete items in both the current and prior year quarters.
- Ashland incurred pretax net interest and other income of $14 million and expense of $5 million for the three months ended December 31, 2022 and 2021, respectively. This includes gains of $21 million and $4 million on restricted investments, respectively, for the current and prior year quarters.
- Other net periodic benefit income (loss) resulted in a loss of $1 million and zero during the three months ended December 31, 2022 and 2021, respectively.
- Operating income was $37 million and $42 million for the three months ended December 31, 2022 and 2021, 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*

Operating income/loss amounted to income of $37 million and $42 million for the three months ended December 31, 2022 and 2021, 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 below in the "EBITDA and Adjusted EBITDA" section. These operating key items for the applicable periods are summarized as follows:

- Restructuring, separation and other costs – Ashland periodically implements 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 restructuring activities.
- 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 adjustments during the current and prior year quarters to its environmental liabilities and receivables primarily related to previously divested businesses or non-operational sites. See Note L of the Notes to Condensed Consolidated Financial Statements for more information.

- Asset impairments - During the three months ended December 31, 2022, Ashland incurred an impairment charge associated with the pending sale of a Specialty Additives manufacturing facility. See Note B of the Notes to Condensed Consolidated Financial Statements for more information.

Operating income for the three months ended December 31, 2022 and 2021 included depreciation and amortization of $59 million and $60 million, respectively.

*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 months ended December 31, 2022 and 2021.

| | Three months ended December 31 | | |
|---|---|---|---|
| (In millions) | 2022 | 2021 | Change |
| **Sales** | $ 525 | $ 512 | $ 13 |

The following table provides a reconciliation of the change in sales for the three ended December 31, 2022 and 2021.

| (In millions) | Three months ended December 31, 2022 |
|---|---|
| Volume | $ (25) |
| Pricing | 62 |
| Foreign currency exchange | (24) |
| Change in sales | $ 13 |

Sales for the current quarter increased $13 million compared to the prior year quarter. Favorable product pricing associated with cost inflation pricing actions increased sales by $62 million which was partially offset by lower sales volume and unfavorable foreign currency exchange of $25 million and $24 million, respectively.

| | Three months ended December 31 | | |
|---|---|---|---|
| (In millions) | 2022 | 2021 | Change |
| **Cost of sales** | $ 360 | $ 351 | $ 9 |
| **Gross profit as a percent of sales** | 31.4 % | 31.4 % | |

The following table provides a reconciliation of the change in cost of sales between the three months ended December 31, 2022 and 2021.

| (In millions) | Three months ended December 31, 2022 |
|---|---|
| Changes in: | |
| Volume | $ (22) |
| Price/mix | 7 |
| Foreign currency exchange | (10) |
| Operating costs | 34 |
| Change in cost of sales | $ 9 |

Cost of sales for the current quarter increased $9 million compared to the prior year quarter. Price/mix and higher operating costs, which includes cost inflation associated with plant manufacturing and shipping costs (as well as planned and unplanned plant shutdowns and maintenance), increased cost of sales by $7 million and $34 million, respectively. These increases were partially offset by lower volume and foreign currency exchange, which decreased cost of sales by $22 million and $10 million, respectively. Gross profit as a percentage of sales held steady at 31.4% driven by pricing and mix improvement actions across business segments.

| | Three months ended December 31 | | |
|---|---|---|---|
| (In millions) | 2022 | 2021 | Change |
| **Selling, general and administrative expense** | $ 93 | $ 82 | $ 11 |
| **As a percent of sales** | 17.7 % | 16.0 % | |

Selling, general and administrative expense for the current quarter increased $11 million compared to the prior year quarter with expenses as a percent of sales increasing 1.7 percentage points. Key drivers of the fluctuation in selling, general and administrative expense compared to the prior year quarter were:

- $8 million and $3 million in net environmental-related expenses during the current and prior year period, respectively (see Note L for more information).
- $4 million impairment charge in the current quarter associated with the pending sale of a Specialty Additives manufacturing facility.

| | Three months ended December 31 | | |
|---|---|---|---|
| (In millions) | 2022 | 2021 | Change |
| **Research and development expense** | $ 13 | $ 13 | $ — |

Research and development expense is consistent with the prior year quarter.

| | Three months ended December 31 | | |
|---|---|---|---|
| (In millions) | 2022 | 2021 | Change |
| **Intangibles amortization expense** | $ 23 | $ 24 | $ (1) |

Intangibles amortization expense is primarily consistent with the prior year quarter.

| | Three months ended December 31 | | |
|---|---|---|---|
| (In millions) | 2022 | 2021 | Change |
| **Net interest and other expense (income)** | | | |
| Interest expense | $ 14 | $ 16 | $ (2) |
| Interest income | (4) | — | (4) |
| Income from restricted investments | (25) | (12) | (13) |
| Other financing costs | 1 | 1 | — |
| | $ (14) | $ 5 | $ (19) |

Net interest and other expense (income) decreased by $19 million during the current quarter compared to the prior year quarter. Interest expense decreased $2 million primarily due to lower debt levels during the current quarter compared to the prior year quarter. Restricted investments income of $25 million and $12 million included gains of $21 million compared to $4 million for the three months ended December 31, 2022 and 2021, respectively. See Note E for more information on the restricted investments.

| | Three months ended December 31 | | |
|---|---|---|---|
| (In millions) | 2022 | 2021 | Change |
| **Other net periodic benefit loss** | $ (1) | $ — | $ (1) |

Other net periodic benefit loss for the three months ended December 31, 2022 primarily included interest cost of $3 million which was partially offset by expected return on plan assets of $2 million.

| | Three months ended December 31 | | |
|---|---|---|---|
| (In millions) | 2022 | 2021 | Change |
| **Income tax expense** | $ 8 | $ 5 | $ 3 |
| **Effective tax rate** | 16 % | 13 % | |

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 16% for the three months ended December 31, 2022 and was primarily impacted by jurisdictional income mix, as well as net favorable discrete items of $1 million.

The overall effective tax rate was 13% for the three months ended December 31, 2021 and was primarily impacted by jurisdictional income mix, as well as favorable discrete items of $3 million.

*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 months ended December 31, 2022 and 2021 was not impacted by tax specific key items.

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

| | Three months ended December 31 | |
|---|---|---|
| (In millions) | 2022 | 2021 |
| Income from continuing operations before income taxes | $ 50 | $ 37 |
| Key items (pre-tax) (a) | (8) | — |
| **Adjusted income from continuing operations before income taxes** | $ 42 | $ 37 |
| | | |
| Income tax expense (benefit) | $ 8 | $ 5 |
| Income tax rate adjustments: | | |
| Tax effect of key items | (2) | — |
| Total income tax rate adjustments | (2) | — |
| **Adjusted income tax expense** | $ 6 | $ 5 |
| | | |
| **Effective tax rate, excluding key items (Non-GAAP) (c)** | 15% | 13% |

(a) See Adjusted EBITDA reconciliation table disclosed in this MD&A 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 disclosed in this MD&A.
(c) Due to rounding conventions, the effective tax rate presented may not recalculate precisely based on the numbers disclosed within this table.

| | Three months ended December 31 | | |
|---|---|---|---|
| (In millions) | 2022 | 2021 | Change |
| **Income (loss) from discontinued operation (net of taxes)** | | | |
| Performance Adhesives | $ (1) | $ 17 | $ (18) |
| Distribution | (1) | (1) | — |
| | $ (2) | $ 16 | $ (18) |

The activity for Distribution during the current and prior year quarters was related to post-closing adjustments for environmental expenses. The Performance Adhesives segment operations had sales and pre-tax operating income included in discontinued operations of $96 million and $22 million for the prior year quarter.

*Other comprehensive income (loss)*

A comparative analysis of the components of other comprehensive income is provided below for the three months ended December 31, 2022 and 2021.

| | Three months ended December 31 | | |
|---|---|---|---|
| (In millions) | 2022 | 2021 | Change |
| **Other comprehensive income (loss) (net of taxes)** | | | |
| Unrealized translation gain (loss) | $ 82 | $ (17) | $ 99 |
| Unrealized loss on commodity hedges | (4) | (3) | (1) |
| | $ 78 | $ (20) | $ 98 |

Total other comprehensive income (loss), net of tax, for the current quarter increased $98 million compared to the prior year quarter primarily as a result of the following:

- For the three months ended December 31, 2022, the change in unrealized gain (loss) from foreign currency translation adjustments resulted in a gain of $82 million compared to a loss of $17 million for the three months ended December 31, 2021. 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 December 31, 2022 and 2021, the change in commodity hedges is primarily due to the fluctuations of the market prices of the underlying commodities. Commodity hedges resulted in unrealized losses of $4 million and $3 million for the three months ended December 31, 2022 and 2021.

