

**UNITED STATES
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, 2019

or

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

For the transition period from _____ to _____

Commission file number 1-15399



(Exact Name of Registrant as Specified in its Charter)

Delaware

*(State or Other Jurisdiction of
Incorporation or Organization)*

36-4277050

(I.R.S. Employer Identification No.)

1 North Field Court, Lake Forest, Illinois

(Address of Principal Executive Offices)

60045

(Zip Code)

**Registrant's telephone number, including area code
(847) 482-3000**

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, 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 Emerging growth company
Non-accelerated filer Smaller reporting 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

As of May 3, 2019 the Registrant had outstanding 94,493,991 shares of common stock, par value \$0.01 per share.

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value \$0.01 per share	PKG	New York Stock Exchange

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All reports we file with the Securities and Exchange Commission (SEC) are available free of charge via the Electronic Data Gathering Analysis and Retrieval (EDGAR) System on the SEC website at www.sec.gov. We also provide copies of our SEC filings at no charge upon request and make electronic copies of our reports available through our website at www.packagingcorp.com as soon as reasonably practicable after filing such material with the SEC.

PART I
FINANCIAL INFORMATION

Item 1. FINANCIAL STATEMENTS

Packaging Corporation of America
Consolidated Statements of Income and Comprehensive Income
(unaudited, dollars in millions, except per-share data)

	Three Months Ended	
	March 31,	
	2019	2018
Statements of Income:		
Net sales	\$ 1,733.7	\$ 1,690.6
Cost of sales	(1,312.3)	(1,334.5)
Gross profit	421.4	356.1
Selling, general and administrative expenses	(140.0)	(134.9)
Other expense, net	(6.0)	(8.3)
Income from operations	275.4	212.9
Non-operating pension expense	(2.0)	(0.5)
Interest expense, net	(24.1)	(25.8)
Income before taxes	249.3	186.6
Provision for income taxes	(62.5)	(46.5)
Net income	<u>\$ 186.8</u>	<u>\$ 140.1</u>
Net income per common share:		
Basic	<u>\$ 1.98</u>	<u>\$ 1.48</u>
Diluted	<u>\$ 1.97</u>	<u>\$ 1.48</u>
Dividends declared per common share	<u>\$ 0.79</u>	<u>\$ 0.63</u>
Statements of Comprehensive Income:		
Net income	\$ 186.8	\$ 140.1
Other comprehensive income, net of tax:		
Foreign currency translation adjustment	—	(0.1)
Reclassification adjustments to cash flow hedges included in net income, net of tax of \$0.3 million and \$0.4 million	1.0	1.0
Amortization of pension and postretirement plans actuarial loss and prior service cost, net of tax of \$0.8 million and \$1.0 million	2.3	3.0
Other comprehensive income	<u>3.3</u>	<u>3.9</u>
Comprehensive income	<u>\$ 190.1</u>	<u>\$ 144.0</u>

See accompanying condensed notes to unaudited quarterly consolidated financial statements.

Packaging Corporation of America
Consolidated Balance Sheets
(unaudited, dollars and shares in millions, except per-share data)

	March 31, 2019	December 31, 2018
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 442.4	\$ 361.5
Accounts receivable, net of allowance for doubtful accounts and customer deductions of \$13.4 million and \$13.6 million as of March 31, 2019, and December 31, 2018, respectively	930.3	901.9
Inventories	831.7	795.6
Prepaid expenses and other current assets	58.0	39.4
Federal and state income taxes receivable	—	16.7
Total current assets	<u>2,262.4</u>	<u>2,115.1</u>
Property, plant, and equipment, net	3,109.8	3,108.6
Operating lease right-of-use assets	217.3	—
Goodwill	917.3	917.3
Other intangible assets, net	368.7	378.2
Other long-term assets	53.1	50.5
Total assets	<u>\$ 6,928.6</u>	<u>\$ 6,569.7</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Finance lease obligations	\$ 1.5	\$ 1.4
Operating lease obligations	57.2	—
Accounts payable	405.1	382.2
Dividends payable	76.2	76.1
Federal and state income taxes payable	12.7	—
Accrued liabilities	160.9	222.4
Accrued interest	27.1	11.5
Total current liabilities	<u>740.7</u>	<u>693.6</u>
Long-term liabilities:		
Long-term debt	2,484.6	2,483.7
Finance lease obligations	17.2	17.6
Operating lease obligations	165.4	—
Deferred income taxes	305.7	285.2
Compensation and benefits	363.5	357.5
Other long-term liabilities	56.9	59.7
Total long-term liabilities	<u>3,393.3</u>	<u>3,203.7</u>
Commitments and contingent liabilities		
Stockholders' equity:		
Common stock, par value \$0.01 per share, 300.0 million shares authorized, 94.5 million shares issued as of March 31, 2019, and December 31, 2018, respectively	0.9	0.9
Additional paid in capital	501.4	494.5
Retained earnings	2,427.8	2,315.8
Accumulated other comprehensive loss	(135.5)	(138.8)
Total stockholders' equity	<u>2,794.6</u>	<u>2,672.4</u>
Total liabilities and stockholders' equity	<u>\$ 6,928.6</u>	<u>\$ 6,569.7</u>

See accompanying condensed notes to unaudited quarterly consolidated financial statements.

Packaging Corporation of America
Consolidated Statements of Cash Flows
(unaudited, dollars in millions)

	Three Months Ended	
	March 31,	
	2019	2018
Cash Flows from Operating Activities:		
Net income	\$ 186.8	\$ 140.1
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation, depletion, and amortization of intangibles	94.8	108.1
Amortization of deferred financing costs	2.2	2.3
Share-based compensation expense	6.9	5.1
Deferred income tax provision	18.8	15.9
Pension and post-retirement benefits expense, net of contributions	7.3	3.9
Other, net	4.2	(1.0)
Changes in operating assets and liabilities:		
Increase in assets —		
Accounts receivable	(28.4)	(22.9)
Inventories	(36.1)	(8.4)
Prepaid expenses and other current assets	(19.7)	(17.0)
Increase (decrease) in liabilities —		
Accounts payable	13.2	(1.0)
Accrued liabilities	(44.0)	(42.9)
Federal and state income taxes payable / receivable	30.0	20.3
Net cash provided by operating activities	236.0	202.5
Cash Flows from Investing Activities:		
Additions to property, plant, and equipment	(78.8)	(108.0)
Additions to other long term assets	(1.3)	(1.9)
Proceeds from disposals	—	0.1
Other, net	—	2.6
Net cash used for investing activities	(80.1)	(107.2)
Cash Flows from Financing Activities:		
Repayments of debt and finance lease obligations	(0.3)	(150.3)
Common stock dividends paid	(74.7)	(59.4)
Shares withheld to cover employee restricted stock taxes	—	(0.1)
Net cash used for financing activities	(75.0)	(209.8)
Net increase (decrease) in cash and cash equivalents	80.9	(114.5)
Cash and cash equivalents, beginning of period	361.5	216.9
Cash and cash equivalents, end of period	\$ 442.4	\$ 102.4

See accompanying condensed notes to unaudited quarterly consolidated financial statements.

Packaging Corporation of America
Consolidated Statements of Changes in Stockholders' Equity
(unaudited, dollars in millions and shares in thousands)

	Common Stock		Additional Paid in Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Total Stockholders' Equity
	Shares	Amount				
Balance at January 1, 2019	94,497	\$ 0.9	\$ 494.5	\$ 2,315.8	\$ (138.8)	\$ 2,672.4
Common stock dividends declared	—	—	—	(74.8)	—	(74.8)
Share-based compensation	(3)	—	6.9	—	—	6.9
Comprehensive income	—	—	—	186.8	3.3	190.1
Balance at March 31, 2019	<u>94,494</u>	<u>\$ 0.9</u>	<u>\$ 501.4</u>	<u>\$ 2,427.8</u>	<u>\$ (135.5)</u>	<u>\$ 2,794.6</u>

	Common Stock		Additional Paid in Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Total Stockholders' Equity
	Shares	Amount				
Balance at January 1, 2018	94,350	\$ 0.9	\$ 471.2	\$ 1,867.4	\$ (156.9)	\$ 2,182.6
Common stock dividends declared	—	—	—	(59.5)	—	(59.5)
Share-based compensation	(2)	—	5.1	—	—	5.1
Adoption of ASC 606	—	—	—	1.6	—	1.6
Comprehensive income	—	—	—	140.1	3.9	144.0
Balance at March 31, 2018	<u>94,348</u>	<u>\$ 0.9</u>	<u>\$ 476.3</u>	<u>\$ 1,949.6</u>	<u>\$ (153.0)</u>	<u>\$ 2,273.8</u>

See accompanying condensed notes to unaudited quarterly consolidated financial statements.

