# SECURITIES AND EXCHANGE COMMISSION 

Washington, D.C. 20549

FORM 10-Q

Quarterly Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

FOR THE QUARTERLY PERIOD ENDED MARCH 31, 1999

Commission file number 1-2918

ASHLAND INC.
(a Kentucky corporation)
I.R.S. No. 61-0122250

50 E. RiverCenter Boulevard
P. O. Box 391

Covington, Kentucky 41012-0391

Telephone Number: (606) 815-3333

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or $15(\mathrm{~d})$ 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 [X] No

At April 30, 1999, there were $73,170,271$ shares of Registrant's Common Stock outstanding. One Right to purchase one-thousandth of a share of Series A Participating Cumulative Preferred Stock accompanies each outstanding share of Registrant's Common Stock.

PART I - FINANCIAL INFORMATION

ASHLAND INC. AND CONSOLIDATED SUBSIDIARIES
STATEMENTS OF CONSOLIDATED INCOME

|  | Three months ended March 31 |  |  |  | Six months ended March 31 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (In millions except per share data) |  | 1999 |  | 1998 |  | 1999 |  | 1998 |
| REVENUES |  |  |  |  |  |  |  |  |
| Sales and operating revenues | \$ | 1,503 | \$ | 1,473 | \$ | 3,149 | \$ | 3, 071 |
| Equity income |  | 139 |  | 57 |  | 100 |  | 106 |
| Other income |  | 13 |  | 19 |  | 39 |  | 46 |
|  |  | 1,655 |  | 1,549 |  | 3,288 |  | 3,223 |
| COSTS AND EXPENSES |  |  |  |  |  |  |  |  |
| Cost of sales and operating expenses |  | 1,176 |  | 1,201 |  | 2,476 |  | 2,509 |
| Selling, general and administrative expenses |  | 251 |  | 224 |  | 518 |  | 435 |
| Depreciation, depletion and amortization |  | 52 |  | 44 |  | 103 |  | 85 |
|  |  | 1,479 |  | 1,469 |  | 3, 097 |  | 3, 029 |
| OPERATING INCOME |  | 176 |  | 80 |  | 191 |  | 194 |
| Interest expense (net of interest income) |  | (34) |  | (36) |  | (67) |  | (62) |

NET INCOME

EARNINGS PER SHARE - Note A

## Basic

Diluted
DIVIDENDS PAID PER COMMON SHARE

| \$ | 87 | \$ | 28 | \$ | 76 | \$ | 81 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | == |  | = |  | = |  |  |


| $\$$ | 1.17 | $\$$ | .37 | $\$$ | 1.02 | $\$$ | 1.07 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\$$ | 1.16 | $\$$ | .37 | $\$$ | 1.01 | $\$$ | 1.05 |
|  |  |  |  |  |  |  |  |
| $\$$ | .275 | $\$$ | .275 | $\$$ | .55 | $\$$ | .55 |

ASHLAND INC. AND CONSOLIDATED SUBSIDIARIES
CONDENSED CONSOLIDATED BALANCE SHEETS

| (In millions) | $\begin{array}{r} \text { March } 31 \\ 1999 \end{array}$ |  | $\begin{array}{r} \text { September } 30 \\ 1998 \end{array}$ |  | $\begin{array}{r} \text { March } 31 \\ 1998 \end{array}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ASSETS |  |  |  |  |  |  |
| CURRENT ASSETS |  |  |  |  |  |  |
| Cash and cash equivalents | \$ | 90 | \$ | 34 | \$ | 18 |
| Accounts receivable |  | 1,072 |  | 1,129 |  | 1,004 |
| Allowance for doubtful accounts |  | (22) |  | (19) |  | (20) |
| Inventories - Note A |  | 480 |  | 440 |  | 465 |
| Deferred income taxes |  | 120 |  | 104 |  | 97 |
| Other current assets |  | 195 |  | 140 |  | 100 |
|  |  | 1,935 |  | 1,828 |  | 1,664 |
| INVESTMENTS AND OTHER ASSETS |  |  |  |  |  |  |
| Investment in Marathon Ashland Petroleum LLC (MAP) |  | 2,095 |  | 2,102 |  | 2,074 |
| Investment in Arch Coal |  | 422 |  | 422 |  | 420 |
| Cost in excess of net assets of companies acquired |  | 224 |  | 207 |  | 184 |
| Other noncurrent assets |  | 340 |  | 362 |  | 406 |
|  |  | 3, 081 |  | 3,093 |  | 3,084 |
| PROPERTY, PLANT AND EQUIPMENT |  |  |  |  |  |  |
| Cost |  | 2,544 |  | 2,413 |  | 2,250 |
| Accumulated depreciation, depletion and amortization |  | 1,322) |  | 1,252) |  | 1,186) |
|  |  | 1,222 |  | 1,161 |  | 1,064 |
|  | \$ | 6,238 | \$ | 6,082 | \$ | 5,812 |
| LIABILITIES AND STOCKHOLDERS' EQUITY |  |  |  |  |  |  |
| CURRENT LIABILITIES |  |  |  |  |  |  |
| Debt due within one year | \$ | 441 | \$ | 125 | \$ | 265 |
| Trade and other payables |  | 1,115 |  | 1,199 |  | 971 |
| Income taxes |  | 32 |  | 37 |  | 45 |
|  |  | 1,588 |  | 1,361 |  | 1,281 |
| NONCURRENT LIABILITIES |  |  |  |  |  |  |
| Long-term debt (less current portion) |  | 1,481 |  | 1,507 |  | 1,536 |
| Employee benefit obligations |  | 426 |  | 458 |  | 424 |
| Reserves of captive insurance companies |  | 181 |  | 165 |  | 176 |
| Other long-term liabilities and deferred credits |  | 481 |  | 454 |  | 328 |
| Commitments and contingencies - Note E |  |  |  |  |  |  |
|  |  | 2,569 |  | 2,584 |  | 2,464 |
| COMMON STOCKHOLDERS' EQUITY |  | 2,081 |  | 2,137 |  | 2,067 |
|  | \$ | 6,238 | \$ | 6,082 | \$ | 5,812 |

SEE NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS.