***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 expenses, and depreciation and amortization.
- Adjusted EBITDA – EBITDA adjusted for noncontrolling interests, discontinued operations, net income (loss) on acquisitions and divestitures, other income and (expense) and key items (including 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.
- Adjusted diluted earnings per share (EPS) excluding intangibles amortization expense – Adjusted earnings per share adjusted for intangibles amortization expense net of tax, divided by the average outstanding diluted shares for the applicable period.
- Free cash flow – operating cash flows less capital expenditures.
- Ongoing free cash flow – operating cash flows less capital expenditures and certain other adjustments as applicable.
- Ongoing free cash flow conversion – ongoing free cash flow divided by adjusted EBITDA.

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

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

The Adjusted diluted EPS, excluding intangibles amortization expense metric enables Ashland to demonstrate the impact of non-cash intangibles amortization expense on EPS, in addition to the key items previously mentioned.

Ashland’s management believes this presentation is helpful to illustrate how previous acquisitions impact applicable period results.

The free cash flow metrics enable 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 and ongoing free cash flow includes the impact of capital expenditures from continuing operations and other significant items impacting cash flow, providing a more complete picture of current and future 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 may provide forward-looking guidance for Adjusted EBITDA, Adjusted diluted EPS and ongoing 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 2022 Credit Agreement are based on similar non-GAAP measures and are defined further in the sections that reference this metric.

*EBITDA and Adjusted EBITDA*

EBITDA totaled income of $93 million and $118 million for the three months ended December 31, 2022 and 2021, 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.

| | Three months ended December 31 | |
|---|---|---|
| (In millions) | 2022 | 2021 |
| Net income | $ 40 | $ 48 |
| Income tax expense | 8 | 5 |
| Net interest and other expense (income) | (14) | 5 |
| Depreciation and amortization | 59 | 60 |
| EBITDA | 93 | 118 |
| Loss (income) from discontinued operations (net of tax) | 2 | (16) |
| Key items included in EBITDA: | | |
| Restructuring, separation and other costs | 1 | 1 |
| Environmental reserve adjustments | 8 | 3 |
| Asset impairments | 4 | — |
| Total key items included in EBITDA | 13 | 4 |
| Adjusted EBITDA | $ 108 | $ 106 |
| | | |
| Total key items included in EBITDA | $ 13 | $ 4 |
| Unrealized gain on securities | (21) | (4) |
| Total key items, before tax | $ (8) | $ — |

*Diluted EPS and Adjusted Diluted EPS*

The following table reflects the U.S. GAAP calculation for the income 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 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 December 31 | |
|---|---|---|
| | 2022 | 2021 |
| Diluted EPS from continuing operations (as reported) | $ 0.76 | $ 0.55 |
| Key items, before tax: | | |
| Restructuring, separation and other costs | 0.02 | 0.02 |
| Environmental reserve adjustments | 0.14 | 0.05 |
| Asset impairments | 0.07 | — |
| Unrealized gain on securities | (0.38) | (0.07) |
| Key items, before tax | (0.15) | — |
| Tax effect of key items (a) | 0.03 | — |
| Key items, after tax | (0.12) | — |
| Adjusted diluted EPS from continuing operations (non-GAAP) | $ 0.64 | $ 0.55 |
| Amortization expense adjustment (net of tax) (b) | $ 0.33 | $ 0.33 |
| Adjusted diluted EPS from continuing operations (non-GAAP) excluding intangibles amortization expense | $ 0.97 | $ 0.88 |

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

(b) Amortization expense adjustment (net of tax) tax rates were 20% for the three months ended December 31, 2022 and 2021, respectively.

## RESULTS OF OPERATIONS – REPORTABLE SEGMENT REVIEW

Ashland’s reportable segments include Life Sciences, Personal Care, Specialty Additives, and Intermediates. Unallocated and Other includes corporate governance activities and certain legacy matters.

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, certain corporate governance costs and other costs or activities 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 loss caption on the Statements of Consolidated Comprehensive Income (Loss). Ashland refines its expense allocation methodologies to the reportable segments from time to time as internal accounting practices are improved, more refined information becomes available and the industry or market changes. Significant revisions to Ashland's methodologies are adjusted for all segments on a retrospective basis.

The following table discloses sales, operating income, depreciation and amortization and EBITDA by reportable segment for the three months ended December 31, 2022 and 2021.

| | Three months ended December 31 | |
|---|---|---|
| (In millions - unaudited) | 2022 | 2021 |
| **SALES** | | |
| *Life Sciences* | $ 207 | $ 170 |
| *Personal Care* | 138 | 147 |
| *Specialty Additives* | 143 | 156 |
| *Intermediates* | 54 | 53 |
| *Intersegment sales* (a) | (17) | (14) |
| | $ 525 | $ 512 |
| **OPERATING INCOME (LOSS)** | | |
| *Life Sciences* | $ 34 | $ 21 |
| *Personal Care* | 11 | 15 |
| *Specialty Additives* | 1 | 17 |
| *Intermediates* | 20 | 16 |
| *Unallocated and other* | (29) | (27) |
| | $ 37 | $ 42 |
| **DEPRECIATION EXPENSE** | | |
| *Life Sciences* | $ 10 | $ 8 |
| *Personal Care* | 9 | 9 |
| *Specialty Additives* | 14 | 16 |
| *Intermediates* | 3 | 3 |
| | $ 36 | $ 36 |
| **AMORTIZATION EXPENSE** | | |
| *Life Sciences* | $ 7 | $ 7 |
| *Personal Care* | 12 | 12 |
| *Specialty Additives* | 4 | 5 |
| *Intermediates* | — | — |
| | $ 23 | $ 24 |
| **EBITDA** (b) | | |
| *Life Sciences* | $ 51 | $ 36 |
| *Personal Care* | 32 | 36 |
| *Specialty Additives* | 19 | 38 |
| *Intermediates* | 23 | 19 |
| *Unallocated and other* | (29) | (27) |
| | $ 96 | $ 102 |

(a) Intersegment sales from Intermediates are accounted for at prices that approximate fair value. All other intersegment sales are accounted for at cost.

(b) Excludes income (loss) from discontinued operations and other net periodic benefit loss. See the Statement of Consolidated Comprehensive Income (Loss) for applicable amounts excluded.

**Life Sciences**

Life Sciences is comprised of pharmaceuticals, nutrition, nutraceuticals, agricultural chemicals, diagnostic films (formerly known as advanced materials) and fine chemicals. Pharmaceutical solutions include controlled release polymers, disintegrants, tablet coating, thickeners, solubilizers, and tablet binders. Nutrition solutions include thickeners, stabilizers, emulsifiers and additives for enhancing mouthfeel, controlling moisture migration, reducing oil uptake and binding structured foods. Nutraceutical solutions include products for weight management, joint comfort, stomach and intestinal health, sports nutrition and general wellness. The nutraceutical business also provides custom formulation, toll processing and particle engineering solutions. Customers include pharmaceutical, food, beverage, nutraceuticals and supplements manufacturers, hospitals and radiologists and industrial manufacturers.

*December 2022 quarter compared to December 2021 quarter*

Life Sciences' sales increased $37 million in the current quarter. Higher volume and favorable pricing increased sales by $23 million each, respectively, while unfavorable foreign currency exchange decreased sales by $9 million. Life Sciences experienced strong global demand for pharmaceutical ingredients throughout the current quarter.

Operating income increased $13 million to income of $34 million for the current quarter. Favorable price/mix and higher volume increased operating income by $24 million and $11 million, respectively, while unfavorable foreign currency exchange and higher costs decreased operating income by $7 million and $15 million, respectively. Current quarter EBITDA increased $15 million to $51 million while adjusted EBITDA increased $16 million to $52 million. Adjusted EBITDA margin increased 3.9 percentage points in the current quarter to 25.1%.

*EBITDA and Adjusted EBITDA reconciliation*

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 plus depreciation and amortization), Adjusted EBITDA (EBITDA adjusted for key items, which may include pro forma effects for significant acquisitions or divestitures, as applicable), and Adjusted EBITDA margin (Adjusted EBITDA, which may include pro forma adjustments, divided by sales or sales adjusted for pro forma results). Ashland does not allocate items to each reportable segment below operating income, such as interest expense and income taxes. As a result, reportable segment EBITDA and Adjusted EBITDA are reconciled directly to operating income since it is the most directly comparable Statements of Consolidated Comprehensive Income (Loss) caption.