Condensed Notes to Unaudited Quarterly Consolidated Financial Statements

1. Nature of Operations and Basis of Presentation

Packaging Corporation of America ("we," "us," "our," PCA," or the "Company") was incorporated on January 25, 1999. In April 1999, PCA acquired the containerboard and corrugated packaging products business of Pactiv Corporation (Pactiv), formerly known as Tenneco Packaging, Inc., a wholly owned subsidiary of Tenneco Inc. We are a large diverse manufacturer of both packaging and paper products. We are headquartered in Lake Forest, Illinois and we operate primarily in the United States.

We report our business in three reportable segments: Packaging, Paper, and Corporate and Other. Our Packaging segment produces a wide variety of containerboard and corrugated packaging products. The Paper segment manufactures and sells a range of communication-based papers. Corporate and other includes support staff services and related assets and liabilities, transportation assets, and activity related to other ancillary support operations. For more information about our segments, see Note 19, Segment Information.

In these consolidated financial statements, certain amounts in prior periods' consolidated financial statements have been reclassified to conform with the current period presentation.

The consolidated financial statements of PCA as of March 31, 2019 and for the three months ended March 31, 2019 and 2018 are unaudited but include all adjustments (consisting only of normal recurring adjustments) that management considers necessary for a fair presentation of such financial statements. The preparation of the consolidated financial statements involves the use of estimates and accruals. Actual results may vary from those estimates. These financial statements have been prepared in accordance with accounting principles generally accepted in the United States for interim financial information and with Article 10 of Regulation S-X of the Securities and Exchange Commission (SEC). Accordingly, they do not include all of the information and notes required by accounting principles generally accepted in the United States for complete audited financial statements. Operating results for the three months ended March 31, 2019 are not necessarily indicative of the results that may be expected for the year ending December 31, 2019. These consolidated financial statements should be read in conjunction with our Annual Report on Form 10-K for the year ended December 31, 2018.

The consolidated financial statements include the accounts of PCA and its majority-owned subsidiaries after elimination of intercompany balances and transactions.

2. New and Recently Adopted Accounting Standards

Recently Adopted Accounting Standards

Effective January 1, 2019, the Company adopted the Financial Accounting Standards Board ("FASB") Accounting Standards Update ("ASU") 2016-02 (Topic 842): *Leases*, which requires the recognition of lease assets and lease liabilities by lessees for those leases classified as operating leases under previous guidance. The original guidance required application on a modified retrospective basis with the earliest period presented. In July 2018, the FASB issued ASU 2018-11, *Targeted Improvements to ASC 842*, which included an option to not restate comparative periods in transition and elect to use the effective date of ASC 842, *Leases*, as the date of initial application of transition, which we elected. As a result of the adoption of ASC 842 on January 1, 2019, we recorded operating lease liabilities of \$228 million, with corresponding right of use ("ROU") assets of the same amount. In addition, we elected the package of practical expedients permitted under the transition guidance within the new standard, which allowed us to carry forward the historical lease classification and not to reassess whether existing or expired contracts contain a lease. We also elected the short-term lease recognition exemption, which permits us to exclude short-term leases (i.e. leases with terms of 12 months or less) from the recognition requirements of this standard, and we elected to account for lease and non-lease components as a single lease component for all classes of underlying assets except for embedded leases. The adoption of ASC 842 had an immaterial impact on our consolidated net earnings, liquidity and debt covenants under our current agreements for the three-month period ended March 31, 2019. See Note 3, Leases, for more information.

Effective January 1, 2019, we adopted ASU 2018-02 (Topic 220): *Income Statement—Reporting Comprehensive Income – Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income*, which allows for optional reclassification from Accumulated Other Comprehensive Income ("AOCI") to retained earnings for the stranded tax effects resulting from the Tax Cuts and Jobs Act in December 2017 ("Tax Act"). Stranded tax effects are the difference in deferred taxes between the amount initially recorded to other comprehensive income ("OCI") at historical corporate income tax rates and the amount recorded using the newly-enacted corporate income tax rate. The cumulative tax rate adjustment to deferred taxes was required to be recorded through income tax expense from continuing operations in the period of enactment as opposed to OCI, resulting in the stranded tax effects in AOCI. The Company elected to not reclassify the stranded tax effects related to the Tax Act. As a result, the adoption did not have an impact on the Company's financial position, results of operations, or cash flow.

New Accounting Standards Not Yet Adopted

In August 2018, the FASB issued ASU 2018-14, *Compensation – Retirement Benefits – Defined Benefit Plans – General (Subtopic 715-20): Disclosure Framework – Changes to the Disclosure Requirements for Defined Benefit Plans*. ASU 2018-14 removes certain disclosures that are not considered cost beneficial, clarifies certain required disclosures and adds additional disclosures. The ASU is effective for annual periods beginning after December 31, 2020, with early adoption permitted. The amendments in ASU 2018-14 would need to be applied on a retrospective basis. The Company is currently evaluating the impact this guidance will have on its related disclosures.

In August 2018, the FASB issued ASU 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurement*. ASU 2018-13 removes or modifies certain disclosure requirements and adds additional requirements to improve the usefulness of the fair value measurement disclosure for financial statement users. The ASU is effective for annual and interim periods beginning after December 15, 2019, with early adoption permitted. Certain amendments of ASU 2018-13 are required to be applied prospectively for the first interim period of the initial year of adoption. All other amendments need to be applied retrospectively. The Company is currently evaluating the impact of the new guidance.

There were no other accounting standards recently issued that had or are expected to have a material impact on our financial position or results of operations.

3. Leases

We group our leases into two primary lease types, real estate and equipment, and into various asset classes within each type. Real estate leases primarily include manufacturing locations, office space, warehouses, and design centers, while equipment leases primarily include manufacturing equipment.

Leases with an initial term of 12 months or less and certain month-to-month leases are not recorded on the balance sheet. The lease expense for these types of leases is recognized on a straight-line basis over the lease term.

To determine the lease term, we include the non-cancellable period of the lease together with the following: all periods covered by an option to extend the lease, if we are reasonably certain to exercise that option; any periods covered by an option to terminate the lease if we are reasonably certain not to exercise that option; and any periods covered by an option to extend or not to terminate the lease that are controlled by the lessor. The exercising of lease renewal options is based on whether future economic benefit is expected to be derived from the renewal. Most of our real estate leases contain at least one renewal option. Renewal options generally range from 1 to 5 years. Although equipment leases may also contain renewal options, we typically do not expect to extend and/or exercise these renewal options unless a compelling business reason is provided to management.

Our leases may contain fixed and variable costs. Fixed costs determine the right-of-use asset. Variable costs are those costs which will vary month to month and are excluded from the calculation of the right-of-use asset. Variable lease costs are recorded to lease expense in the period in which they are incurred.

Our leases do not provide an implicit borrowing rate of return. Therefore, we use our incremental borrowing rate to calculate the present value of lease payments at inception of the lease or when a lease is modified.

Supplemental balance sheet information related to our leases was as follows (dollars in millions):

	March 31, 2019
Operating leases:	
Operating lease right-of-use assets	\$ 217.3
Current portion of operating lease obligations	\$ 57.2
Long-term portion of operating lease obligations	165.4
Total operating lease obligations	\$ 222.6
Finance leases:	
Buildings	\$ 0.3
Machinery and equipment	28.5
Total	28.8
Less accumulated amortization	(17.0)
Total	\$ 11.8
Current portion of finance lease obligations	\$ 1.5
Long-term portion of finance lease obligations	17.2
Total finance lease obligations	\$ 18.7
Weighted-average remaining lease term (years):	
Operating leases	5.7
Finance leases	9.5
Weighted-average discount rate:	
Operating leases	4.49%
Finance leases	6.66%

The components of lease expense were as follows (dollars in millions):

	Three Months Ended March 31, 2019	
Finance lease cost:		
Amortization of finance lease assets	\$	0.4
Interest on lease liabilities		0.3
Total finance lease cost		0.7
Operating lease cost		17.4
Short-term lease cost		4.3
Variable lease cost		5.9
Total lease cost	\$	<u>28.3</u>

Supplemental cash flow information related to leases was as follows (dollars in millions):

	Three Months Ended March 31, 2019	
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows for operating leases	\$	(14.8)
Operating cash flows for finance leases		(0.4)
Financing cash flows for finance leases		(0.3)
Right-of-use assets obtained in exchange for new lease obligations:		
Operating leases	\$	(5.1)
Finance leases		—
Supplemental non-cash information on changes in lease liabilities	\$	4.3
Supplemental non-cash information on changes in right-of-use assets	\$	10.7

The maturities of lease liabilities for operating and finance leases at March 31, 2019 were as follows (dollars in millions):

	Operating Leases		Finance Leases	
2019	\$	50.5	\$	2.0
2020		57.5		2.7
2021		47.2		2.7
2022		31.2		2.7
2023		19.1		2.7
Thereafter		48.4		12.5
Total lease payments		<u>253.9</u>		<u>25.3</u>
Less imputed interest (a)		(31.3)		(6.6)
Present value of lease liabilities	\$	<u>222.6</u>	\$	<u>18.7</u>

(a) Calculated using the incremental borrowing rate for each lease applied to the future payments.