ASHLAND INC. AND CONSOLIDATED SUBSIDIARIES
STATEMENTS OF CONSOLIDATED COMMON STOCKHOLDERS' EQUITY

| (In millions) | Common stock |  | $\begin{aligned} & \text { Paid-in } \\ & \text { capital } \end{aligned}$ |  | Retained earnings |  | Accumulated other comprehensive income |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BALANCE AT OCTOBER 1, 1997 | \$ | 75 | \$ | 605 | \$ | 1,379 | \$ | (35) |  | 2, 024 |
| Total comprehensive income (1) |  |  |  |  |  | 81 |  | (9) |  | 72 |
| Common stock cash dividends |  |  |  |  |  | (42) |  |  |  | (42) |
|  |  |  |  |  |  |  |  |  |  |  |
| Stock incentive plans |  |  |  | 10 |  |  |  |  |  | 10 |
| Acquisitions of other companies |  | 1 |  | 1 |  | 3 |  |  |  | 5 |
| Other changes |  |  |  | (2) |  |  |  |  |  | (2) |
| BALANCE AT MARCH 31, 1998 | \$ | 76 | \$ | 614 | \$ | 1,421 | \$ | (44) |  | 2, 067 |
| BALANCE AT OCTOBER 1, 1998 | \$ | 76 | \$ | 602 | \$ | 1,501 | \$ | (42) | \$ | 2,137 |
| Total comprehensive income (1) |  |  |  |  |  | 76 |  | (12) |  | 64 |
| Common stock cash dividends |  |  |  |  |  | (41) |  |  |  | (41) |
|  |  |  |  |  |  |  |  |  |  |  |
| Stock incentive plans |  |  |  | 5 |  |  |  |  |  | 5 |
| Acquisitions of other companies |  | 1 |  | 43 |  |  |  |  |  | 44 |
| Repurchase of common stock |  | (3) |  | (126) |  |  |  |  |  | (129) |
| Other changes |  |  |  | 1 |  |  |  |  |  | 1 |
| BALANCE AT MARCH 31, 1999 | \$ | 74 | \$ | 525 | \$ | 1,536 | \$ | (54) | \$ | 2,081 |

(1) Reconciliations of net income to total comprehensive income follow.

|  | Three months ended March 31 |  |  |  | Six months ended <br> March 31 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (In millions) |  | 1999 |  | 998 |  | 1999 |  | 998 |
| Net income | \$ | 87 | \$ | 28 | \$ | 76 | \$ | 81 |
| Unrealized translation adjustments |  | (13) |  | (4) |  | (11) |  | (9) |
| Related tax benefit |  | 3 |  | - |  | 3 |  | - |
| Unrealized gains (losses) on securities |  | (2) |  | - |  | (3) |  | 3 |
| Related tax benefit (expense) |  | 1 |  |  |  | 1 |  | (1) |
| Gains on securities included in net income |  | (1) |  | - |  | (3) |  | (3) |
| Related tax expense |  | - |  | - |  | 1 |  | 1 |
| Total comprehensive income | \$ | 75 | \$ | 24 | \$ | 64 | \$ | 72 |

At March 31, 1999, accumulated other comprehensive income was a loss of $\$ 54$ million comprised of net unrealized translation losses of \$36 million and a minimum pension liability of $\$ 18$ million.

SEE NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

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ASHLAND INC. AND CONSOLIDATED SUBSIDIARIES
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STATEMENTS OF CONSOLIDATED CASH FLOWS


SEE NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

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

## NOTE A - SIGNIFICANT ACCOUNTING POLICIES

## INTERIM FINANCIAL REPORTING

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with generally accepted accounting principles for interim financial reporting and Securities and Exchange Commission regulations. Although such statements are subject to any year-end audit adjustments which may be necessary, in the opinion of management, all adjustments (consisting of normal recurring accruals) considered necessary for a fair presentation have been included. These financial statements should be read in conjunction with Ashland's Annual Report on Form $10-\mathrm{K}$ for the fiscal year ended September 30, 1998. Results of operations for the six months ended March 31, 1999, are not necessarily indicative of results to be expected for the year ending September 30, 1999.

## INVENTORIES

| (In millions) | $\begin{array}{r} \text { March } 31 \\ 1999 \end{array}$ |  | $\begin{array}{r} \text { September } 30 \\ 1998 \end{array}$ |  | $\begin{array}{r} \text { March } 31 \\ 1998 \end{array}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chemicals and plastics | \$ | 370 | \$ | 352 | \$ | 375 |
| Petroleum products |  | 53 |  | 48 |  | 52 |
| Construction materials |  | 53 |  | 39 |  | 41 |
| Other products |  | 49 |  | 49 |  | 49 |
| Supplies |  | 8 |  | 9 |  | 10 |
| Excess of replacement costs over LIFO carrying values |  | (53) |  | (57) |  | (62) |
|  | \$ | 480 | \$ | 440 | \$ | 465 |

EARNINGS PER SHARE
The following table sets forth the computation of basic and diluted earnings per share (EPS).

|  |  |  | Six months ended March 31 |  |
| :---: | :---: | :---: | :---: | :---: |
| (In millions except per share data) | 1999 | 1998 | 1999 | 1998 |

NUMERATOR
Numerator for basic and diluted EPS - Net income

| 87 |
| :---: |
| \$ |

\$ 76 \$ 81

DENOMINATOR

Denominator for basic EPS - Weighted average
common shares outstanding
Common shares issuable upon exercise of stock options

Denominator for diluted EPS - Adjusted weighted average shares and assumed conversions