The following EBITDA presentation for the three months ended December 31, 2022 and 2021 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 Life Sciences. The key items during the three months ended December 31, 2022 related to $1 million for restructuring program within the Nutraceuticals business of the Life Sciences segment.

| | Life Sciences | |
|---|---|---|
| | Three months ended December 31 | |
| (In millions) | 2022 | 2021 |
| Operating income | $ 34 | $ 21 |
| Depreciation and amortization | 17 | 15 |
| EBITDA | $ 51 | $ 36 |
| Restructuring and other costs | 1 | — |
| Adjusted EBITDA | $ 52 | $ 36 |

**Personal Care**

Personal Care is comprised of biofunctionals, microbial protectants (preservatives), skin care, sun care, oral care, hair care and household solutions. These businesses have a broad range of natural, nature-derived, biodegradable, and high-performance ingredients for customer driven solutions to help protect, renew, moisturize and revitalize skin and hair, and provide solutions for toothpastes, mouth washes and rinses, denture cleaning and care for teeth. Household supplies nature-derived rheology ingredients, biodegradable surface wetting agents, performance encapsulates, and specialty polymers for household, industrial and institutional cleaning products. Customers include formulators at large multinational branded consumer products companies and smaller, independent boutique companies.

*December 2022 quarter compared to December 2021 quarter*

Personal Care' sales decreased $9 million to $138 million in the current quarter. Lower volume and unfavorable foreign currency exchange decreased sales by $15 million and $7 million, respectively. These decreases were partially offset by favorable product pricing which increased sales by $13 million. Personal Care sales were negatively impacted by the COVID-19 impact related to the China re-opening and significant destocking within the distribution channel, particularly in Europe.

Operating income decreased $4 million to income of $11 million for the current quarter. Lower volume, higher operating costs and unfavorable foreign currency exchange decreased operating income by $6 million, $6 million and $2 million, respectively. These decreases were partially offset by favorable price/mix which increased operating income by $10 million. Current quarter EBITDA decreased $4 million to $32 million. EBITDA margin decreased 1.3 percentage points in the current quarter to 23.2%.

*EBITDA reconciliation*

The following EBITDA presentation for the three months ended December 31, 2022 and 2021 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 Personal Care. Personal Care had no key items for the three months ended December 31, 2022 or 2021.

| | Personal Care | |
|---|---|---|
| | Three months ended December 31 | |
| (In millions) | 2022 | 2021 |
| Operating income | $ 11 | $ 15 |
| Depreciation and amortization | 21 | 21 |
| EBITDA | $ 32 | $ 36 |

**Specialty Additives**

Specialty Additives is comprised of rheology and performance-enhancing additives serving the architectural coatings, construction, energy, automotive and various industrial markets. Solutions include coatings additives for architectural paints, finishes and lacquers, cement and gypsum based dry mortars, ready-mixed joint compounds, synthetic plasters for commercial and residential construction, and specialty materials for industrial applications. Products include rheology modifiers (cellulosic and associative thickeners), foam control agents, surfactants and wetting agents, pH neutralizers, advanced ceramics used in catalytic converters, and environmental filters, ingredients that aid the manufacturing process of ceramic capacitors, plasma display panels and solar cells, ingredients for textile printing, thermoplastic metals and alloys for welding. Products help improve desired functional outcomes through rheology modification and control, water retention, workability, adhesive strength, binding power, film formation, deposition and suspension and emulsification. Customers include global paint manufacturers, electronics and automotive manufacturers, textile mills, the construction industry, and welders.

*December 2022 quarter compared to December 2021 quarter*

Specialty Additives' sales decreased $13 million to $143 million in the current quarter. Lower volume and unfavorable foreign currency exchange decreased sales by $25 million and $7 million, respectively. Those decreases were partially offset by favorable product pricing which increased sales by $19 million. Specialty Additives sales were negatively impacted by the COVID-19 impact related to the China re-opening and, the general economic slowdown in Europe.

Operating income decreased $16 million to income of $1 million for the current quarter. Lower volume, higher operating costs, asset impairments, and unfavorable foreign currency exchange decreased operating income by $6 million, $15 million, $4 million, and $1 million, respectively. Operating costs were negatively impacted by COVID-19 dynamics in China which resulted in additional extended unplanned plant shutdowns, that were in addition to planned plant maintenance shutdowns. These decreases were partially offset by favorable pricing/mix which increased operating income by $10 million. Current quarter EBITDA decreased $19 million to $19 million while Adjusted EBITDA decreased $15 million to $23 million. Adjusted EBITDA margin decreased 8.3 percentage points in the current quarter to 16.1%.

*EBITDA and Adjusted EBITDA reconciliation*

The following EBITDA presentation for the three months ended December 31, 2022 and 2021 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 Additives. The key items during the three months ended December 31, 2022 related to an impairment charge of $4 million associated with a manufacturing facility.

| | Specialty Additives | |
|---|---|---|
| | Three months ended December 31 | |
| (In millions) | 2022 | 2021 |
| Operating income | $ 1 | $ 17 |
| Depreciation and amortization | 18 | 21 |
| EBITDA | 19 | 38 |
| Asset impairments | 4 | — |
| Adjusted EBITDA | $ 23 | $ 38 |

**Intermediates**

Intermediates is comprised of the production of 1,4 butanediol (BDO) and related derivatives, including 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. BDO is also supplied to Life Sciences, Personal Care, and Specialty Additives for use as a raw material.

*December 2022 quarter compared to December 2021 quarter*

Intermediates' sales increase $1 million to $54 million in the current period. Favorable product pricing increased sales by $8 million. These increases were substantially offset by lower volume and unfavorable foreign currency exchange decreased sales by $6 million and $1 million, respectively.

Operating income increased $4 million to $20 million for the current quarter. Price/mix increased operating income by $11 million and was partially offset by lower volume, higher production costs and unfavorable foreign currency exchange which decreased operating income by $3 million, $3 million and $1 million, respectively. Current quarter EBITDA increased $4 million to $23 million. EBITDA margin increased 6.8 percentage points in the current quarter to 42.6%.

*EBITDA reconciliation*

The following EBITDA presentation (as defined and described in the section above) for the three months ended December 31, 2022 and 2021 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. Intermediates had no key items for the three months ended December 31, 2022 or 2021.

| | Intermediates | |
|---|---|---|
| | Three months ended December 31 | |
| (In millions) | 2022 | 2021 |
| Operating income | $ 20 | $ 16 |
| Depreciation and amortization | 3 | 3 |
| EBITDA | $ 23 | $ 19 |

**Unallocated and other**

The following table summarizes the key components of the Unallocated and other segment's operating income (loss) for the three ended December 31, 2022 and 2021.

| | Unallocated and Other | |
|---|---|---|
| | Three months ended December 31 | |
| (In millions) | 2022 | 2021 |
| Restructuring activities | $ (1) | $ (5) |
| Environmental expenses | (8) | (3) |
| Other expenses (primarily governance and legacy expenses) | (20) | (19) |
| Total expense | $ (29) | $ (27) |

*December 2022 quarter compared to December 2021 quarter*

Unallocated and other recorded expense of $29 million and $27 million for the three months ended December 31, 2022 and 2021, respectively. The current and prior year quarters included expense of $1 million and $5 million, respectively, for restructuring activities mainly comprised of severance, lease abandonment and other restructuring costs related to company-wide cost reduction programs during the current and prior year quarters, respectively, which included stranded costs of $4 million for prior year quarter associated with the Performance Adhesives divestiture.

The current quarter and prior year quarter included $8 million and $3 million for environmental expenses, respectively.

Other expenses between periods were driven by increases in governance and legacy expenses primarily associated with fluctuations in foreign currency, deferred compensation and stock compensation.

## FINANCIAL POSITION

### Liquidity

Ashland believes that cash flow from operations, availability under existing credit facilities and arrangements, current cash and investment balances and the ability to obtain other financing, if necessary, will provide adequate cash funds for Ashland's foreseeable working capital needs, capital expenditures at existing facilities, dividend payments and debt service obligations. Ashland's cash requirements are subject to change as business conditions warrant and opportunities arise. The timing and size of any new business ventures or acquisitions that the Company may complete may also impact its cash requirements.

*Cash flows*

Ashland’s cash flows from operating, investing and financing activities, as reflected in the Statements of Condensed Consolidated Cash Flows, are summarized as follows for the three months ended December 31, 2022 and 2021.

| | Three months ended December 31 | |
|---|---|---|
| (In millions) | 2022 | 2021 |
| **Cash provided (used) by:** | | |
| Operating activities from continuing operations | $ (29) | $ 14 |
| Investing activities from continuing operations | (27) | (7) |
| Financing activities from continuing operations | (27) | (11) |
| Discontinued operations | (34) | (9) |
| Effect of currency exchange rate changes on cash and cash equivalents | 3 | (3) |
| Net decrease in cash and cash equivalents | $ (114) | $ (16) |

Cash and cash equivalents decreased $114 million for the three months ended December 31, 2022 compared to a $16 million decrease for the three months ended December 31, 2021.