The maturities of lease liabilities at December 31, 2018 under ASC 840 were as follows (dollars in millions):

	Operating Leases		Finance Leases	
2019	\$	70.1	\$	2.7
2020		58.7		2.7
2021		47.4		2.7
2022		29.9		2.7
2023		17.8		2.7
Thereafter		46.4		12.4
Total operating lease payments	\$	<u>270.3</u>		<u>25.9</u>
Less imputed interest (b)				(6.9)
Present value of lease liabilities			\$	<u>19.0</u>

(b) Calculated using the incremental borrowing rate for each lease applied to the future payments.

4. Revenue

Revenue Recognition

Revenue is recognized when control of the promised goods or services is transferred to customers in an amount that reflects the consideration expected to be received in exchange for those goods or services. Sales, value added, and other taxes collected concurrently with revenue-producing activities are excluded from revenue.

The following table presents our revenues disaggregated by product line (dollars in millions):

	Three Months Ended March 31,	
	2019	2018
Packaging	\$ 1,477.6	\$ 1,402.9
Paper	239.7	269.4
Corporate and Other	16.4	18.3
Total revenue	<u>\$ 1,733.7</u>	<u>\$ 1,690.6</u>

Packaging Revenue

Our containerboard mills produce linerboard and semi-chemical corrugating medium which are papers primarily used in the production of corrugated products. The majority of our containerboard production is used internally by our corrugated products manufacturing facilities. The remaining containerboard is sold to outside domestic and export customers. Our corrugated products manufacturing plants produce a wide variety of corrugated packaging products and retail merchandise displays. We sell corrugated products to national, regional and local customers, which are broadly diversified across industries and geographic locations.

The Company recognizes revenue for its packaging products when performance obligations under the terms of a contract with a customer are satisfied. This occurs with the transfer of control of our products at a specific point in time. Based on our express terms and conditions of the sale of products to our customers, as well as terms included in contractual arrangements with our customers, we do not have an enforceable right of payment that includes a reasonable profit throughout the duration of the contract for products that do not have an alternative use. Revenue is recognized when the product is shipped from the mill or from our manufacturing facility to our customer. Certain customers may receive volume-based incentives, which are accounted for as variable consideration. We estimate these amounts based on the expected amount to be provided to customers and reduce revenue recognized.

Certain customers receive a portion of their packaging products as consigned inventory with billing triggered once the customer uses or consumes the designated product. Prior to invoicing, these amounts are handled as unbilled receivables. Total unbilled receivables, which are immaterial in amount, are included in the accounts receivable financial statement caption.

Paper Revenue

We manufacture and sell a range of communication-based papers. Communication papers consist of cut-size office papers, and printing and converting papers.

The Company recognizes revenue for its paper products when performance obligations under the terms of a contract with a customer are satisfied. This occurs with the transfer of control of our products at a specific point in time. Revenue is recognized when the product is shipped from the mill or from our manufacturing facility or distribution center to our customer. Certain customers may receive volume-based incentives, which are accounted for as variable consideration. We estimate these amounts based on the expected amount to be provided to customers and reduce revenue recognized.

Corporate and Other Revenue

Revenue in this segment primarily relates to Louisiana Timber Procurement Company, L.L.C. (LTP), a variable-interest entity that is 50% owned by PCA and 50% owned by Boise Cascade Company (Boise Cascade). PCA is the primary beneficiary of LTP and has the power to direct the activities that most significantly affect the economic performance of LTP. Therefore, we consolidate 100% of LTP in our financial statements. See Note 18, Transactions With Related Parties, for more information related to LTP.

The Company recognizes revenue within this segment when performance obligations under the terms of a contract with a customer are satisfied. This occurs with the transfer of control of our products at a specific point in time.

Practical Expedients and Exemption

Shipping and handling fees billed to a customer are recorded on a gross basis in "Net sales" with the corresponding shipping and handling costs included in "Cost of sales" in the concurrent period as the revenue is recorded. We expense sales commissions when incurred because the amortization period is one year or less. Sales commissions are recorded in "Selling, general, and administrative expenses".

We do not disclose the value of unsatisfied performance obligations for contracts with an original expected duration of one year or less.

5. Acquisitions

Englander dZignPak

On October 9, 2018, PCA acquired the assets of Englander dZignPak ("Englander"), a corrugated products manufacturer, for \$56.3 million. The assets include two sheet plants located in Waco, Texas and Carrollton, Texas. Sales and total assets of the acquired company are not material to our overall sales and total assets. Operating results of the acquired assets subsequent to October 9, 2018 are included in our Packaging segment's 2018 operating results. We have estimated the allocation of the purchase price to the assets acquired and liabilities assumed based on estimates of the fair value at the date of acquisition, of which \$28.6 million was allocated to goodwill (which is deductible for tax purposes) and \$14.1 million to intangible assets (to be amortized over a weighted average life of approximately 9.7 years), primarily customer relationships, in the Packaging segment. The purchase price allocation continues to be preliminary and is subject to finalization of working capital adjustments. Our current estimates and assumptions may change as more information becomes available. We expect to finalize the allocations within the 12-month period following the acquisition date.

6. Earnings Per Share

The following table sets forth the computation of basic and diluted income per common share for the periods presented (dollars and shares in millions, except per share data):

	Three Months Ended	
	March 31,	
	2019	2018
Numerator:		
Net income	\$ 186.8	\$ 140.1
Less: distributed and undistributed earnings allocated to participating securities	(1.4)	(1.1)
Net income attributable to common shareholders	<u>\$ 185.4</u>	<u>\$ 139.0</u>
Denominator:		
Weighted average basic common shares outstanding	93.7	93.6
Effect of dilutive securities	0.3	0.2
Weighted average diluted common shares outstanding	<u>94.0</u>	<u>93.8</u>
Basic income per common share	\$ 1.98	\$ 1.48
Diluted income per common share	\$ 1.97	\$ 1.48

7. Other Expense, Net

The components of other expense, net, were as follows (dollars in millions):

	Three Months Ended	
	March 31,	
	2019	2018
Asset disposals and write-offs	\$ (4.3)	\$ (5.1)
Wallula mill restructuring (a)	(0.4)	(0.7)
Facilities closure and other costs (b)	—	(0.1)
Other	(1.3)	(2.4)
Total	<u>\$ (6.0)</u>	<u>\$ (8.3)</u>

(a) Includes charges related to the discontinuation of production of uncoated free sheet and coated one-side grades at the Wallula, Washington mill in the second quarter of 2018 and the conversion of the No. 3 paper machine to a high-performance 100% virgin kraft linerboard machine.

(b) Includes charges consisting of closure costs related to corrugated products facilities.

8. Income Taxes

For the three months ended March 31, 2019 and 2018, we recorded \$62.5 million and \$46.5 million of income tax expense and had an effective tax rate of 25.1% and 24.9%, respectively. The slight increase in our effective tax rate for the three months ended March 31, 2019 compared with the same period in 2018 was primarily due to higher state and local income taxes net of the federal benefit.

Our effective tax rate may differ from the federal statutory income tax rate of 21.0% due primarily to the effect of state and local income taxes. During the three months ended March 31, 2019 and 2018, cash paid for taxes, net of refunds received, was \$13.7 million and \$10.3 million, respectively.

During the three months ended March 31, 2019, there were no significant changes to our uncertain tax positions. For more information, see Note 7, Income Taxes, of the Notes to Consolidated Financial Statements in "Part II, Item 8. Financial Statements and Supplementary Data" of our 2018 Annual Report on Form 10-K.

9. Inventories

We value our raw materials, work in process, and finished goods inventories using lower of cost, as determined by the average cost method, or market. Supplies and materials are valued at the first-in, first-out (FIFO) or average cost methods.

The components of inventories were as follows (dollars in millions):

	March 31, 2019	December 31, 2018
Raw materials	\$ 330.1	\$ 307.8
Work in process	13.6	13.9
Finished goods	210.5	199.0
Supplies and materials	277.5	274.9
Inventories	<u>\$ 831.7</u>	<u>\$ 795.6</u>

10. Property, Plant, and Equipment

The components of property, plant, and equipment were as follows (dollars in millions):

	March 31, 2019	December 31, 2018
Land and land improvements	\$ 165.6	\$ 161.9
Buildings	806.6	795.5
Machinery and equipment	5,522.0	5,481.6
Construction in progress	193.9	176.7
Other	75.9	75.4
Property, plant and equipment, at cost	6,764.0	6,691.1
Less accumulated depreciation	<u>(3,654.2)</u>	<u>(3,582.5)</u>
Property, plant, and equipment, net	<u>\$ 3,109.8</u>	<u>\$ 3,108.6</u>

Depreciation expense for the three months ended March 31, 2019 and 2018 was \$85.2 million and \$94.6 million, respectively. We recognized \$0.2 million and \$8.3 million of incremental depreciation expense during the three months ended March 31, 2019 and 2018, respectively, as a result of shortening the useful lives of certain assets primarily related to the Wallula mill restructuring.