BASIC EARNINGS PER SHARE
DILUTED EARNINGS PER SHARE


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

## NOTE B - INFORMATION BY INDUSTRY SEGMENT

During the quarter ended March 31, 1999, Ashland took steps to provide greater market focus and definition for its former Ashland Chemical operations with the creation of two new divisions Ashland Distribution Company and Ashland Specialty Chemical Company. These divisions replace Ashland Chemical Company. The Information By Industry Segment on Page 10 has been presented showing these two new segments, with prior periods restated for comparison purposes. In addition, the following table shows total assets and capital employed for each of the new segments at March 31, 1999, and restated as of September 30, 1998.

|  | Total assets |  |  |  | Capital employed |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (In millions) | $\begin{array}{r} \text { March } 31 \\ 1999 \end{array}$ |  | $\begin{array}{r} \text { September } 30 \\ 1998 \end{array}$ |  | $\begin{array}{r} \text { March } 31 \\ 1999 \end{array}$ |  | September 301998 |  |
| Ashland Distribution | \$ | 938 | \$ | 915 | \$ | 534 | \$ | 477 |
| Ashland Specialty Chemical |  | 873 |  | 861 |  | 573 |  | 557 |

NOTE C - UNUSUAL ITEMS
Marathon Ashland Petroleum LLC (MAP) maintains an inventory valuation reserve to reduce the LIFO cost of its inventories to their net realizable values. Adjustments in that reserve are recognized quarterly based on changes in petroleum product prices, creating non-cash charges or credits to Ashland's earnings. In addition, during the six months ended March 31, 1998, Ashland recorded a gain on the sale of its $23 \%$ interest in Melamine Chemicals, Inc. The following tables show the effects of these unusual items on Ashland's operating income, net income and diluted earnings per share for the periods ended March 31, 1999, and 1998.

|  | Three months ended March 31 |  |  |  | Six months ended March 31 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (In millions except per share data) | 1999 |  | 1998 |  | 1999 |  | 1998 |  |
| Operating income before unusual items | \$ |  | \$ | 77 | \$ | 152 | \$ | 177 |
| MAP inventory valuation adjustments |  |  | 3 |  | 39 |  | 3 |  |
| Ashland Specialty Chemical gain on sale of Melamine Chemicals |  |  | - |  |  |  |  | 14 |
| Operating income as reported | \$ | 176 | \$ | 80 | \$ | 191 | \$ | 194 |
| Net income before unusual items | \$ | 6 | \$ | 26 | \$ | 52 | \$ | 72 |
| MAP inventory valuation adjustments |  | 81 |  | 2 |  | 24 |  | 2 |
| Ashland Specialty Chemical gain on sale of Melamine Chemicals |  | - |  | - |  | - |  | 7 |
| Net income as reported | \$ | 87 | \$ | 28 | \$ | 76 | \$ | 81 |
| Diluted earnings per share before unusual items | \$ | . 08 | \$ | .34.03 | \$ | . 69 | \$ | .94.11 |
| Impact of unusual items | 1.08 |  |  |  |  |  |  |  |
| Diluted earnings per share as reported | \$ | 1.16 | \$ | . 37 | \$ | 1.01 | \$ | 1.05 |

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

## NOTE D - UNCONSOLIDATED AFFILIATES

Ashland is required by Rule 3-09 of Regulation S-X to file separate financial statements for its two significant unconsolidated affiliates, Marathon Ashland Petroleum LLC (MAP) and Arch Coal, Inc. Such financial statements for the year ended December 31, 1998, were filed on a Form 10-K/A on March 17, 1999. Unaudited income statement information for these companies is shown below.

Since MAP commenced operations on January 1, 1998, comparative information for the six months ended March 31, 1998, is not presented. MAP's results included adjustments to MAP's inventory market valuation reserve. MAP is organized as a limited liability company (LLC) that has elected to be taxed as a partnership. Therefore, the parents are responsible for income taxes applicable to their share of MAP's taxable income. The net income reflected below for MAP does not include any provision for income taxes which will be incurred by MAP's parents.

|  | Three months ended March 31 |  |  |  | Six months ended March 31 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (In millions) |  | 1999 |  | 1998 |  | 1999 |  | 1998 |
| MAP |  |  |  |  |  |  |  |  |
| Sales and operating revenues | \$ | 4,184 | \$ | 4,589 | \$ | 8, 896 |  |  |
| Income from operations |  | 383 |  | 138 |  | 292 |  |  |
| Net income |  |  |  |  |  |  |  |  |
| Including inventory valuation adjustments |  | 381 |  | 141 |  | 293 |  |  |
| Excluding inventory valuation adjustments |  | 33 |  | 132 |  | 189 |  |  |
| Ashland's equity income |  |  |  |  |  |  |  |  |
| Including inventory valuation adjustments |  | 138 |  | 47 |  | 97 |  |  |
| Excluding inventory valuation adjustments |  | 6 |  | 44 |  | 58 |  |  |
| ARCH COAL |  |  |  |  |  |  |  |  |
| Sales and operating revenues | \$ | 406 | \$ | 299 | \$ | 800 | \$ | 628 |
| Income from operations |  | 14 |  | 22 |  | 28 |  | 52 |
| Net income |  | 1 |  | 16 |  | 2 |  | 37 |
| Ashland's equity income |  | - |  | 8 |  | - |  | 19 |

NOTE E - LITIGATION, CLAIMS AND CONTINGENCIES
Ashland is subject to various federal, state and local environmental laws and regulations that require remediation efforts at multiple locations, including current operating facilities, operating facilities conveyed to MAP, previously owned or operated facilities, and Superfund or other waste sites. For information regarding environmental capital expenditures and reserves, see the "Miscellaneous - Environmental Matters" section of Ashland's Form 10-K.