The $114 million decrease for the three months ended December 31, 2022 was primarily driven by payment of cash dividends, additions to property, plant and equipment, and taxes paid on stock based compensation of $18 million, $23 million and $9 million, respectively. Operating cash flows from continuing operations were outflows of $29 million, while discontinued operations cash flows were outflows of $34 million.

The $16 million decrease for the three months ended December 31, 2021 was primarily driven by payment of cash dividends of $17 million and additions to property, plant and equipment of $15 million offset by net proceeds from short-term debt of $11 million. Operating cash flows from continuing operations were inflows of $14 million, while discontinued operations cash flows were outflows of $9 million.

*Free cash flow and other liquidity resources*

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

| (In millions) | 2022 | 2021 |
|---|---|---|
| Total cash flows provided (used) by operating activities from continuing operations | $ (29) | $ 14 |
| less: | | |
| Additions to property, plant and equipment | (23) | (15) |
| Free cash flow | (52) | (1) |
| Cash (inflows) outflows from U.S. Accounts Receivable Sales Program (a) | 19 | 10 |
| Restructuring-related payments (b) | 1 | 4 |
| Environmental and related litigation payments (c) | 11 | 13 |
| Ongoing free cash flow | $ (21) | $ 26 |
| | | |
| Adjusted EBITDA (d) | 108 | 106 |
| | | |
| Ongoing free cash flow conversion (e) | -19% | 25% |

(a) Represents activity associated with the U.S. Accounts Receivable Sales Program impacting each period presented.
(b) Restructuring payments incurred during each period.
(c) Represents cash outflows associated with environmental and related litigation payments which will be reimbursed by the environmental trust.
(d) See adjusted EBITDA reconciliation.
(e) Ongoing free cash flow divided by Adjusted EBITDA.

Working capital (current assets minus current liabilities, excluding long-term debt due within one year) amounted to $1,260 million and $1,215 million as of December 31, 2022 and September 30, 2022, respectively. The $45 million increase in working capital was the primary reason of the $47 million decline in ongoing free cash flows between periods primarily as a result of increased inventories to navigate supply-chain issues as well as cost inflation and reduced accrued expenses as a result of annual incentive program payouts, which were $24 million higher than the prior year's quarter. Liquid assets (cash, cash equivalents and accounts receivable) amounted to 190% of current liabilities as of December 31, 2022 and September 30, 2022, respectively.

The following summary reflects Ashland's cash, unused borrowing capacity and liquidity as of December 31, 2022 and September 30, 2022.

| (In millions) | December 31 2022 | September 30 2022 |
|---|---|---|
| **Cash and investment securities** | | |
| Cash and cash equivalents | $ 532 | $ 646 |
| Restricted investments (a) | 404 | 374 |
| | | |
| **Unused borrowing capacity and liquidity** | | |
| Revolving credit facility | 581 | 581 |
| 2018 accounts receivable securitization (foreign) | 106 | 99 |
| Accounts receivable sales program (U.S.) | — | — |

(a) Includes $259 million and $245 million related to the Asbestos trust and $145 million and $129 million related to the Environmental trust as of December 31, 2022 and September 30, 2022, respectively.

The borrowing capacity remaining under the $600 million revolving credit facility was $581 million due to an outstanding balance of zero, as well as a reduction of $19 million for letters of credit outstanding at December 31, 2022. In total, Ashland's available liquidity position, which includes cash, the revolving credit facility and foreign accounts receivable securitization facility, was $1,219 million at December 31, 2022, compared to $1,326 million at September 30, 2022. Ashland had no available liquidity under the U.S. Accounts Receivable Sales Program as of December 31, 2022. Ashland also maintained $404 million of restricted investments to pay for future asbestos claims and environmental remediation and related litigation.

## Capital resources

*Debt*

The following summary reflects Ashland's debt as of December 31, 2022 and September 30, 2022.

| (In millions) | December 31 2022 | September 30 2022 |
|---|---|---|
| Short-term debt (includes current portion of long-term debt) | $ — | $ — |
| Long-term debt (less current portion and debt issuance cost discounts) (a) | 1,316 | 1,270 |
| Total debt | $ 1,316 | $ 1,270 |

(a) Includes $14 million of debt issuance cost discounts as of December 31, 2022 and September 30, 2022, respectively.

Debt as a percent of capital employed was 28% at December 31, 2022 and at September 30, 2022, respectively. At December 31, 2022, Ashland's total debt had an outstanding principal balance of $1,366 million, discounts of $36 million, and debt issuance costs of $14 million. Ashland had no long-term debt (excluding debt issuance costs) maturing within the next 4 years and $4 million due in fiscal 2027.

*Ashland credit ratings*

Ashland's corporate credit ratings remained unchanged at BB+ by Standard & Poor's and Ba1 by Moody's Investor Services. As of December 31, 2022, both Moody's Investor Services and Standard & Poor's outlook remained at stable. Subsequent changes to these ratings or outlook may have an effect on Ashland's borrowing rate or ability to access capital markets in the future.

*Ashland debt covenant restrictions*

Ashland's current credit agreement (the 2022 Credit Agreement) contains usual and customary representations, warranties and affirmative and negative covenants, including financial covenants for leverage and interest coverage ratios, limitations on liens, additional subsidiary indebtedness, restrictions on subsidiary distributions, investments, mergers, sale of assets and restricted payments and other customary limitations. As of December 31, 2022, Ashland is in compliance with all debt agreement covenant restrictions under the 2022 Credit Agreement.

The maximum consolidated net leverage ratio permitted under the 2022 Credit Agreement is 4.0. The 2022 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 2022 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 above in the “consolidated review” section. 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 December 31, 2022, Ashland’s calculation of the consolidated net leverage ratio was 1.3.

The minimum required consolidated interest coverage ratio under the 2022 Credit Agreement is 3.0. The 2022 Credit Agreement defines the consolidated interest coverage ratio as the ratio of Covenant Adjusted EBITDA to consolidated interest charges for any measurement period. At December 31, 2022, Ashland’s calculation of the consolidated interest coverage ratio was 10.8.

Any change in Covenant Adjusted EBITDA of $100 million would have an approximate 0.2x effect on the consolidated net leverage ratio and a 1.8x effect on the consolidated interest coverage ratio. The change in consolidated indebtedness of $100 million would affect the consolidated leverage ratio by approximately 0.2x.

**Additional capital resources**

*Total equity*

Total equity increased by $98 million since September 30, 2022 to $3,318 million at December 31, 2022. The increase of $98 million was due to net income of $40 million and deferred translation gain of $82, offset by dividends of $18 million, common shares issued under stock incentive plans of $2 million and $4 million of deferred loss on commodity hedges.

*Stockholder dividends*

Ashland paid a dividend of 33.5 cents per share for the first quarter of fiscal 2023 and 30.0 cents per share in the first quarter of fiscal 2022.

*Capital expenditures*

Capital expenditures were $23 million for the three months ended December 31, 2022 compared to $15 million for the three months ended December 31, 2021.

## 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, 2022. Although management bases its estimates on historical experience and various other assumptions that are believed to be reasonable under the circumstances, actual results could differ significantly from the estimates under different assumptions or conditions. Management has reviewed the estimates affecting these items with the Audit Committee of Ashland’s Board of Directors. No material changes have been made to the valuation techniques during the three months ended December 31, 2022.

## OUTLOOK

Ashland issued its outlook for fiscal 2023 in November 2022. This outlook has not changed and remains the same as shown in the table below. Ashland continues to expect sales in the range of $2.5 billion to $2.7 billion for fiscal year 2023, consistent with prior expectations. In addition, the company continues to expect Adjusted EBITDA to be within the prior outlook range of $600 million to $650 million, with the current forecast model indicating earnings below the mid-point of that range.

| | FY2023 Outlook |
|---|---|
| **Key Operating Metrics** | |
| Sales | $2.5 - $2.7 billion |
| Adjusted EBITDA | $600 - $650 million |

Ashland is unable to reconcile forward-looking adjusted EBITDA to forward-looking net income, the most closely comparable GAAP financial measure, because the information needed to provide such reconciliation would require unreasonable efforts.

## ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Ashland's market risk exposure at December 31, 2022 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, 2022.

## 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 Chief Financial Officer, evaluated the effectiveness of Ashland's disclosure controls and procedures pursuant to Rule 13a-15(b) and 15d-15(b) promulgated under the Securities Exchange Act of 1934, as amended. Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that the disclosure controls and procedures were effective as of December 31, 2022.