At March 31, 2019 and December 31, 2018, purchases of property, plant, and equipment included in accounts payable were \$34.3 million and \$24.7 million, respectively.

11. Goodwill and Intangible Assets

Goodwill

Goodwill represents the excess of the cost of an acquired business over the fair value of the identifiable tangible and intangible assets acquired and liabilities assumed in a business combination. At both March 31, 2019 and December 31, 2018, we had \$862.1 million of goodwill recorded in our Packaging segment and \$55.2 million of goodwill recorded in our Paper segment.

Intangible Assets

Intangible assets are primarily comprised of customer relationships and trademarks and trade names.

The weighted average remaining useful life, gross carrying amount, and accumulated amortization of our intangible assets were as follows (dollars in millions):

	March 31, 2019			December 31, 2018		
	Weighted Average Remaining Useful Life (in Years)	Gross Carrying Amount	Accumulated Amortization	Weighted Average Remaining Useful Life (in Years)	Gross Carrying Amount	Accumulated Amortization
Customer relationships	10.6	\$ 504.6	\$ 153.4	10.9	\$ 504.6	\$ 144.5
Trademarks and trade names	9.8	34.8	18.7	10.1	34.8	18.3
Other	2.7	4.3	2.9	3.0	4.3	2.7
Total intangible assets (excluding goodwill)	10.6	<u>\$ 543.7</u>	<u>\$ 175.0</u>	10.8	<u>\$ 543.7</u>	<u>\$ 165.5</u>

During the three months ended March 31, 2019 and 2018, amortization expense was \$9.5 million and \$10.4 million, respectively.

12. Accrued Liabilities

The components of accrued liabilities were as follows (dollars in millions):

	March 31, 2019	December 31, 2018
Compensation and benefits	\$ 81.6	\$ 136.7
Medical insurance and workers' compensation	26.9	27.5
Customer volume discounts and rebates	18.4	25.2
Franchise, property, sales and use taxes	17.0	13.4
Environmental liabilities and asset retirement obligations	5.3	5.0
Severance, retention, and relocation	2.0	2.2
Other	9.7	12.4
Total	<u>\$ 160.9</u>	<u>\$ 222.4</u>

13. Debt

For the three months ended March 31, 2019 and 2018, cash payments for interest were \$7.3 million and \$12.5 million, respectively.

Included in interest expense, net and other, are amortization of treasury lock settlements and amortization of financing costs. For the three months ended March 31, 2019 and 2018, amortization of treasury lock settlements was \$1.3 million and \$1.4 million, respectively. For both the three months ended March 31, 2019 and 2018, amortization of financing costs was \$0.7 million.

At March 31, 2019, we had \$2,496.5 million of fixed-rate senior notes outstanding. The fair value of our fixed-rate debt was estimated to be \$2,536.8 million. The difference between the book value and fair value is due to the difference between the period-end market interest rate and the stated rate of our fixed-rate debt. We estimated the fair value of our fixed-rate debt using quoted market prices (Level 2 inputs) within the fair value hierarchy, which is further defined in Note 2, Summary of Significant Accounting Policies, of the Notes to Consolidated Financial Statements in "Part II, Item 8. Financial Statements and Supplementary Data" of our 2018 Annual Report on Form 10-K.

For more information on our long-term debt and interest rates on that debt, see Note 10, Debt, of the Notes to Consolidated Financial Statements in "Part II, Item 8. Financial Statements and Supplementary Data" of our 2018 Annual Report on Form 10-K.

14. Employee Benefit Plans and Other Postretirement Benefits

The components of net periodic benefit cost for our pension plans were as follows (dollars in millions):

	Pension Plans	
	Three Months Ended March 31,	
	2019	2018
Service cost	\$ 6.2	\$ 6.2
Interest cost	11.7	10.6
Expected return on plan assets	(13.0)	(14.2)
Net amortization of unrecognized amounts		
Prior service cost	1.6	1.8
Actuarial loss	1.7	2.3
Net periodic benefit cost	\$ 8.2	\$ 6.7

PCA makes pension plan contributions that are sufficient to fund its actuarially determined costs, generally equal to the minimum amounts required by the Employee Retirement Income Security Act (ERISA). From time to time, PCA may make additional discretionary contributions based on the funded status of the plans, tax deductibility, income from operations, and other factors. During the three ended March 31, 2019 and 2018, payments to our nonqualified pension plans were insignificant. For the three months ended March 31, 2019, we made contributions of \$0.7 million to our qualified pension plans. We made contributions of \$2.2 million to our qualified plans during the three months ended March 31, 2018. We expect to contribute at least the estimated required minimum contributions to our qualified pension plans of approximately \$15.8 million in 2019.

For the three months ended March 31, 2019 and 2018, the net periodic benefit cost for our postretirement plans was insignificant.

15. Share-Based Compensation

The Company has a long-term equity incentive plan, which allows for grants of restricted stock, performance awards, stock appreciation rights, and stock options to directors, officers, and employees, as well as others who engage in services for PCA. The plan, as amended, terminates May 1, 2023 and authorizes 10.6 million shares of common stock for grant over the life of the plan. As of March 31, 2019, 0.7 million shares were available for future grants under the plan. Forfeitures are added back to the pool of shares of common stock available to be granted at a future date.

The following table presents restricted stock and performance unit award activity for the three months ended March 31, 2019:

	Restricted Stock		Performance Units	
	Shares	Weighted Average Grant-Date Fair Value	Shares	Weighted Average Grant-Date Fair Value
Outstanding at January 1, 2019	743,591	\$ 86.90	266,704	\$ 90.01
Vested	(699)	80.75	—	—
Forfeitures	(2,720)	91.44	—	—
Outstanding at March 31, 2019	<u>740,172</u>	<u>\$ 86.89</u>	<u>266,704</u>	<u>\$ 90.01</u>

Compensation Expense

Our share-based compensation expense is recorded in "Selling, general, and administrative expenses." Compensation expense for share-based awards recognized in the Consolidated Statements of Income, net of forfeitures, was as follows (dollars in millions):

	Three Months Ended March 31,	
	2019	2018
Restricted stock	\$ 4.9	\$ 3.9
Performance units	2.0	1.2
Total share-based compensation expense	6.9	5.1
Income tax benefit	(1.7)	(1.3)
Share-based compensation expense, net of tax benefit	\$ 5.2	\$ 3.8

The fair value of restricted stock is determined based on the closing price of the Company's stock on the grant date. Compensation expense, net of estimated forfeitures, is recorded over the requisite service period. As PCA's Board of Directors has the ability to accelerate the vesting of these awards upon an employee's retirement, the Company accelerates the recognition of compensation expense for certain employees approaching normal retirement age.

Performance unit awards are earned based on the achievement of defined performance rankings of Return on Invested Capital (ROIC) or Total Shareholder Return (TSR) compared to ROIC and TSR for peer companies. For performance unit awards made in 2018, 50% used TSR as the performance measure and 50% used ROIC as the performance measure. All units awarded before 2018 used ROIC as the performance measure. The ROIC component of performance unit awards is valued based on the closing price of the stock on the grant date. As the ROIC component contains a performance condition, compensation expense, net of estimated forfeitures, is recorded over the requisite service period based on the most probable number of awards expected to vest. The TSR component of performance unit awards is valued using a Monte Carlo simulation as the TSR component contains a market condition. The Monte Carlo simulation estimates the fair value of the TSR component based on the expected term of the award, a risk-free interest rate, expected dividends, and expected volatility of the Company's common stock and the common stock of the peer companies. Compensation expense is recorded ratably over the expected term of the award.

The unrecognized compensation expense for all share-based awards at March 31, 2019 was as follows (dollars in millions):

	March 31, 2019	
	Unrecognized Compensation Expense	Remaining Weighted Average Recognition Period (in years)
Restricted stock	\$ 26.6	2.3
Performance units	12.5	2.4
Total unrecognized share-based compensation expense	<u>\$ 39.1</u>	<u>2.3</u>

16. Stockholders' Equity

Dividends

During the three months ended March 31, 2019, we paid \$74.7 million of dividends to shareholders. On February 27, 2019, PCA's Board of Directors declared a regular quarterly cash dividend of \$0.79 per share of common stock, which was paid on April 15, 2019 to shareholders of record as of March 15, 2019. The dividend payment was \$74.7 million.

Repurchases of Common Stock

On February 25, 2016, PCA announced that its Board of Directors authorized the repurchase of \$200.0 million of the Company's outstanding common stock. Repurchases may be made from time to time in open market or privately negotiated transactions in accordance with applicable securities regulations. The timing and amount of repurchases will be determined by the Company in its discretion based on factors such as PCA's stock price and market and business conditions.

The Company did not repurchase any shares of its common stock under this authority during the three months ended March 31, 2019. At March 31, 2019, \$193.0 million of the authorized amount remained available for repurchase of the Company's common stock.