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

ASHLAND INC. AND CONSOLIDATED SUBSIDIARIES
notes to condensed consolidated financial statements

NOTE E - LITIGATION, CLAIMS AND CONTINGENCIES (continued)
Ashland is a defendant in a series of cases involving more than 600 former workers at the Lockheed aircraft manufacturing facility in Burbank, California. The plaintiffs allege personal injury resulting from exposure to chemicals sold to Lockheed by Ashland, and inadequate labeling of such chemicals. The cases are being tried in the Superior Court of the State of California for the County of Los Angeles. To date, five trials involving approximately 130 plaintiffs have resulted in total verdicts adverse to Ashland of approximately $\$ 80$ million (approximately $\$ 75$ million of which is punitive damages). The damage awards have been appealed. Ashland believes that there is a substantial probability that the damage awards will be reversed or reduced substantially.

In addition to these matters, Ashland and its subsidiaries are parties to numerous other claims and lawsuits, some of which are also for substantial amounts. While these actions are being contested, the outcome of individual matters is not predictable with assurance.

Ashland does not believe that any liability resulting from any of the above matters, after taking into consideration its insurance coverages and amounts already provided for, will have a material adverse effect on its consolidated financial position, cash flows or liquidity. However, such matters could have a material effect on Ashland's results of operations in a particular quarter or fiscal year as they develop or as new issues are identified.

NOTE F - ACQUISITIONS
During the six months ended March 31, 1999, APAC acquired six construction businesses, four of which included the issuance of $\$ 44$ million in Ashland common stock. In addition, Ashland Specialty Chemical made an acquisition in its Composite Polymers division. These acquisitions were accounted for as purchases and did not have a significant effect on Ashland's consolidated financial statements.

|  | Three months ended March 31 |  |  |  | Six months ended March 31 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (In millions except as noted) |  | 1999 |  | 1998 |  | 1999 |  | 1998 |
| Revenues |  |  |  |  |  |  |  |  |
| Sales and operating revenues |  |  |  |  |  |  |  |  |
| Ashland Distribution | \$ | 716 | \$ | 740 | \$ | 1,422 | \$ | 1,466 |
| Ashland Specialty Chemical |  | 304 |  | 332 |  | 613 |  | 646 |
| APAC |  | 262 |  | 197 |  | 691 |  | 535 |
| Valvoline |  | 250 |  | 235 |  | 484 |  | 488 |
| Intersegment sales |  |  |  |  |  |  |  |  |
| Ashland Distribution |  | (8) |  | (7) |  | (17) |  | (14) |
| Ashland Specialty Chemical |  | (20) |  | (22) |  | (41) |  | (44) |
| Valvoline |  | (1) |  | (2) |  | (3) |  | (6) |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Ashland Specialty Chemical |  | 1 |  | 2 |  | 3 |  | 4 |
| Refining and Marketing |  | 138 |  | 47 |  | 97 |  | 83 |
| Arch Coal |  | - |  | 8 |  | - |  | 19 |
|  |  | 139 |  | 57 |  | 100 |  | 106 |
| Other income |  |  |  |  |  |  |  |  |
| Ashland Distribution |  | 2 |  | 2 |  | 4 |  | 3 |
| Ashland Specialty Chemical |  | 5 |  | 5 |  | 9 |  | 25 |
| APAC |  | 2 |  | 3 |  | 5 |  | 4 |
| Valvoline |  | 1 |  | 2 |  | 3 |  | 5 |
| Refining and Marketing |  | 3 |  | 1 |  | 11 |  | 1 |
| Corporate |  | - |  | 6 |  | 7 |  | 8 |
|  |  | 13 |  | 19 |  | 39 |  | 46 |
|  | \$ | 1,655 | \$ | 1,549 | \$ | 3,288 | \$ | 3,223 |
| OPERATING INCOME |  |  |  |  |  |  |  |  |
| Ashland Distribution | \$ | 13 | \$ | 14 | \$ | 25 | \$ | 28 |
| Ashland Specialty Chemical |  | 21 |  | 23 |  | 49 |  | 61 |
| APAC |  | 2 |  | - |  | 28 |  | 19 |
| Valvoline |  | 13 |  | 5 |  | 24 |  | 16 |
| Refining and Marketing (1) |  | 6 |  | 41 |  | 58 |  | 78 |
| Inventory valuation adjustments (2) |  | 132 |  | 3 |  | 39 |  | 3 |
| Arch Coal |  | - |  | 8 |  | (1) |  | 19 |
| Corporate |  | (11) |  | (14) |  | (31) |  | (30) |
|  | \$ | 176 | \$ | 80 | \$ | 191 | \$ | 194 |
| OPERATING INFORMATION |  |  |  |  |  |  |  |  |
| APAC |  |  |  |  |  |  |  |  |
| Construction backlog at March 31 (millions) |  |  |  |  | \$ | 872 | \$ | 825 |
| Hot mix asphalt production (million tons) |  | 3.1 |  | 2.3 |  | 9.9 |  | 7.7 |
| Aggregate production (million tons) |  | 4.1 |  | 3.7 |  | 9.3 |  | 8.3 |
| Valvoline lubricant sales (thousand barrels per day) |  | 16.4 |  | 15.5 |  | 16.1 |  | 15.5 |
| Refining and Marketing (3) |  |  |  |  |  |  |  |  |
| Refined products sold (thousand barrels per day) |  | 1,121 |  | 1,143 |  | 1,181 |  |  |
| Crude oil refined (thousand barrels per day) |  | 848 |  | 905 |  | 855 |  |  |
| Arch Coal (3) |  |  |  |  |  |  |  |  |
| Tons sold (millions) |  | 27.7 |  | 11.9 |  | 54.3 |  | 24.6 |
| Tons produced (millions) |  | 26.1 |  | 11.4 |  | 50.9 |  | 22.2 |

(1) Effective January 1, 1998, includes Ashland's equity income from MAP, amortization of Ashland's excess investment in MAP, and certain retained refining and marketing activities.
(2) Represents Ashland's share of changes in MAP's inventory market valuation reserve. The reserve reflects the excess of the LIFO cost of MAP's crude oil and refined product inventories over their net realizable values.
(3) Amounts represent $100 \%$ of the volumes of MAP or Arch Coal. MAP commenced operations January 1, 1998.