*Changes in Internal Control over Financial Reporting* - During the three months ended December 31, 2022, 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. Ashland’s threshold for disclosing material environmental legal proceedings involving a governmental authority where potential monetary sanctions are involved is $1 million.

***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 L of Notes to Condensed Consolidated Financial Statements in this quarterly report on Form 10-Q.

***Environmental Proceedings***

*(a) CERCLA and Similar State Law Sites* - Under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 and similar state laws, Ashland and its subsidiaries may be subject to joint and several liability for cleanup costs in connection with alleged releases of hazardous substances at sites where it has been identified as a “potentially responsible party” (PRP). As of December 31, 2022, 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 59 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) Lower Passaic River, New Jersey Matters* - Ashland, through two formerly owned facilities, and International Specialty Products (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 (AOOC) 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 AOOC, in June 2012 the CPG voluntarily entered into another AOOC for an interim removal action focused solely at mile 10.9 of the Passaic River. The allocations for the 2007 AOOC 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 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's motion to dismiss was partially granted, and the surviving claims are in the early stages of recovery. Ashland and ISP participated in an USEPA allocation process that resulted in a partial settlement with the EPA. Possible future allocation proceedings and the lawsuit are not expected to be material to Ashland.

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

***Other Pending Legal Proceedings***

In addition to the matters described above, there are other various claims, lawsuits and administrative proceedings pending or threatened against Ashland and its current and former subsidiaries. Such actions are with respect to commercial matters, product liability, toxic tort liability and other environmental matters which seek remedies or damages, some of which are for substantial amounts. While Ashland cannot predict with certainty the outcome of such actions, it believes that adequate reserves have been recorded and losses already recognized with respect to such actions were immaterial as of December 31, 2022. There is a reasonable possibility that a loss exceeding amounts already recognized may be incurred related to these actions; however, Ashland believes that such potential losses were immaterial as of December 31, 2022.

## 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, 2022.

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

There was no share repurchase activity during the three months ended December 31, 2022.

Issuer Purchases of Equity Securities

| Q1 Fiscal Periods | Total Number of Shares Purchased | Average Price Paid Per Share, including commission | Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs | Dollar Value of Shares that May Be Purchased Under the Plans or Programs (in millions) (a) |
|---|---|---|---|---|
| October 1, 2022 to October 31, 2022 | — | $ — | — | $ 500 |
| November 1, 2022 to November 30, 2022 | — | — | — | 500 |
| December 1, 2022 to December 31, 2022 | — | — | — | 500 |
| Total | — | | — | $ 500 |

(a) During May 2022, Ashland's Board of Directors approved a new evergreen $500 million stock repurchase program which replaced the previous stock repurchase program. Ashland'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 December 31, 2022, $500 million remains available for repurchase under this authorization.

## ITEM 6. EXHIBITS

(a) Exhibits

| | |
|---|---|
| 10.1 | Amendment dated as of January 13, 2023, to the Tax Matters Agreement dated as of September 22, 2016, between Ashland Inc. (formerly Ashland Global Holdings Inc.) and Valvoline Inc. filed as Exhibit 10.4 to the Form 8-K filed on September 28, 2016 (SEC File No. 333-211719) and incorporated herein by reference. |
| 31.1* | Certificate of Guillermo Novo, 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 Guillermo Novo, 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** | Inline XBRL Instance Document. |
| 101.SCH** | Inline XBRL Taxonomy Extension Schema Document. |
| 101.CAL** | Inline XBRL Taxonomy Extension Calculation Linkbase Document. |
| 101.DEF** | Inline XBRL Taxonomy Extension Definition Linkbase Document. |
| 101.LAB** | Inline XBRL Taxonomy Extension Label Linkbase Document. |
| 101.PRE** | Inline XBRL Taxonomy Extension Presentation Linkbase Document. |
| 104 | Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibit 101). |

| | |
|---|---|
| * | 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 December 31, 2022 and December 31, 2021; (ii) Condensed Consolidated Balance Sheets at December 31, 2022 and September 30, 2022; (iii) Statements of Condensed Consolidated Cash Flows for the three months ended December 31, 2022 and December 31, 2021; and (iv) Notes to Condensed Consolidated Financial Statements. |
| SM | Service mark, Ashland or its subsidiaries, registered in various countries. |
| TM | Trademark, Ashland or its subsidiaries, registered in various countries. |

## SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

| | |
|---|---|
| | Ashland Inc. |
| | (Registrant) |
| February 1, 2023 | /s/ J. Kevin Willis |
| | J. Kevin Willis<br>Senior Vice President and Chief Financial Officer<br>(on behalf of the Registrant and as principal<br>financial officer) |

EXHIBIT 10.1

AMENDMENT, dated as of January 13, 2023 (this "Amendment"), between ASHLAND INC. (f/k/a ASHLAND GLOBAL HOLDINGS INC.), Delaware corporation ("Ashland Global"), VALVOLINE INC., (a Kentucky corporation) ("Valvoline"). Capitalized terms used and not otherwise defined herein shall have the meanings given them in the Tax Matters Agreement referred to below.

WHEREAS Ashland Global and Valvoline are parties to that certain Tax Matters Agreement, dated as of September 22, 2016 (the "Tax Matters Agreement");

WHEREAS Ashland Global and Valvoline wish to amend the terms of the Tax Matters Agreement as of the date of this Amendment;

WHEREAS capitalized terms not otherwise defined herein shall have the meaning ascribed thereto in the Tax Matters Agreement.

NOW, THEREFORE, in consideration of the mutual covenants and agreements contained herein, Ashland Global and Valvoline hereby agree as follows:

SECTION 1. Amendment.

(a) Section 1.01 of the Tax Matters Agreement is amended by:

(i) Adding the following definitions in the appropriate alphabetical order:

(A) "Payment Due Date" has the meaning set forth in Section 3.02(c)(ii).

(B) "Recalculated Tax Reimbursement Payment" has the meaning set forth in Section 3.02(g).

(C) "Specified Tax Proceeding" has the meaning set forth in Section 3.03.

(D) "Tax Reimbursement Amount" has the meaning set forth in Section 3.02(c)(i)(A).

(E) "Valvoline Actual Tax Return" means a Tax Return filed by Valvoline (including a Valvoline Amended Return).

(F) "Valvoline Amended Returns" has the meaning set forth in Section 3.02(a)(ii).

(G) "Valvoline Hypothetical Returns" has the meaning set forth in Section 3.02(b).

(H) "Valvoline Originally Filed Returns" has the meaning set forth in Section 3.02(a)(i).

(I) "Valvoline Post-2020 Returns" has the meaning set forth in Section 3.02(a)(iii).

(b) Deleting the following definitions:

(A) "Actual Tax Return Amount"

(B) "Hypothetical Tax Return Amount"

(C) "Valvoline Pro Forma Tax Attributes"

(b) Section 2.08 of the Tax Matters Agreement is removed in its entirety and replaced as follows:

"Amendments. Except as otherwise provided in this Agreement, each Company shall not (and shall not cause its Affiliates to) file, amend, withdraw, revoke or otherwise alter any Tax Return if doing so would reasonably be expected to (a) obligate the other Company to make an indemnity payment under Article IV, (b) cause the other Company or any of its Affiliates to incur any taxes for which it is not indemnified under this Agreement, or (c) adversely affect a refund or other Tax Attribute to which the other Company or any of its Affiliates is entitled (including, for the avoidance of doubt, any Legacy Tax Attribute with respect to which Ashland Global is entitled to a payment pursuant to Section 3.02(c)), in each case without the prior written consent of the other Company or as required under applicable Law. Any amendments to a Valvoline post-consolidation Tax Return reflecting an adjustment to a Valvoline Tax Attribute claimed on such Tax Return or an adjustment to taxable income shall not be treated as adversely affecting a Legacy Tax Attribute to the extent such adjustment is unrelated to a Legacy Tax Attribute and, if applicable, such Valvoline Tax Attribute is not of the same type as a Legacy Tax Attribute previously used by Valvoline."

(c) Section 3.02 of the Tax Matters Agreement is amended by:

(i) Deleting clauses (a) – (c) thereof in their entirety and replacing them as follows:

"(a) Actual Tax Returns.

(i)The parties agree and acknowledge that, unless otherwise required by a Determination resulting from a Specified Tax Proceeding, Valvoline and its Affiliates shall include all Legacy Tax Attributes on their Tax Returns (including the Valvoline Amended Returns), except as provided in Section 3.02(e) and except to the extent the utilization of such Legacy Tax Attributes is limited under the Code, Regulations, or applicable state tax Law. Notwithstanding anything herein to the contrary, any references to limitations on the utilization of Legacy Tax Attributes under the Code, Regulations or applicable state tax Law, in this Section 3.02(a) or any other provision of this Agreement, do not relate to the validity of the Legacy Tax Attributes.