Accumulated Other Comprehensive Income (Loss)

Changes in accumulated other comprehensive income (loss) (AOCI) by component were as follows (dollars in millions). Amounts in parentheses indicate losses:

	Foreign Currency Translation Adjustments	Unrealized Loss On Treasury Locks, Net	Unrealized Loss on Foreign Exchange Contracts	Unfunded Employee Benefit Obligations	Total
Balance at January 1, 2019	\$ (0.4)	\$ (10.2)	\$ (0.3)	\$ (127.9)	\$ (138.8)
Amounts reclassified from AOCI, net of tax	—	1.0	—	2.3	3.3
Balance at March 31, 2019	<u>\$ (0.4)</u>	<u>\$ (9.2)</u>	<u>\$ (0.3)</u>	<u>\$ (125.6)</u>	<u>\$ (135.5)</u>

Reclassifications out of AOCI were as follows (dollars in millions). Amounts in parentheses indicate expenses in the Consolidated Statements of Income:

Details about AOCI Components	Amounts Reclassified from AOCI		
	Three Months Ended March 31,		
	2019	2018	
Unrealized loss on treasury locks, net (a)	\$ (1.3)	\$ (1.4)	See (a) below
	0.3	0.4	Tax benefit
	<u>\$ (1.0)</u>	<u>\$ (1.0)</u>	Net of tax
Unfunded employee benefit obligations (b)			
Amortization of prior service costs	\$ (1.5)	\$ (1.7)	See (b) below
Amortization of actuarial gains / (losses)	(1.6)	(2.3)	See (b) below
	(3.1)	(4.0)	Total before tax
	0.8	1.0	Tax benefit
	<u>\$ (2.3)</u>	<u>\$ (3.0)</u>	Net of tax

- (a) This AOCI component is included in interest expense, net. Amount relates to the amortization of the effective portion of treasury lock derivative instruments recorded in AOCI. The net amount of settlement gains or losses on derivative instruments included in AOCI to be amortized over the next 12 months is a net loss of \$5.2 million (\$3.9 million after tax). For a discussion of treasury lock derivative instrument activity, see Note 14, Derivative Instruments and Hedging Activities, of the Notes to Consolidated Financial Statements in "Part II, Item 8. Financial Statements and Supplementary Data" of our 2018 Annual Report on Form 10-K.
- (b) These AOCI components are included in the computation of net pension and postretirement benefit costs. See Note 14, Employee Benefit Plans and Other Postretirement Benefits, for additional information.

17. Concentrations of Risk

Our Paper segment has a long-standing commercial and contractual relationship with Office Depot, our largest customer in the paper business. This relationship exposes us to a significant concentration of business and financial risk. Our sales to Office Depot represent approximately 7% of our total Company sales revenue for the three month periods ended March 31, 2019 and 2018 and approximately 52% and 45% of our Paper segment sales revenue for both of those periods, respectively. For full year 2018, sales to Office Depot represented 47% of our Paper segment sales. At March 31, 2019 and December 31, 2018, we had \$83.6 million and \$66.7 million of accounts receivable due from Office Depot, respectively, which represents 9% and 7% of our total Company accounts receivable, respectively.

18. Transactions With Related Parties

Louisiana Timber Procurement Company, L.L.C. (LTP) is a variable-interest entity that is 50% owned by PCA and 50% owned by Boise Cascade Company (Boise Cascade). LTP procures sawtimber, pulpwood, residual chips, and other residual wood fiber to meet the wood and fiber requirements of PCA and Boise Cascade in Louisiana. PCA is the primary beneficiary of LTP and has the power to direct the activities that most significantly affect the economic performance of LTP. Therefore, we consolidate 100% of LTP in our financial statements in our Corporate and Other segment. The carrying amounts of LTP's assets and liabilities (which relate primarily to non-inventory working capital items) on our Consolidated Balance Sheets were \$3.6 million at March 31, 2019 and \$2.7 million at December 31, 2018. During the three months ended March 31, 2019 and 2018, we recorded \$20.0 million and \$20.5 million, respectively, of LTP sales to Boise Cascade in "Net Sales" in the Consolidated Statements of Income and approximately the same amount of expenses in "Cost of Sales".

During the three months ended March 31, 2019 and 2018, fiber purchases from related parties were \$4.4 million and \$4.0 million, respectively. Most of these purchases related to chip and log purchases by LTP from Boise Cascade's wood products business. These purchases are recorded in "Cost of Sales" in the Consolidated Statements of Income.

19. Segment Information

We report our business in three reportable segments: Packaging, Paper, and Corporate and Other. These segments represent distinct businesses that are managed separately because of differing products and services. Each of these businesses requires distinct operating and marketing strategies.

Each segment's profits and losses are measured on operating profits before interest expense, net, non-operating pension expense, and income taxes. For certain allocated expenses, the related assets and liabilities remain in the Corporate and Other segment.

Selected financial information by reportable segment was as follows (dollars in millions):

Three Months Ended March 31, 2019	Sales, net			Operating Income (Loss)
	Trade	Intersegment	Total	
Packaging	\$ 1,470.8	\$ 6.8	\$ 1,477.6	\$ 249.6 (a)
Paper	239.7	—	239.7	45.6 (a)
Corporate and other	23.2	33.5	56.7	(19.8)
Intersegment eliminations	—	(40.3)	(40.3)	—
	<u>\$ 1,733.7</u>	<u>\$ —</u>	<u>\$ 1,733.7</u>	<u>275.4</u>
Non-operating pension expense				(2.0)
Interest expense, net				(24.1)
Income before taxes				<u>\$ 249.3</u>

Three Months Ended March 31, 2018	Sales, net			Operating Income (Loss) (a)
	Trade	Intersegment	Total	
Packaging	\$ 1,396.6	\$ 6.3	\$ 1,402.9	\$ 224.7 (b)
Paper	269.4	—	269.4	7.2 (b)
Corporate and Other	24.6	29.0	53.6	(19.0) (b)
Intersegment eliminations	—	(35.3)	(35.3)	—
	<u>\$ 1,690.6</u>	<u>\$ —</u>	<u>\$ 1,690.6</u>	<u>212.9</u>
Non-operating pension expense				(0.5)
Interest expense, net				(25.8)
Income before taxes				<u>\$ 186.6</u>

(a) Includes \$0.6 million of charges related to the announced second quarter 2018 discontinuation of uncoated free sheet and coated one-side grades at the Wallula, Washington mill associated with the conversion of the No. 3 paper machine to a high-performance 100% virgin kraft linerboard machine.

(b) Includes \$8.8 million of charges related to the second quarter 2018 discontinuation of uncoated free sheet and coated one-side grades at the Wallula, Washington mill associated with the conversion of the No. 3 paper machine to a high-performance 100% virgin kraft linerboard machine and \$0.3 million of charges consisting of closure costs related to corrugated products facilities and a corporate administration facility.

20. Commitments, Guarantees, Indemnifications and Legal Proceedings

We have financial commitments and obligations that arise in the ordinary course of our business. These include long-term debt, capital commitments, lease obligations, and purchase commitments for goods and services, and legal proceedings, all of which are discussed in Note 10, Debt, and Note 19, Commitments, Guarantees, Indemnifications, and Legal Proceedings, of the Notes to Consolidated Financial Statements in "Part II, Item 8. Financial Statements and Supplementary Data" of our 2018 Annual Report on Form 10-K.

Guarantees and Indemnifications

We provide guarantees, indemnifications, and other assurances to third parties in the normal course of our business. These include tort indemnifications, product guarantees, environmental assurances, and representations and warranties in commercial agreements. At March 31, 2019, we are not aware of any material liabilities arising from any guarantee, indemnification, or financial assurance we have provided. If we determined such a liability was probable and subject to reasonable determination, we would accrue for it at that time.

DeRidder Mill Incident

On February 8, 2017, a tank located in the pulp mill at the Company's DeRidder, Louisiana facility exploded, resulting in three contractor fatalities and other injuries. The Company has been served with multiple lawsuits involving the decedents and other allegedly injured parties, alleging negligence on the part of the Company and claiming compensatory and punitive damages. The Company is vigorously defending these lawsuits. The Company believes that these suits are covered by its liability insurance policies, subject to an aggregate \$1.0 million deductible. The incident remains under investigation and all lawsuits are in the early stages. Accordingly, the Company is unable to estimate a range of reasonable possible losses at this time.

The Company has also incurred property damage and business interruption losses and has claimed these losses, subject to a \$5.0 million deductible, under its property damage and business interruption insurance policy. As of December 31, 2017, the Company finalized the claim with the insurance carrier and received \$17.0 million in insurance proceeds during the first quarter of 2018. The insurance proceeds are included in net cash provided by operating activities (\$14.5 million) and in net cash used for investing activities (\$2.5 million) based on the nature of the reimbursement.

The Company has cooperated with investigations from the U.S. Occupational Health and Safety Administration (OSHA), the U.S. Chemical Safety Board (CSB) and the U.S. Environmental Protection Agency (EPA). The U.S. Chemical Safety Board completed its investigation and issued its report during the second quarter of 2018. The Company settled with OSHA during the second quarter of 2018 and paid approximately \$40,000 in penalties for citations. The EPA investigation is ongoing.