## ASHLAND INC. AND CONSOLIDATED SUBSIDIARIES

MANAGEMENT'S DISCUSSION AND ANALYSIS

RESULTS OF OPERATIONS
CURRENT QUARTER - Ashland recorded net income of $\$ 87$ million for the quarter ended March 31, 1999, compared to $\$ 28$ million for the quarter ended March 31, 1998. Excluding unusual items described in Note C to the Condensed Consolidated Financial Statements, net income amounted to $\$ 6$ million in the 1999 period, compared to $\$ 26$ million in the 1998 period. The decline was due to severely compressed refining margins in January and February of 1999. Operating income from Ashland's wholly owned businesses was up $18 \%$, as Valvoline and APAC reported excellent quarters, while Ashland Distribution and Ashland Specialty Chemical provided solid earnings. However, these good performances were more than offset by lower profits from Refining and Marketing and Arch Coal.

YEAR-TO-DATE - For the six months ended March 31, 1999, Ashland recorded net income of $\$ 76$ million, compared to $\$ 81$ million for the six months ended March 31, 1998. Excluding unusual items described in Note $C$ to the Condensed Consolidated Financial Statements, net income amounted to $\$ 52$ million in the 1999 period, compared to $\$ 72$ million in the 1998 period. The decline was generally due to the same factors described in the current quarter comparison above.

## ASHLAND DISTRIBUTION

CURRENT QUARTER - Ashland Distribution reported operating income of $\$ 13$ million for the quarter ended March 31, 1999, compared to $\$ 14$ million for the quarter ended March 31, 1998. The FRP Supply division reported record second quarter operating income on the strength of improved sales volumes, reflecting good conditions in segments of the marine, construction and auto industries. The Industrial Chemicals \& Solvents division showed improvement, reflecting higher gross profit margins. Results declined for the remaining distribution divisions (General Polymers, Ashland Plastics Europe, and Fine Ingredients) despite increases in unit sales volumes, as they encountered some price deflation resulting from weakness in commodity chemical markets.

YEAR-TO-DATE - For the six months ended March 31, 1999, Ashland Distribution reported operating income of $\$ 25$ million, compared to $\$ 28$ million for the same period of 1998 . The decline was generally due to the same factors described in the current quarter comparison above.

## ASHLAND SPECIALTY CHEMICAL

CURRENT QUARTER - For the quarter ended March 31, 1999, Ashland Specialty Chemical reported operating income of $\$ 21$ million, compared to $\$ 23$ million for the March 1998 quarter. Composite Polymers, Specialty Polymers \& Adhesives, and Drew Industrial all set divisional second quarter profit records, primarily on the strength of increased sales volumes. The Petrochemicals division was up due to higher margins for maleic anhydride. These improvements partially offset declines in the Foundry Products, Drew Marine, and Electronic Chemicals divisions resulting primarily from reduced sales volumes.

YEAR-TO-DATE - For the six months ended March 31, 1999, Ashland Specialty Chemical reported operating income of $\$ 49$ million. Results for the first six months of 1998 amounted to $\$ 47$ million, excluding a $\$ 14$ million pretax gain on the sale of Ashland's $23 \%$ interest in Melamine Chemicals. Improvements in Composite Polymers, Specialty Polymers \& Adhesives, Drew Industrial and Petrochemicals more than offset declines in Foundry Products, Drew Marine and Electronic Chemicals. The same factors discussed in the current quarter comparison above affected the year-to-date comparison.

## ASHLAND INC. AND CONSOLIDATED SUBSIDIARIES

MANAGEMENT'S DISCUSSION AND ANALYSIS

APAC
CURRENT QUARTER - For the second quarter of fiscal 1999, APAC's construction operations reported operating income of $\$ 2$ million, compared to breakeven results for the March 1998 quarter. Given the seasonality of highway construction, the March quarter is typically the slowest period in the construction season. The profit generated in the March 1999 quarter reflects improvements in cost control and better weather conditions than the March 1998 quarter.

YEAR-TO-DATE - For the six months ended March 31, 1999, APAC reported operating income of $\$ 28$ million, a $51 \%$ improvement over $\$ 19$ million for the same period of 1998. Net revenue (total revenue less subcontract work) increased $30 \%$, while production of hot mix asphalt was up $29 \%$ and crushed aggregate was up $12 \%$ from the 1998 period. The construction backlog at March 31, 1999, amounted to $\$ 872$ million, the best March level in APAC history, representing a 6\% improvement over the March 1998 level. In keeping with Ashland's strategy to grow higher return businesses, APAC completed six acquisitions during the first half of fiscal 1999, expanding its market position in North Carolina, Virginia and Missouri.

VALVOLINE
CURRENT QUARTER - For the quarter ended March 31, 1999, Valvoline reported operating income of $\$ 13$ million, compared to $\$ 5$ million for the March 1998 quarter. Earnings from the core lubricant business remained strong, reflecting increased lubricant sales volumes. In addition, automotive chemical sales continue to gain momentum as the new SynPower product line has received widespread customer acceptance following an aggressive marketing program launched in fiscal 1998. Revenues for Eagle One car care product lines are rapidly increasing with good market penetration among the major mass market and automotive retailers. Valvoline Instant Oil Change had a record March quarter achieving higher daily car counts. Partially offsetting these improvements were lower earnings from Valvoline International operations in Europe and Latin America. In addition, the used-oil collection business felt the adverse effects of soft used-oil fuel prices.

YEAR-TO-DATE - For the six months ended March 31, 1999, Valvoline reported operating income of $\$ 24$ million, compared to $\$ 16$ million for the same period of 1998. The increase was generally due to the same factors described in the current quarter comparison above.