(ii)Set forth on Schedule I is (i) a complete list of U.S. Federal and state Tax Returns filed by Valvoline before the date of this Amendment (“Valvoline Originally Filed Returns”) that shall be amended pursuant to this Section 3.02(a)(ii) to be in accordance with Section 3.02(a)(i) (“Valvoline Amended Returns”) and (ii) the taxable year to which each Valvoline Originally Filed Return relates. Valvoline shall provide to Ashland Global the portion of each Valvoline Amended Return and related workpapers reflecting the effect of a Legacy Tax Attribute (whether used in such year or a prior year) as soon as reasonably practicable and in any event by March 15, 2023. Ashland Global shall provide Valvoline with any written comments to a Valvoline Amended Return within ten Business Days of Ashland Global’s receipt thereof. Except as provided in Section 3.02(e), Valvoline shall revise each Valvoline Amended Return to incorporate any reasonable written comments timely provided by Ashland Global, to the extent such comments (A) do not affect any position taken on a Valvoline Amended Return with respect to its taxable income prior to taking any Legacy Tax Attributes into account, and (B) relate directly to the use of any Legacy Tax Attributes or Tax Attributes of the same type as any Legacy Tax Attributes previously used by Valvoline. For the avoidance of doubt and notwithstanding anything herein to the contrary, Valvoline shall credit, rather than deduct, any foreign taxes reflected on Valvoline Amended Returns unless otherwise agreed by the Parties in writing. Unless otherwise agreed by the Parties in writing, Valvoline shall file each Valvoline Amended Return no later than ten Business Days after receipt of any written comments provided by Ashland Global or, if no such comments are received, no earlier than eleven Business Days and no later than fifteen Business Days after Valvoline delivers to Ashland Global such Valvoline Amended Return.

(i)Valvoline and its Affiliates shall prepare, or cause to be prepared, all Tax Returns with respect to taxable years of Valvoline beginning on or after October 1, 2021 (“Valvoline Post-2020 Returns”) in accordance with Section 3.02(a)(i) and shall timely file such Tax Returns (taking into account any applicable extensions). Valvoline shall provide to Ashland Global the portion of each such Valvoline Post-2020 Return and related workpapers reflecting the effect of a Legacy Tax Attribute (whether used in such year or prior year) as soon as reasonably practicable and in the case of a federal Tax Return no later than 20 days prior to the due date (including any available extensions) for filing such Tax Return.

Ashland Global shall provide Valvoline with any written comments to a Valvoline Post-2020 Return within ten Business Days of Ashland Global's receipt thereof. Except as provided in Section 3.02(e), Valvoline shall revise each Valvoline Post-2020 Return to incorporate any reasonable written comments timely provided by Ashland Global, to the extent such comments (A) do not affect any position taken on a Valvoline Post-2020 Return with respect to its taxable income prior to taking any Legacy Tax Attributes into account, and (B) relate directly to the use of any Legacy Tax Attributes or Tax Attributes of the same type as any Legacy Tax Attributes previously used by Valvoline. For the avoidance of doubt and notwithstanding anything herein to the contrary, Valvoline shall credit, rather than deduct, any foreign taxes reflected on a Valvoline Post-2020 Return unless otherwise agreed by the Parties in writing.

(ii)For the avoidance of doubt and notwithstanding anything herein to the contrary, all Valvoline Amended Returns and Valvoline Post-2020 returns shall be prepared and filed in accordance with this Section 3.02(a) and not in accordance with Section 2.02(b), and the review by Ashland Global of Valvoline Amended Returns and Valvoline Post-2020 Returns shall be governed by this Section 3.02(a) and not by Section 2.02(c). Except as provided in Section 3.02(e), Valvoline agrees to utilize all Legacy Tax Attributes on the Valvoline Amended Returns and the Valvoline Post-2020 Returns, except to the extent that the utilization of such Legacy Tax Attributes is limited under the Code, Regulations, or applicable state tax Law.

(b) Hypothetical Tax Return Workpapers. For each taxable year of Valvoline beginning on or after October 1, 2018, Valvoline shall prepare workpapers supporting hypothetical pro forma Tax Returns that are consistent in all material respects to the Tax Returns actually filed by Valvoline for that year (including, where applicable, Valvoline Amended Returns), except that the tax liability reflected on the hypothetical pro forma workpapers shall be determined on a cumulative basis, as if all Legacy Tax Attributes had a balance of zero at the date of Deconsolidation and taking into account available Valvoline Tax Attributes not used on an applicable Valvoline Tax Return to the extent permitted under the Code, Regulations, or applicable state tax Law ("Valvoline Hypothetical Tax Return Workpapers"). Valvoline shall provide to Ashland Global the Valvoline Hypothetical Tax Return Workpapers (including supporting documentation reasonably requested by Ashland) for taxable years beginning on October 1, 2018, October 1, 2019 and October 1, 2020 as soon as reasonably practicable and in any event by March 15, 2023. Valvoline shall provide to Ashland Global the Valvoline Hypothetical Tax Return Workpapers for each taxable year beginning on or after October 1, 2021 within five Business Days of filing the final Valvoline Actual Tax Return for such taxable year. The Valvoline Hypothetical Tax Return Workpapers shall include the supporting documentation prepared by Valvoline in preparation of the Valvoline Hypothetical Tax Return

Workpapers reasonably requested by Ashland Global. Ashland Global shall provide Valvoline with any written comments to the Valvoline Hypothetical Tax Return Workpapers within ten Business Days of Ashland Global's receipt thereof. Except as provided in Section 3.02(e), Valvoline shall revise each Valvoline Hypothetical Return Workpapers to incorporate any reasonable written comments timely provided by Ashland Global to the extent such comments (A) do not affect any position taken on any Valvoline Hypothetical Tax Return Workpapers with respect to its taxable income prior to taking any Legacy Tax Attributes into account, and (B) relate directly to the use of any Legacy Tax Attributes or Tax Attributes of the same type as any Legacy Tax Attributes previously used by Valvoline. For the avoidance of doubt and notwithstanding anything herein to the contrary, Valvoline shall credit, rather than deduct, any foreign taxes reflected on a Valvoline Hypothetical Tax Return Workpaper unless otherwise agreed by the Parties in writing.

(c) Tax Reimbursement Amount.

(i)Calculation and Payment of Tax Reimbursement Amount.

(A)The "Tax Reimbursement Amount" for each taxable year of Valvoline beginning on or after October 1, 2018, shall equal the excess of the aggregate tax liability shown on the Valvoline Hypothetical Tax Return Workpapers for such year over the aggregate Tax liability shown on the Valvoline Actual Tax Returns for such year (the "Tax Reimbursement Amount").

(B)For each taxable year of Valvoline beginning on or after October 1, 2018, Valvoline shall pay to Ashland Global no later than the Payment Due Date for such year:

(1)100% of the Tax Reimbursement Amount for such year until the total payments from Valvoline to Ashland Global under this Section 3.02(c)(i)(B)(1) for all taxable years equals $10 million; and

(2)Thereafter, 80% of the Tax Reimbursement Amount for such year.

(ii) Unless otherwise agreed to in writing, the "Payment Due Date" for a taxable year shall be (i) if Valvoline is required to file Valvoline Amended Returns for that year pursuant to Section 3.02(a)(i), the 10th Business Day after the date Valvoline has filed all Valvoline Amended Returns required to be filed for that year or (ii) if no Valvoline Amended Return is required to be filed for that year, the later of either (y) September 20th of the calendar year following the end of that taxable year or (z) 10 Business Days following the date the Valvoline Tax Return is actually filed."

(d) Inserting new clauses (d) – (g) thereof as follows:

“(d) Schedule J. Schedule J sets forth:

(i) The unused balance of each Legacy Tax Attribute as of May 12, 2017 as provided by Ashland and agreed to by Valvoline;

(ii) For each taxable year ending after May 12, 2017 and on or before September 30, 2021;

(A) Valvoline’s good faith estimate of the unused balance of each Legacy Tax Attribute as of the beginning of such year;

(B) Valvoline’s good faith estimate of the amount of each Legacy Tax Attribute that will be reflected on any Tax Return of Valvoline for such year (including, for the avoidance of doubt, a Valvoline Amended Return);

(C) Valvoline’s good faith estimate of the amount (if any) of each Legacy Tax Attribute that expired during the year; and

(D) Valvoline’s good faith estimate of the balance of each Legacy Tax Attribute as of the end of such year.