Legal Proceedings

We are also a party to various legal actions arising in the ordinary course of our business. These legal actions include commercial liability claims, premises liability claims, and employment-related claims, among others. As of the date of this filing, we believe it is not reasonably possible that any of the legal actions against us will, either individually or in the aggregate, have a material adverse effect on our financial condition, results of operations, or cash flows.

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

This management's discussion and analysis includes statements regarding our expectations with respect to our future performance, expected business conditions, liquidity, and capital resources. Such statements, along with any other statements that are not historical in nature, are forward-looking. These forward-looking statements are subject to numerous risks and uncertainties, including, but not limited to, the risks and uncertainties described in our 2018 Annual Report on Form 10-K, as well as those factors listed in other documents we file with the Securities and Exchange Commission (SEC). We do not assume any obligation to update any forward-looking statement. Our actual results may differ materially from those contained in or implied by any of the forward-looking statements in this Form 10-Q. Please see "Forward Looking Statements" elsewhere in this Item 2.

Overview

PCA is the third largest producer of containerboard products and the third largest producer of uncoated freesheet paper in North America. We operate six containerboard mills, two paper mills, and 95 corrugated products manufacturing plants. Our containerboard mills produce linerboard and corrugating medium, which are papers primarily used in the production of corrugated products. Our corrugated products manufacturing plants produce a wide variety of corrugated packaging products, including conventional shipping containers used to protect and transport manufactured goods, multi-color boxes and displays with strong visual appeal that help to merchandise the packaged product in retail locations, and honeycomb protective packaging. In addition, we are a large producer of packaging for meat, fresh fruit and vegetables, processed food, beverages, and other industrial and consumer products. We also manufacture and sell white papers, including both commodity and specialty papers, which may have custom or specialized features such as colors, coatings, high brightness, and recycled content. We are headquartered in Lake Forest, Illinois and operate primarily in the United States.

This Item 2 is intended to supplement, and should be read in conjunction with, "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in our 2018 Annual Report on Form 10-K.

Executive Summary

First quarter net sales were \$1.73 billion in 2019 and \$1.69 billion in 2018. We reported \$187 million of net income, or \$1.97 per diluted share, during the first quarter of 2019, compared to \$140 million, or \$1.48 per diluted share, during the same period in 2018. Net income included \$0.5 million of expense for special items (discussed below) in the first quarter of 2019, compared to \$7 million in 2018. Excluding special items, net income was \$187 million, or \$1.98 per diluted share, during the first quarter of 2019, compared to \$147 million, or \$1.55 per diluted share, in the first quarter of 2018. The increase was driven primarily by higher prices and mix and volumes in our Packaging segment, higher prices and mix in our Paper segment, lower annual outage expenses, and lower depreciation expense. These items were partially offset by lower volumes in our Paper segment, higher indirect and converting costs, higher direct material costs, and higher fixed expenses. For additional detail on special items included in reported GAAP results, as well as segment income (loss) excluding special items, earnings before non-operating pension expense, interest, income taxes, and depreciation, amortization, and depletion (EBITDA), and EBITDA excluding special items, see "Item 2. Reconciliations of Non-GAAP Financial Measures to Reported Amounts."

Packaging segment income from operations was \$250 million in the first quarter of 2019, compared to \$225 million in the first quarter of 2018. Packaging segment EBITDA excluding special items was \$334 million in the first quarter of 2019 compared to \$308 million in the first quarter of 2018. The increase in EBITDA excluding special items was due to higher containerboard and corrugated products prices and mix and sales and production volumes driven by strong demand, and lower annual outage expenses, partially offset by higher operating and converting costs, higher wood costs, and other fixed costs.

Paper segment income from operations was \$46 million in the first quarter of 2019, compared to \$7 million in the first quarter of 2018. Paper segment EBITDA excluding special items was \$55 million in the first quarter of 2019, compared to \$31 million in the first quarter of 2018. The increase in EBITDA excluding special items was due to higher prices and mix and lower operating costs, partially offset by lower sales and production volumes primarily related to the exit from the paper business at the Wallula Mill.

During the second quarter of 2018, the Company discontinued production of uncoated freesheet and coated one-side grades at its Wallula, Washington mill and converted the No. 3 paper machine to a 400,000 ton-per-year virgin kraft linerboard machine. The Company took an extended outage on the machine to complete the conversion in the fourth quarter of 2018. The Company incurred charges in the Packaging and Paper segments during the first quarter of 2019 and the Paper segment during the same period in 2018 relating to these activities as described below under "Special Items and Earnings per Diluted Share, Excluding Special Items." The Company does not expect to incur further related charges going forward.

Special Items and Earnings per Diluted Share, Excluding Special Items

A reconciliation of reported earnings per diluted share to earnings per share, excluding special items, for the three months ended March 31, 2019 and 2018 are as follows:

	Three Months Ended	
	March 31,	
	2019	2018
Earnings per diluted share, as reported	\$ 1.97	\$ 1.48
Special items:		
Wallula mill restructuring (a)	0.01	0.07
Total special items	0.01	0.07
Earnings per diluted share, excluding special items	\$ 1.98	\$ 1.55

(a) For 2019 and 2018, includes \$0.6 million and \$8.8 million, respectively, of charges related to the discontinuation of production of uncoated free sheet and coated one-side grades at the Wallula, Washington mill in the second quarter of 2018 and conversion of the No. 3 paper machine to a high-performance 100% virgin kraft linerboard machine.

Included in this Item 2 are various non-GAAP financial measures, including diluted EPS excluding special items, segment income excluding special items and EBITDA excluding special items. Management excludes special items as it believes these items are not necessarily reflective of the ongoing results of operations of our business. We present these measures because they provide a means to evaluate the performance of our segments and our Company on an ongoing basis using the same measures that are used by our management, because these measures assist in providing a meaningful comparison between periods presented and because these measures are frequently used by investors and other interested parties in the evaluation of companies and the performance of their segments. A reconciliation of diluted EPS to diluted EPS excluding special items is included above and the reconciliations of other non-GAAP measures used in this Management's Discussion and Analysis of Financial Condition and Results of Operations, to the most comparable measure reported in accordance with GAAP, are included in Item 2 under "Reconciliations of Non-GAAP Financial Measures to Reported Amounts." Any analysis of non-GAAP financial measures should be done in conjunction with results presented in accordance with GAAP. The non-GAAP measures are not intended to be substitutes for GAAP financial measures and should not be used as such.

Industry and Business Conditions

Trade publications reported North American industry-wide corrugated products shipments down 0.5%, during the first quarter of 2019 compared to the same quarter of 2018. Reported industry containerboard production decreased 3.9% compared to the first quarter of 2018. Reported industry containerboard inventories at the end of the first quarter of 2019 were approximately 2.7 million tons, up 12.5% compared to the same period in 2018. Reported containerboard export shipments were down 21.6% compared to the first quarter of 2018. Trade publications reported price decreases of \$10 per ton for domestic linerboard in March of 2019 and \$20 per ton for corrugating medium in January of 2019.

Trade publications reported North American uncoated freesheet paper shipments were down 8.3% in the first quarter of 2019, compared to the same quarter of 2018. Average prices reported by a trade publication for cut size office papers were higher by \$123 per ton, or 12.5%, in the first quarter of 2019, compared to the first quarter of 2018.

Outlook

Looking ahead to the second quarter of 2019, in our Packaging segment, we expect seasonally higher containerboard and corrugated products shipments, with lower prices as a result of the published domestic containerboard price decreases and lower export prices. In our Paper segment, volume should be similar to the first quarter, and we will continue implementing the previously announced price increases for Paper segment products, but scheduled outage costs will be higher due to the annual shutdown at our International Falls mill. Across both segments we anticipate slightly higher freight, repairs, and certain fixed costs as well as higher share-based compensation costs due to the accounting treatment of restricted stock. Energy costs should improve as we move into seasonally milder weather, recycled fiber prices should be slightly lower, and our effective tax rate should be lower when compared to the first quarter. Considering these items, we expect second quarter earnings to be higher than the first quarter.