## REFINING AND MARKETING

CURRENT QUARTER - Operating income from Refining and Marketing (excluding $\$ 132$ million in favorable inventory market valuation adjustments) amounted to $\$ 6$ million for the quarter ended March 31, 1999. This compares to $\$ 41$ million for the quarter ended March 31, 1998 (excluding $\$ 3$ million in favorable inventory market valuation adjustments). Results for both periods include Ashland's 38\% share of MAP's earnings, amortization of Ashland's excess investment in MAP, and results of certain retained refining and marketing activities. The decline in operating income was primarily due to severely compressed refining margins in January and February. In addition to margin compression early in the quarter, results were adversely affected by an estimated loss on the pending sale of MAP's Scurlock Permian operations, of which Ashland's share was $\$ 6$ million. Results from retail marketing operations increased primarily on the strength of higher merchandise sales volumes. Transportation operations declined as a result of increased operating expenses and decreased throughput volumes.

## ASHLAND INC. AND CONSOLIDATED SUBSIDIARIES

MANAGEMENT'S DISCUSSION AND ANALYSIS

REFINING AND MARKETING (CONTINUED)
YEAR-TO-DATE - Operating income from Refining and Marketing (excluding $\$ 39$ million in favorable inventory market valuation adjustments) amounted to $\$ 58$ million for the six months ended March 31, 1999. This compares to $\$ 78$ million for the six months ended March 31, 1998 (excluding $\$ 3$ million in favorable inventory market valuation adjustments). Results for the prior year's period include the operating income of the former Ashland Petroleum and SuperAmerica divisions for the December 1997 quarter. MAP was formed January 1, 1998, when Ashland combined its refining and marketing operations with those of the USX-Marathon Group. The decrease in operating income reflects reduced refining margins and other factors described in the current quarter comparison above. The impact of decreased refining margins has been somewhat mitigated by substantial efficiency improvements resulting from the combined operations of MAP. In its first year of existence, MAP captured approximately $\$ 150$ million in annual, repeatable, pretax savings and established itself as an industry leader in earnings per barrel of crude oil throughput. An additional \$100 million in efficiencies are targeted for calendar 1999. Looking toward the remainder of fiscal 1999, refining margins typically improve entering the driving season, and MAP continues to achieve its savings targets. In addition, asphalt markets are expected to be tight, which should benefit MAP as the nation's largest asphalt producer.

ARCH COAL
CURRENT QUARTER - Ashland recorded breakeven results from its investment in Arch Coal for the quarter ended March 31, 1999, compared to operating income of $\$ 8$ million for the quarter ended March 31, 1998. The decline was due to continuing challenges at certain mines and mild winter weather that contributed to a weak coal market. An operating loss from Arch's Dal-Tex operation in southern West Virginia was due to an extended delay in obtaining a surface mining permit for additional reserves at the site. As a result of this delay, Arch has announced plans to close the mine in July and recorded an after-tax charge of $\$ 4.0$ million in the March 1999 quarter for severance and other labor, benefit and miscellaneous costs related to the impending closure. Largely offsetting this charge, Arch recorded an after-tax gain of \$3.8 million in the March 1999 quarter for the cumulative effect of an accounting change in the method it uses for depreciating certain assets. Arch switched from the straight-line method to the units-of-production method for depreciating its preparation plants and rail-loading facilities, which will yield a more accurate matching of costs to actual production. Arch is continuing its efforts to improve performance at its Black Thunder mine in eastern wyoming, but has yet to reach its targets for expanded production and reduced costs. Arch expects Black Thunder to be in a considerably stronger position by the end of calendar 1999.

YEAR-TO-DATE - For the six months ended March 31, 1999, Ashland recorded an operating loss of $\$ 1$ million from its investment in Arch, compared to operating income of $\$ 19$ million for the same period of 1998. In addition to the factors described in the current quarter comparison above, results for the December 1998 quarter were impacted by inadequate rail service and higher-than-expected operating costs at Arch's West Elk mine in Colorado, as well as bitterly cold weather that hindered both equipment and rail performance of Western operations. As it previously announced, Arch expects continued earnings weakness during calendar 1999, primarily as a result of the Dal-Tex situation, lower-than-expected price escalations in sales contracts, and the re-opening and renegotiation of several large contracts.

## ASHLAND INC. AND CONSOLIDATED SUBSIDIARIES

MANAGEMENT'S DISCUSSION AND ANALYSIS

CORPORATE
Corporate expenses amounted to $\$ 11$ million in the quarter ended March 31, 1999, compared to $\$ 14$ million for the quarter ended March 31, 1998. The decline reflects reductions in incentive and deferred compensation costs. Corporate expenses on a year-to-date basis were relatively unchanged, amounting to $\$ 31$ million for the 1999 period, compared to $\$ 30$ million for the 1998 period.

## INTEREST EXPENSE (NET OF INTEREST INCOME)

For the three months ended March 31, 1999, interest expense (net of interest income) totaled $\$ 34$ million, compared to $\$ 36$ million for the March 1998 quarter. The decline reflects higher miscellaneous interest charges in the March 1998 quarter. For the year-to-date, interest expense (net of interest income) amounted to $\$ 67$ million in the 1999 period, compared to $\$ 62$ million in the 1998 period. The increase reflects increased debt levels resulting primarily from $\$ 254$ million in purchases of leased assets in December 1997 and January 1998 associated with the formation of MAP, from common stock repurchases and from acquisitions.

## LIQUIDITY

Ashland's financial position has enabled it to obtain capital for its financing needs and to maintain investment grade ratings on its senior debt of Baa2 from Moody's and BBB from Standard \& Poor's. Ashland has a revolving credit agreement which expires on February 9, 2000, providing for up to $\$ 320$ million in borrowings, none of which was in use at March 31, 1999. At that date, under a shelf registration, Ashland could also issue an additional \$600 million in debt, equity or convertible securities should future opportunities or needs arise. On May 7, 1999, Ashland issued \$150 million in medium-term notes under the registration and used the proceeds to reduce short-term debt. Furthermore, Ashland has access to various uncommitted lines of credit and commercial paper markets, under which $\$ 383$ million of short-term borrowings were outstanding at March 31, 1999.