(iii) For taxable years of Valvoline beginning on or after October 1, 2021, Valvoline’s good faith projection of the items set forth below, taking into account all gain recognized from the sale of any equity interests of a Valvoline Affiliate during an applicable tax period:

(A) The unused balance of each Legacy Tax Attribute as of the beginning of such year;

(B) The amount of each Legacy Tax Attribute that will be reflected on the applicable Valvoline Post-2020 Return;

(C) The amount (if any) of each Legacy Tax Attribute that will expire during the year; and

(D) The balance of each Legacy Tax Attribute as of the end of such year.

Valvoline shall update Schedule J to reflect actual amounts for the items set forth in Section 3.02(d)(ii) above and shall provide such updated Schedule to Ashland Global as soon as reasonably practicable and in any event by the date that Valvoline files all Valvoline Amended Returns pursuant to Section 3.02(a)(ii). Each taxable year of Valvoline thereafter, Valvoline shall update Schedule J to reflect actual amounts and revised projections, as applicable, for the items set forth in Section 3.02(d)(iii) and shall provide such updated Schedule to Ashland Global as soon as reasonably practicable and in any event no later than five Business Days after the Payment Due Date for such year. Valvoline expects in good faith, as of the date of this Amendment, that: (i) for each Legacy Tax

Attribute listed on Schedule J, Valvoline will pay Ashland Global with respect to such Legacy Tax Attribute pursuant to Section 3.02(c) in the taxable years when Valvoline estimates that such Legacy Tax Attribute will be reflected on a Tax Return of Valvoline (including a Valvoline Amended Return) under Section 3.02(d)(ii)(B) or 3.02(d)(iii)(B), as applicable; and (ii) Valvoline's own Tax Attributes will not materially affect the timing of such payments.

(e) Cooperation and Dispute Resolution.

(iii)Valvoline agrees to share any calculations, workpapers or relevant Tax Returns reasonably requested by Ashland Global in connection with matters related to this Section 3.02.

(iv)If Valvoline wishes to take a position on a Valvoline Actual Tax Return or the Valvoline Hypothetical Tax Return Workpapers that is inconsistent with one or more comments provided by Ashland Global pursuant to Section 3.02(a) or Section 3.02(b), Valvoline may do so if (A) Valvoline obtains an opinion from a Tax Advisor that there is no substantial authority for Ashland Global's position and that the position Valvoline wishes to take is supported by a "more likely than not" standard; or (B) the revisions do not affect any position taken on a Valvoline Tax Return or the Valvoline Hypothetical Tax Return Workpapers with respect to its taxable income prior to taking any Legacy Tax Attributes into account and relate directly to the use of any Legacy Tax Attributes or Tax Attributes of the same type as any Legacy Tax Attributes previously used by Valvoline. The parties shall attempt in good faith to resolve any issues or disputes related to this Section 3.02. Notwithstanding anything herein to the contrary, any dispute related to the review of Ashland Global of Valvoline Tax Returns or the Valvoline Hypothetical Tax Return Workpapers shall be governed by this Section 3.02(e) and not Section 2.07.

(f) Reimbursement by Ashland Global. Ashland Global shall reimburse Valvoline for any reasonable and necessary out of pocket expenses paid to a third party to prepare and file any Valvoline Amended Return to the extent those expenses are directly related to claiming a Legacy Tax Attribute thereon, *provided*, that any such expenses must be approved in writing by Ashland Global (such approval not to be unreasonably withheld) and that such reimbursement shall not exceed $300,000 in the aggregate.

(g) Recalculation of Tax Reimbursement Payment.

(i) If (x) the aggregate amount of tax shown on the Valvoline Actual Tax Returns for a taxable year is changed after such returns are filed and (y) the effect of such change is that the total payments that would be due from Valvoline to Ashland Global under Section 3.02(c) for all relevant taxable years taking into account such change (the "Recalculated Tax Reimbursement Payment") is greater or less than the aggregate amount actually paid by Valvoline to Ashland Global for those taxable years under Section 3.02(c), then Ashland Global shall pay to Valvoline, or Valvoline shall pay to Ashland Global, the amount determined in paragraph (ii) below.

(ii) If the aggregate Recalculated Tax Reimbursement Payments for all relevant taxable years exceeds the aggregate amount actually paid by Valvoline to Ashland Global for those taxable years under Section 3.02(c) (as previously recalculated pursuant to this Section 3.02(g), if applicable) for all such relevant taxable years, Valvoline shall pay such excess to Ashland Global. If the aggregate amount actually paid by Valvoline to Ashland Global under Section 3.02(c) (as recalculated pursuant to this Section 3.02(g), if applicable) for all relevant taxable years exceeds the Recalculated Tax Reimbursement Payments for all relevant taxable years, Ashland Global shall pay such excess to Valvoline. Such payments shall be made promptly after the determination that the aggregate amount of tax shown on the Valvoline Actual Tax Returns for a taxable year is changed."

(e) The following is added as a new Section 3.03 of the Tax Matters Agreement:

"Specified Tax Proceedings. If in the course of any audit or examination of any Tax Return filed by Valvoline (a "Specified Tax Proceeding") Valvoline receives notice (including, for the avoidance of doubt, the receipt of any Information Document Request or similar inquiry) that a Taxing Authority is examining the validity of a Legacy Tax Attribute claimed by Valvoline on an Actual Tax Return (including any amendment), then Valvoline shall notify Ashland Global as soon as practicable following the receipt of such notice (but in no event later than ten Business Days following the date of the receipt of such notice or, if earlier, 5 Business Days before the due date for any response to an Information Document Request or similar inquiry ). Notwithstanding anything herein to the contrary, Ashland Global will control, at its expense, only the portion of any Specified Tax Proceeding that relates to the validity of a Legacy Tax Attribute, and Valvoline will not take any action with respect to such Specified Tax Proceeding without the prior written consent of Ashland Global, including pursuing or foregoing any administrative appeals, proceedings, hearings and conferences with any Taxing Authority with respect thereto or settling such Specified Tax Proceeding. Notwithstanding anything herein to the contrary, this Section 3.03, and not Section 6.01(a), shall govern Specified Tax Proceedings."

(f) Section 4.01 of the Tax Matters Agreement is amended by deleting "and" at the end of clause (c) thereof and inserting the following as new clauses (e) and (f) thereof:

"(e) any penalties, interest or additions to Tax incurred by Valvoline as a result of a Determination that the balance of any Legacy Tax Attribute is less than the balance of such Legacy Tax Attribute as of the date of Deconsolidation, as reflected on Schedule J; and

(f) all reasonable out-of-pocket costs incurred by Valvoline to defend the validity of any Legacy Tax Attributes during a Specified Tax Proceeding pursuant to Section 3.03 and as reasonably agreed to by Ashland Global."

(g) The first clause of Section 6.01(a)(i) of the Tax Matters Agreement (immediately prior to clause (i) thereof) is amended to read as follows:

"Subject to Section 3.03 and Section 6.01(b)"

(h) Schedule I hereto is inserted as a new Schedule I to the Tax Matters Agreement.

(i) Schedule J hereto is inserted as a new Schedule J to the Tax Matters Agreement.

SECTION 2. Effectiveness. This Amendment shall become effective as of the date first above written (the "Amendment Effective Date").

SECTION 3. Effects on the Tax Matters Agreement: If, and to the extent, the provisions of this Amendment conflict with any other provision of the Tax Matters Agreement, the provisions of this Amendment shall govern and control. Except as expressly modified by this Amendment, the Tax Matters Agreement shall remain in full force and effect in accordance with its terms.

SECTION 4. Governing Law; Jurisdiction; Waiver of Jury Trial. The provisions of Sections 8.06, and 8.17 of the Tax Matters Agreement are hereby incorporated by reference herein, mutatis mutandis.

**SCHEDULE I**

| | |
|---|---|
| Federal | FY19-FY21 |
| Alabama | FY19-FY21 |
| Alaska | FY19-FY21 |
| Arizona | FY19 |
| Arkansas | FY19-FY20 |
| Colorado | FY19-FY20 |
| Connecticut | FY19-FY21 |
| Delaware | FY19-FY21 |
| Florida | FY19 |
| Georgia | FY19-FY21 |
| Idaho | FY19 |
| Illinois | FY19-FY21 |
| Indiana | FY19-FY20 |
| Iowa | FY19-FY21 |
| Kansas | FY19-FY20 |
| Kentucky | FY19-FY21 |
| Louisiana | FY19-FY21 |
| Maryland | FY19-FY21 |
| Massachusetts | FY19 |
| Michigan | FY19 |
| Mississippi | FY19-FY21 |
| Missouri | FY19-FY21 |
| Nebraska | FY19-FY21 |
| New Mexico | FY19-FY21 |
| New York | FY19-FY21 |
| North Carolina | FY19-FY21 |
| North Dakota | FY19-FY21 |
| Oklahoma | FY19-FY21 |
| Pennsylvania | FY19-FY21 |
| Rhode Island | FY19-FY20 |
| South Carolina | FY19-FY21 |
| Virginia | FY19-FY21 |
| West Virginia | FY19-FY21 |
| Wisconsin | FY19-FY21 |

Note: To the extent there are open, ongoing audits/notices in any of the above states, will work with auditor to include adjustments in that process if possible; otherwise amended returns will be filed.