Results of Operations

Three Months Ended March 31, 2019, compared to Three Months Ended March 31, 2018

The historical results of operations of PCA for the three months ended March 31, 2019 and 2018 are set forth below (dollars in millions):

	Three Months Ended March 31,			Change		
	2019		2018			
Packaging	\$	1,477.6	\$	1,402.9	\$	74.7
Paper		239.7		269.4		(29.7)
Corporate and Other		56.7		53.6		3.1
Intersegment eliminations		(40.3)		(35.3)		(5.0)
Net sales	\$	1,733.7	\$	1,690.6	\$	43.1
Packaging	\$	249.6	\$	224.7	\$	24.9
Paper		45.6		7.2		38.4
Corporate and Other		(19.8)		(19.0)		(0.8)
Income from operations	\$	275.4	\$	212.9	\$	62.5
Non-operating pension expense		(2.0)		(0.5)		(1.5)
Interest expense, net		(24.1)		(25.8)		1.7
Income before taxes		249.3		186.6		62.7
Income tax provision		(62.5)		(46.5)		(16.0)
Net income	\$	186.8	\$	140.1	\$	46.7
<i>Non-GAAP Measures (a)</i>						
Net income excluding special items	\$	187.3	\$	146.9	\$	40.4
Consolidated EBITDA		370.2		321.0		49.2
Consolidated EBITDA excluding special items		370.6		321.8		48.8
Packaging EBITDA		333.6		307.8		25.8
Packaging EBITDA excluding special items		333.8		307.9		25.9
Paper EBITDA		54.7		30.6		24.1
Paper EBITDA excluding special items		54.9		31.3		23.6

(a) See "Reconciliations of Non-GAAP Financial Measures to Reported Amounts" included in this Item 2 for a reconciliation of non-GAAP measures to the most comparable GAAP measure.

Net Sales

Net sales increased \$43 million, or 2.5%, to \$1,734 million during the three months ended March 31, 2019, compared to \$1,691 million during the same period in 2018.

Packaging. Net sales increased \$75 million, or 5.3%, to \$1,478 million, compared to \$1,403 million in the first quarter of 2018 due to higher domestic containerboard and corrugated products prices and mix (\$64 million) and increased containerboard and corrugated products volume (\$11 million). In the first quarter of 2019, our domestic containerboard prices increased 3.5%, while export prices decreased 4.0%, compared to the same period in 2018. In the first quarter of 2019, export and domestic containerboard outside shipments decreased 19.2%, and total corrugated products shipments were up 0.7%, compared to the first quarter of 2018.

Paper. Net sales during the three months ended March 31, 2019 decreased \$30 million, or 11.0%, to \$240 million, compared to \$269 million in the first quarter of 2018, due to decreased volume (\$55 million), primarily due to the exit from the paper business at Wallula, partially offset by favorable changes in prices and mix (\$26 million).

Gross Profit

Gross profit increased \$65 million during the three months ended March 31, 2019, compared to the same period in 2018. The increase was driven primarily by higher containerboard and corrugated products prices and mix and sales and production volumes, higher prices and mix in our Paper segment, and lower annual outage expenses, partially offset by lower volumes in our Paper segment and higher operating and converting costs. In the three months ended March 31, 2019, gross profit did not include any special items, compared to \$8 million of Wallula Mill restructuring charges in the same period last year.

Selling, General, and Administrative Expenses

Selling, general, and administrative expenses ("SG&A") increased \$5 million during the three months ended March 31, 2019, compared to the same period in 2018. The increase was primarily due to higher employee salaries and fringes.

Other Expense, Net

Other expense, net, for the three months ended March 31, 2019 and 2018 are set forth below (dollars in millions):

	Three Months Ended	
	March 31,	
	2019	2018
Asset disposals and write-offs	\$ (4.3)	\$ (5.1)
Wallula mill restructuring	(0.4)	(0.7)
Facilities closure and other costs	—	(0.1)
Other	(1.3)	(2.4)
Total	<u>\$ (6.0)</u>	<u>\$ (8.3)</u>

We discuss these items in more detail in Note 7, Other Expense, Net of the Condensed Notes to Unaudited Quarterly Consolidated Financial Statements in “Part I, Item 1. Financial Statements” of this Form 10-Q.

Income from Operations

Income from operations increased \$63 million, or 29.4%, during the three months ended March 31, 2019, compared to the same period in 2018. The first quarter of 2019 and 2018 included \$1 million and \$9 million of expense, respectively, for special items related to the Wallula Mill restructuring.

Packaging. Packaging segment income from operations increased \$25 million to \$250 million, compared to \$225 million during the three months ended March 31, 2018. The increase related primarily to higher containerboard and corrugated products prices and mix (\$46 million), higher containerboard and corrugated products sales and production volumes (\$34 million), and lower annual outage expenses (\$3 million), partially offset by higher operating and converting costs (\$37 million), higher fiber costs (\$9 million), fixed asset disposals (\$4 million) and other expenses (\$8 million). There were an insignificant amount of special items in the Packaging segment in the first three months of 2019 and 2018.

Paper. Paper segment income from operations increased \$38 million to \$45 million, compared to \$7 million during the three months ended March 31, 2018. The increase primarily related to higher prices and mix (\$26 million), lower operating costs (\$11 million), lower depreciation expense (\$4 million) and other expenses (\$5 million), partially offset by lower sales and production volumes (\$16 million). There were an insignificant amount of special items in the Paper segment in the first three months of 2019. Special items for the first quarter 2018 included expense of \$9 million related to the Wallula mill restructuring.

Non-Operating Pension Expense, Interest Expense, Net and Income Taxes

Non-operating pension expense increased \$1.5 million during the three months ended March 31, 2019, compared to the same period in 2018. The increase in non-operating pension expense was primarily related to the 2018 asset performance (i.e. lower asset balances resulted in lower than expected return) and the amortization of the 2018 losses.

Interest expense, net decreased \$2 million during the three months ended March 31, 2019, compared to the same period in 2018. The decrease in interest expense, net was primarily due to our repayment of the 6.50% Senior Notes due in March 2018.

During the three months ended March 31, 2019, we recorded \$63 million of income tax expense, compared to \$47 million of expense during the three months ended March 31, 2018. The effective tax rate for the three months ended March 31, 2019 and 2018 was 25.1% and 24.9%, respectively. The slight increase in our effective tax rate was primarily due to higher state and local income taxes net of the federal benefit.

Liquidity and Capital Resources

Sources and Uses of Cash

Our primary sources of liquidity are net cash provided by operating activities and available borrowing capacity under our revolving credit facility. At March 31, 2019, we had \$442 million of cash and \$328 million of unused borrowing capacity under the revolving credit facility, net of letters of credit. Currently, our primary uses of cash are for operations, capital expenditures, acquisitions, debt service, common stock dividends, and repurchases of common stock. We believe that net cash generated from operating activities, cash on hand, available borrowings under our revolving credit facility, and available capital through access to capital markets will be adequate to meet our liquidity and capital requirements, including payments of any declared common stock dividends, for the foreseeable future. As our debt or credit facilities become due, we will need to repay, extend, or replace such facilities. Our ability to do so will be subject to future economic conditions and financial, business, and other factors, many of which are beyond our control.

Below is a summary table of our cash flows, followed by a discussion of our sources and uses of cash through operating activities, investing activities, and financing activities (dollars in millions):

	Three Months Ended March 31,		Change
	2019	2018	
Net cash provided by (used for):			
Operating activities	\$ 236.0	\$ 202.5	\$ 33.5
Investing activities	(80.1)	(107.2)	27.1
Financing activities	(75.0)	(209.8)	134.8
Net increase (decrease) in cash and cash equivalents	<u>\$ 80.9</u>	<u>\$ (114.5)</u>	<u>\$ 195.4</u>

Operating Activities

Our operating cash flow is primarily driven by our earnings and changes in operating assets and liabilities, such as accounts receivable, inventories, accounts payable and other accrued liabilities, as well as factors described below. Cash requirements for operating activities are subject to PCA's operating needs and the timing of collection of receivables and payments of payables and expenses.

During the three months ended March 31, 2019, net cash provided by operating activities was \$236 million, compared to \$202 million in the same period in 2018, an increase of \$34 million. Cash from operations excluding changes in cash used for operating assets and liabilities increased \$47 million, primarily due to higher income from operations as discussed above. Cash decreased by \$13 million due to changes in operating assets and liabilities. The decrease was primarily due to the following: (a) an increase in finished goods inventory in the Paper segment in anticipation of the planned second quarter annual outage at the International Falls paper mill, and (b) an increase in rollstock inventories in the Packaging segment due to lower export and domestic containerboard shipments in the first quarter of 2019 compared to the first quarter of 2018. These changes were partially offset by an increase in accounts payable levels related to the timing of payments in the first quarter.

Investing Activities

We used \$80 million for investing activities during the three months ended March 31, 2019 compared to \$107 million during the same period in 2018. We spent \$79 million for internal capital investments during the three months ended March 31, 2019, compared to \$108 million during the same period in 2018.

We expect capital investments in 2019 to be between \$390 million and \$410 million, not including acquisitions. These expenditures could increase or decrease as a result of a number of factors, including our financial results, strategic opportunities, future economic conditions, and our regulatory compliance requirements. We currently estimate capital expenditures to comply with environmental regulations will be about \$10 million in 2019. Our estimated environmental expenditures could vary significantly depending upon the enactment of new environmental laws and regulations, including those related to greenhouse gas emissions and industrial boilers. For additional information, see "Environmental Matters" in "Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" of our 2018 Annual Report on Form 10-K.