Cash flows from continuing operations, a major source of Ashland's liquidity, amounted to $\$ 51$ million for the six months ended March 31, 1999, compared to a deficit of $\$ 66$ million for the six months ended March 31, 1998. The increase reflects a higher level of cash distributions from MAP in the December 1998 quarter, compared to cash generated from Ashland's former Refining and Marketing operations in the December 1997 quarter. Ashland's capital requirements for net property additions and dividends exceeded cash flows from continuing operations by $\$ 87$ million for the six months ended March 31, 1999.

Operating working capital (accounts receivable and inventories, less trade and other payables) at March 31, 1999, was \$415 million, compared to \$351 million at September 30, 1998, and \$478 million at March 31 , 1998. Liquid assets (cash, cash equivalents and accounts receivable) amounted to $72 \%$ of current liabilities at March 31, 1999, compared to 84\% at September 30, 1998, and 78\% at March 31, 1998. Ashland's working capital is affected by its use of the LIFO method of inventory valuation, which valued inventories $\$ 53$ million below their replacement costs at March 31, 1999.

## ASHLAND INC. AND CONSOLIDATED SUBSIDIARIES

MANAGEMENT'S DISCUSSION AND ANALYSIS

## CAPITAL RESOURCES

For the six months ended March 31, 1999, property additions amounted to $\$ 102$ million, compared to $\$ 109$ million for the same period last year. Property additions and cash dividends for the remainder of fiscal 1999 are estimated at $\$ 100$ million and $\$ 40$ million. Under Ashland's share repurchase program initiated in August 1998, Ashland had repurchased 3.7 million shares through March 31, 1999, with remaining authority to repurchase an additional 2.7 million shares. The timing and exact number of shares to be repurchased will be dependent on market conditions. Ashland anticipates meeting its remaining 1999 capital requirements for property additions, debt repayments and dividends from internally generated funds. However, external financing may be necessary to fund common stock repurchases and acquisitions.

At March 31, 1999, Ashland's debt level amounted to \$1.9 billion, compared to $\$ 1.6$ billion at September 30, 1998. Debt as a percent of capital employed amounted to $48 \%$ at March 31, 1999, compared to 43\% at September 30, 1998. During the quarter ended December 31, 1998, Ashland liquidated $\$ 200$ million of its interest rate swap agreements, which had converted fixed-rate debt to floating rates at September 30, 1998. As a result, Ashland's exposure to short-term interest rate fluctuations for the remainder of 1999 will be limited to $\$ 38$ million in floating-rate debt outstanding at March 31, 1999, the remaining $\$ 25$ million floating-rate swap agreement, and any short-term notes and commercial paper outstanding.

## ENVIRONMENTAL MATTERS

Federal, state and local laws and regulations relating to the protection of the environment have resulted in higher operating costs and capital investments by the industries in which Ashland operates. Because of the continuing trends toward greater environmental awareness and ever increasing regulations, Ashland believes that expenditures for environmental compliance will continue to have a significant effect on its businesses. Although it cannot accurately predict how such trends will affect future operations and earnings, Ashland believes the nature and significance of its ongoing compliance costs will be comparable to those of its competitors. For information on certain specific environmental proceedings and investigations, see the "Legal Proceedings" section of this Form 10-Q. For information regarding environmental capital expenditures and reserves, see the "Miscellaneous - Environmental Matters" section of Ashland's Form 10-K.

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

Ashland does not believe that any liability resulting from environmental matters, after taking into consideration its insurance coverage and amounts already provided for, will have a material adverse effect on its consolidated financial position, cash flows or liquidity. However, such matters could have a material effect on Ashland's results of operations in a particular quarter or fiscal year as they develop or as new issues are identified.

## ASHLAND INC. AND CONSOLIDATED SUBSIDIARIES

MANAGEMENT'S DISCUSSION AND ANALYSIS

## YEAR 2000 READINESS

Ashland, like most other companies, is faced with the Year 2000 issue and began developing plans in 1994 to address the possible exposures. Project teams are responsible for coordinating the assessment, remediation and testing of the necessary modifications to Ashland's computer applications, including both internal information systems and embedded systems, as well as assessing the Year 2000 readiness of its major vendors and developing contingency plans. The team's progress is regularly monitored by Ashland's senior management and periodically reported to the Audit Committee of Ashland's Board of Directors.

Ashland has completed the assessment phase related to its internal information systems, and is resolving identified issues through system modifications or replacement. Although testing will continue, Ashland believes that about $93 \%$ of its significant systems are currently Year 2000 compliant, and that the remaining systems will be compliant by early summer.

Ashland has substantially completed the assessment of its embedded systems that operate such items as its manufacturing systems, laboratory processes and security systems. Embedded systems will be remediated or replaced as necessary by early summer or plans will be made to perform such remediation or replacement activities as part of scheduled shutdowns that will occur later in 1999. The quality of the responses received from the manufacturers of such equipment, the estimated effect of the individual system on Ashland, and the ability of Ashland to perform meaningful tests will determine whether independent testing of remediated embedded systems will be conducted.

Formal communications have been initiated with major vendors to assess the potential exposure to Ashland from their failure to remediate their own Year 2000 issues. A failure by any of these vendors could become a significant challenge to Ashland's ability to operate its facilities at affected locations. Vendors contacted include Ashland's suppliers, financial institutions and companies providing utilities (electric, telephone and water). Alternate providers of products and services will be established, if deemed necessary. Although Ashland has no means of ensuring the Year 2000 readiness of such vendors, it will continue to gather information and monitor their compliance. Based on the representations provided by these vendors to date, Ashland has no reason to believe that these vendors are not addressing their Year 2000 issues adequately.