# SCHEDULE J

| | 5/12/2017 | | Tax Year Ending 9/30/2018 | | | Tax Year Ending 9/30/2019 | | | | Tax Year Ending 9/30/2020 | | | | Tax Year Ending 9/30/2021 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LTA Description | **Estimated unused balance at beginning of year** | **Estimated amount to be reflected on Tax Returns** | **Estimated amount expired** | **Estimated ending balance** | **Estimated unused balance at beginning of year** | **Estimated amount to be reflected on Tax Returns** | **Estimated amount expired** | **Estimated ending balance** | **Estimated unused balance at beginning of year** | **Estimated amount to be reflected on Tax Returns** | **Estimated amount expired** | **Estimated ending balance** | **Estimated unused balance at beginning of year** | **Estimated amount to be reflected on Tax Returns** | **Estimated amount expired** | **Estimated ending balance** |
| Federal Foreign Tax Credits | $3,723,479 | $0 | $0 | **$3,723,479** | $3,723,479 | $0 | $0 | **$3,723,479** | $3,723,479 | $1,870,000 | $0 | **$1,953,479** | $1,853,479 | $1,245,000 | $0 | **$600,479** |
| R&D Credits | $6,986,677 | $0 | $0 | **$6,986,677** | $6,986,677 | $4,529,177 | $0 | **$2,457,5110** | $2,457,500 | $2,457,500 | $0 | **$0** | $0 | $0 | $0 | **$0** |
| AMT Credits | $932,484 | $0 | $0 | **$932,484** | $932,484 | $932,484 | $0 | **$0** | $0 | $0 | $0 | **$0** | $0 | $0 | $0 | **$0** |
| State NOL Gross DTA | $24,491,610 | $0 | $320,940 | **$24,170,670** | $24,170,670 | $1,623,355 | $10,285 | **$22,537,031** | $22,537,031 | $3,041,129 | $304,809 | **$19,191,092** | $19,191,092 | $2,451,881 | $0 | **$16,739,212** |
| State NOL Gross VA | $0 | $0 | $0 | **$0** | $0 | $0 | $0 | **$0** | $0 | $0 | $0 | **$0** | $0 | $0 | $0 | **$0** |
| State Credits Gross DTA | $1,342,249 | $0 | $0 | **$1,342,249** | $1,342,249 | $0 | $0 | **$1,342,249** | $1,342,249 | $0 | $0 | **$1,342,249** | $1,342,249 | $0 | $0 | **$1,342,249** |
| State Credits Gross VA | ($394,349) | $0 | $0 | **($394,349)** | ($394,349) | $0 | $0 | **($394,349)** | ($394,349) | $0 | $0 | **($394,349)** | ($394,349) | $0 | $0 | **($394,349)** |
| Total | $37,082,150. | $0 | $320,940 | **$36,761,210** | $36,761,210 | $7,085,016 | $10,285 | **$29,665,910** | $29,665,910 | $7,368,629 | $304,809 | **$21,992,471** | $21,992,471 | $3,696,881 | $0 | **$18,295,591** |
| Net Federal Benefit | ($5,342,297) | $0 | ($67,397) | **($5,274,900)** | ($5,274,900) | ($340,905) | ($2,160) | **($4,931,835)** | ($4,931,835) | ($638,637) | ($64,010) | **($4,229,188)** | ($4,229,188) | ($514,895) | $0 | **($3,714,293)** |
| Net DTA - Indemnity | $31,739,853 | $0 | $253,542 | **$31,486,311** | $31,486,311 | $6,744,112 | $8,125 | **$24,734,074** | $24,734,074 | $6,729,992 | $240,799 | **$17,763,283** | $17,763,283 | $3,181,986 | $0 | **$14,581,297** |

| LTA | Tax Year Ending 9/30/2022 | | | | Tax Year Ending 9/30/2023 | | | | Tax Year Ending 9/30/2024 | | | | Tax Year Ending 9/30/2025 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Description | Estimated unused balance at beginning of year | Estimated amount to be reflected on Tax Returns | Estimated amount expired | Estimated ending balance | Estimated unused balance at beginning of year | Estimated amount to be reflected on Tax Returns | Estimated amount expired | Estimated ending balance | Estimated unused balance at beginning of year | Estimated amount to be reflected on Tax Returns | Estimated amount expired | Estimated ending balance | Estimated unused balance at beginning of year | Estimated amount to be reflected on Tax Returns | Estimated amount expired | Estimated ending balance |
| Federal Foreign Tax Credits | $608,479 | $608,479 | $0 | **$0** | $0 | $0 | $0 | **$0** | $0 | $0 | $0 | **$0** | $0 | $0 | $0 | **$0** |
| R&D Credits | $0 | $0 | $0 | **$0** | $0 | $0 | $0 | **$0** | $0 | $0 | $0 | **$0** | $0 | $0 | $0 | **$0** |
| AMT Credits | $0 | $0 | $0 | **$0** | $0 | $0 | $0 | **$0** | $0 | $0 | $0 | **$0** | $0 | $0 | $0 | **$0** |
| State NOL Gross DTA | $16,739,212 | $2,713,502 | $0 | **$14,025,709** | $14,025,709 | $9,220,422 | $0 | **$4.805.287** | $4,805,287 | $319,757 | $0 | **$4,485,531** | $4,485,531 | $319,757 | $0 | **$4,165,774** |
| State NOL Gross VA | $0 | $0 | $0 | **$0** | $0 | $0 | $0 | **$0** | $0 | $0 | $0 | **$0** | $0 | $0 | $0 | **$0** |
| State Credits Gross DTA | $1,342,249 | $0 | $0 | **$1,342,249** | $1,342,249 | $0 | $0 | **$1,342,249** | $1,342,249 | $0 | $0 | **$1,342,249** | $1,342,249 | $0 | $0 | **$1,342,249** |
| State Credits Gross VA | ($394,349) | $0 | $0 | **($394,349)** | ($394,349) | $0 | $0 | **($394,349)** | ($394,349) | $0 | $0 | **($394,349)** | ($394,349) | $0 | $0 | **($394,349)** |
| Total | $18,295,591 | $3,321,981 | $0 | **$14,973,609** | $14,973,609 | $9,220,422 | $0 | **$5,753,187** | $5,753,187 | $319,757 | $0 | **$5,433,431** | $5,433,431 | $319,757 | $0 | **$5,113,674** |
| Net Federal Benefit | ($3,714,293) | ($569,835) | $0 | **($3,144,458)** | ($3,144,458) | ($1,936,289) | $0 | **($1,208,169)** | ($1,208,169) | ($67,149) | $0 | **($1,141,020)** | ($1,141,020) | ($67,149) | $0 | **($1,073,871)** |
| Net DTA - Indemnity | $14,581,297 | $2,752,146 | $0 | **$11,829,151** | $11,829,151 | $7,284,133 | $0 | **$4.545,018** | $4,545,018 | $252,608 | $0 | **$4,292,410** | $4,292,410 | $252,608 | $0 | **$4,039,802** |

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be duly executed by their respective authorized officers as of the date first written above.

ASHLAND INC.

By

/s/Yvonne Winkler von Mohrenfels

Name: Yvonne Winkler von Mohrenfels

Title: Senior Vice President, General Counsel and Secretary

VALVOLINE INC.

By

/s/ Julie M. O’Daniel

Name: Julie M. O’Daniel

Title: General Counsel and Chief Legal Officer

EXHIBIT 31.1

**CERTIFICATION**

I, Guillermo Novo, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Ashland 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: February 1, 2023

/s/ Guillermo Novo

Guillermo Novo

Chair and Chief Executive Officer

(Principal Executive Officer)

EXHIBIT 31.2

**CERTIFICATIONS**

I, J. Kevin Willis, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Ashland 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: February 1, 2023

/s/ J. Kevin Willis

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

EXHIBIT 32

ASHLAND 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 Inc. (the “Company”) on Form 10-Q for the period ended December 31, 2022, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), each of the undersigned, Guillermo Novo, 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/ Guillermo Novo
Guillermo Novo
Chief Executive Officer
February 1, 2023

/s/ J. Kevin Willis
J. Kevin Willis
Chief Financial Officer
February 1, 2023