Ashland is also developing contingency plans related to the Year 2000 issue, addressing various scenarios and alternatives. Among other things, such plans will likely include replacing electronic applications with manual processes, identifying alternate vendors, adjusting staffing requirements, and increasing raw material inventory levels, as deemed necessary. Contingency plans are expected to be completed by June 1999, and will be regularly updated as current issues develop or new issues are identified.

Although a full assessment has not yet been completed, Ashland estimates that its fiscal 1999 costs related to Year 2000 issues will not exceed $\$ 15$ million, and will be minimal thereafter. Such amount is based on various assumptions, including the expected availability and costs of internal and external resources and the complexity of the necessary changes. Such estimate does not include any costs of new systems for which the principal justification is improved business functionality, rather than Year 2000 compliance. Since Ashland's Year 2000 compliance program was initiated several years ago and has been integrated with other system enhancements, Ashland's total costs of remediating Year 2000 issues are not readily discernible.

## YEAR 2000 READINESS (continued)

Ashland believes it has an effective program to resolve significant Year 2000 issues in a timely manner. However, certain phases of that program have not yet been completed and some exposures are outside Ashland's direct control. If Ashland is unsuccessful in identifying or remediating Year 2000 issues in its significant systems, is affected by major vendors or customers not being Year 2000 compliant, or is affected by general economic disruptions resulting from Year 2000 issues, its consolidated financial position or results of operations could be materially adversely affected.

MAP and Arch Coal also have prepared their own programs to deal with Year 2000 issues. Arch Coal's program is outlined in the Management's Discussion and Analysis section of its Annual Report on Form 10-K for the year ended December 31, 1998. MAP's program is covered in the Management's Discussion and Analysis section for the Marathon Group in USX Corporation's Annual Report on Form 10-k for the year ended December 31, 1998. Both of these documents are on file with the Securities and Exchange Commission.

## FORWARD LOOKING STATEMENTS

This Form 10-Q contains forward-looking statements, within the meaning of Section 27A of the Securities Act of 1933 and Section $21 E$ of the Securities Exchange Act of 1934 , with respect to Ashland's operating performance. Estimates as to operating performance are based upon a number of assumptions, including (among others) prices, supply and demand, market conditions and operating efficiencies. Although Ashland believes that its expectations are based on reasonable assumptions, it cannot assure that the expectations reflected herein will be achieved. This forward-looking information may prove to be inaccurate, and actual results may differ significantly from those anticipated. Other factors and risks affecting Ashland are contained in Ashland's Form 10-K for the fiscal year ended September 30, 1998.

ENVIRONMENTAL PROCEEDINGS - As of March 31, 1999, Ashland had been identified as a "potentially responsible party" ("PRP") under Superfund or similar state laws for potential joint and several liability for clean-up costs in connection with alleged releases of hazardous substances in connection with 92 waste treatment or disposal sites. These sites are currently subject to ongoing investigation and remedial activities, overseen by the United States Environmental Protection Agency ("EPA") or a state agency, in which Ashland is typically participating as a member of a PRP group. Generally, the type of relief sought includes remediation of contaminated soil and/or groundwater, reimbursement for past costs of site clean-up and administrative oversight, and/or long-term monitoring of environmental conditions at the sites. Ashland carefully monitors the investigatory and remedial activity at many of these sites. Based on its experience with site remediation, its familiarity with current environmental laws and regulations, its analysis of the specific hazardous substances at issue, the existence of other financially viable PRPs and its current estimates of investigatory, clean-up and monitoring costs at each site, Ashland believes that its liability at these sites, either individually or in the aggregate, after taking into account its insurance coverage and established reserves, will not have a material adverse effect on Ashland's consolidated financial position, cash flow or liquidity. However, such matters could have a material effect on Ashland's results of operations in a particular quarter or fiscal year as they develop or as new issues are identified. Estimated costs for these matters are recognized in accordance with generally accepted accounting principles governing the likelihood that costs will be incurred and Ashland's ability to reasonably estimate future costs.

LOCKHEED LITIGATION - Ashland is a defendant in a series of cases involving more than 600 former workers at the Lockheed aircraft manufacturing facility in Burbank, California. The plaintiffs allege personal injuries resulting from exposure to chemicals sold to Lockheed by Ashland, and inadequate labeling of such chemicals. The cases are being tried in the Superior Court of the State of California for the County of Los Angeles. To date, five trials involving approximately 130 plaintiffs have resulted in total verdicts adverse to Ashland of approximately $\$ 80$ million (approximately $\$ 75$ million of which is punitive damages). The damage awards have been appealed. Ashland believes that there is a substantial probability that the damage awards will be reversed or substantially further reduced, and that, after taking into account probable recoveries under insurance policies, these cases will not have a material adverse effect on Ashland's consolidated financial position, cash flow or liquidity.

In addition, Ashland filed an action in Kentucky against approximately 44 insurance carriers to confirm coverage for liabilities under the Lockheed cases. One of the insurance carriers in turn filed an action in California seeking to deny insurance coverage for liabilities in these cases.

ITEM 2.
Changes in securities and use of proceeds
During the quarter ended March 31, 1999, Ashland issued an aggregate of 801,473 shares of its Common Stock, par value $\$ 1.00$ per share, in connection with the acquisitions of three companies. All such shares were issued in transactions exempt from registration pursuant to Section 4(2) of the Securities Act of 1933, as amended, and the regulations thereunder. Such acquisitions were: McDonald Grading Co., Inc. which closed on February 12, 1999, Crowell Constructors, Inc. which closed on February 12, 1999, and Highway Constructors, Inc. which closed on March 25, 1999.

ITEM 6.
EXHIBITS AND REPORTS ON FORM 8-K
a) Exhibits

## 27 Financial Data Schedule

(b) Reports on Form 8-K

None

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.

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Ashland Inc. (Registrant)
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Date: May 13, 1999

Date: May 13, 1999
/s/ Kenneth L. Aulen
Kenneth L. Aulen
Administrative Vice President and Controller (Chief Accounting Officer)
/s/ David L. Hausrath
 David L. Hausrath Vice President and General Counsel