Financing Activities

During the three months ended March 31, 2019, net cash used for financing activities was \$75 million, compared to \$210 million during the same period in 2018. The decrease primarily relates to the \$150 million repayment of our 6.5% senior notes that were due March 2018. In the first three months of 2019, we paid \$75 million of dividends compared with \$59 million of dividends paid during the first three months of 2018. On May 15, 2018, PCA's Board of Directors announced an increase in the regular quarterly cash dividend to \$0.79 per share from the previous \$0.63 per share dividend, beginning with the dividend paid on July 13, 2018.

For more information about our debt, see Note 10, Debt, of the Notes to Consolidated Financial Statements in "Part II, Item 8. Financial Statements and Supplementary Data" of our 2018 Annual Report on Form 10-K.

Contractual Obligations

There have been no material changes to the contractual obligations table disclosed in Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations" of our 2018 Annual Report on Form 10-K.

Reconciliations of Non-GAAP Financial Measures to Reported Amounts

Income from operations excluding special items, net income excluding special items, EBITDA, and EBITDA excluding special items are non-GAAP financial measures. Management excludes special items, as it believes that these items are not necessarily reflective of the ongoing operations of our business. These measures are presented because they provide a means to evaluate the performance of our segments and our Company on an ongoing basis using the same measures that are used by our management, because these measures assist in providing a meaningful comparison between periods and because these measures are frequently used by investors and other interested parties in the evaluation of companies and the performance of their segments. Any analysis of non-GAAP financial measures should be done in conjunction with results presented in accordance with GAAP. The non-GAAP measures are not intended to be substitutes for GAAP financial measures and should not be used as such. Reconciliations of the non-GAAP measures to the most comparable measure reported in accordance with GAAP for the three months ended March 31, 2019 and 2018 follow (dollars in millions):

	Three Months Ended March 31,					
	2019			2018		
	Income before Taxes	Income Taxes	Net Income	Income before Taxes	Income Taxes	Net Income
As reported in accordance with GAAP	\$ 249.3	\$ (62.5)	\$ 186.8	\$ 186.6	\$ (46.5)	\$ 140.1
Special items:						
Wallula mill restructuring (a)(b)	0.6	(0.1)	0.5	8.8	(2.2)	6.6
Facilities closure and other costs (b)	—	—	—	0.3	(0.1)	0.2
Total special items	0.6	(0.1)	0.5	9.1	(2.3)	6.8
Excluding special items	\$ 249.9	\$ (62.6)	\$ 187.3	\$ 195.7	\$ (48.8)	\$ 146.9

(a) The three months ended March 31, 2019 include \$0.6 million of charges related to the announced second quarter 2018 discontinuation of uncoated free sheet and coated one-side grades at the Wallula, Washington mill associated with the conversion of the No. 3 paper machine to a high-performance 100% virgin kraft linerboard machine.

(b) The three months ended March 31, 2018 include the following:

- \$8.8 million of charges related to the second quarter 2018 discontinuation of uncoated free sheet and coated one-side grades at the Wallula, Washington mill associated with the conversion of the No. 3 paper machine to a high-performance 100% virgin kraft linerboard machine million of charges consisting of closure costs related to corrugated products facilities and corporate administration facility.
- \$0.3 million of charges million of charges consisting of closure costs related to corrugated products facilities and corporate administration facility.

The following table reconciles net income to EBITDA and EBITDA excluding special items for the periods indicated (dollars in millions):

	Three Months Ended March 31,	
	2019	2018
Net income	\$ 186.8	\$ 140.1
Non-operating pension expense	2.0	0.5
Interest expense, net	24.1	25.8
Income tax provision	62.5	46.5
Depreciation, amortization, and depletion	94.8	108.1
EBITDA	\$ 370.2	\$ 321.0
Special items:		
Wallula mill restructuring	0.4	0.7
Facilities closure and other costs	—	0.1
Total special items	0.4	0.8
EBITDA excluding special items	\$ 370.6	\$ 321.8

The following table reconciles segment income (loss) to EBITDA and EBITDA excluding special items for the periods indicated (dollars in millions):

	Three Months Ended	
	March 31,	
	2019	2018
Packaging		
Segment income	\$ 249.6	\$ 224.7
Depreciation, amortization, and depletion	84.0	83.1
EBITDA	333.6	307.8
Wallula mill restructuring	0.2	—
Facilities closure and other costs	—	0.1
EBITDA excluding special items	<u>\$ 333.8</u>	<u>\$ 307.9</u>
Paper		
Segment income	\$ 45.6	\$ 7.2
Depreciation, amortization, and depletion	9.1	23.4
EBITDA	54.7	30.6
Wallula mill restructuring	0.2	0.7
EBITDA excluding special items	<u>\$ 54.9</u>	<u>\$ 31.3</u>
Corporate and Other		
Segment loss	\$ (19.8)	\$ (19.0)
Depreciation, amortization, and depletion	1.7	1.6
EBITDA	(18.1)	(17.4)
EBITDA excluding special items	<u>\$ (18.1)</u>	<u>\$ (17.4)</u>
EBITDA	<u>\$ 370.2</u>	<u>\$ 321.0</u>
EBITDA excluding special items	<u>\$ 370.6</u>	<u>\$ 321.8</u>

Market Risk and Risk Management Policies

PCA is exposed to the impact of interest rate changes and changes in the market value of its financial instruments. We periodically enter into derivatives to minimize these risks, but not for trading purposes. We were not a party to any derivatives-based arrangements at March 31, 2019. For a discussion of derivatives and hedging activities, see Note 14, Derivative Instruments and Hedging Activities, of the Notes to Consolidated Financial Statements in “Part II, Item 8. Financial Statements and Supplementary Data” of our 2018 Annual Report on Form 10-K.

At March 31, 2019, interest rates on 100% of PCA’s outstanding debt are fixed.

Off-Balance-Sheet Activities

The Company does not have any off-balance sheet arrangements as of March 31, 2019.

Environmental Matters

There have been no material changes to the disclosure set forth in Item 7. “Management’s Discussion and Analysis of Financial Condition and Results of Operations - Environmental Matters” filed with our 2018 Annual Report on Form 10-K.

Critical Accounting Policies and Estimates

Management’s discussion and analysis of financial condition and results of operations are based upon the Company’s consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosures of contingent assets and liabilities. On an ongoing basis, PCA evaluates its estimates, including those related to business combinations, pensions and other postretirement benefits, goodwill and intangible assets, long-lived asset impairment, environmental liabilities, and income taxes, among others. PCA bases its estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

PCA has included in its 2018 Annual Report on Form 10-K a discussion of its critical accounting policies and estimates which require management's most difficult, subjective, or complex judgments used in the preparation of its consolidated financial statements. PCA has not had any changes to these critical accounting estimates during the first three months of 2019.

New and Recently Adopted Accounting Standards

For a listing of our new and recently adopted accounting standards, see Note 2, New and Recently Adopted Accounting Standards, of the Condensed Notes to Unaudited Quarterly Consolidated Financial Statements in "Part I, Item 1. Financial Statements" of this Form 10-Q.

Forward-Looking Statements

Some of the statements in this Quarterly Report on Form 10-Q, and in particular, statements found in this Management's Discussion and Analysis of Financial Condition and Results of Operations, that are not historical in nature are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include statements about our expectations regarding our future liquidity, earnings, expenditures, and financial condition. These statements are often identified by the words "will," "should," "anticipate," "believe," "expect," "intend," "estimate," "hope," or similar expressions. These statements reflect management's current views with respect to future events and are subject to risks and uncertainties. There are important factors that could cause actual results to differ materially from those in forward-looking statements, many of which are beyond our control. These factors, risks and uncertainties include the following:

- the impact of general economic conditions;
- the impact of acquired businesses and risks and uncertainties regarding operation, expected benefits and integration of such businesses;
- containerboard, corrugated products, and white paper general industry conditions, including competition, product demand, product pricing, and input costs;
- fluctuations in wood fiber and recycled fiber costs;
- fluctuations in purchased energy costs;
- the possibility of unplanned outages or interruptions at our principal facilities;
- legislative or regulatory actions or requirements, particularly concerning environmental or tax matters.

Our actual results, performance or achievement could differ materially from those expressed in, or implied by, these forward-looking statements, and accordingly, we can give no assurances that any of the events anticipated by the forward-looking statements will transpire or occur, or if any of them do occur, what impact they will have on our results of operations or financial condition. Given these uncertainties, investors are cautioned not to place undue reliance on these forward-looking statements. We expressly disclaim any obligation to publicly revise any forward-looking statements that have been made to reflect the occurrence of events after the date hereof. For a discussion of other factors, risks and uncertainties that may affect our business, see Item 1A. Risk Factors included in our Annual Report on Form 10-K for the year ended December 31, 2018.

Item 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

For a discussion of market risks related to PCA, see Part I, Item 2, "Management's Discussion and Analysis of Financial Condition and Results of Operations - Market Risk and Risk Management Policies" in this Quarterly Report on Form 10-Q.

Item 4. CONTROLS AND PROCEDURES

PCA maintains disclosure controls and procedures (as defined in Rule 13a-15(e) of the Securities Exchange Act of 1934) that are designed to provide reasonable assurance that information required to be disclosed in PCA's filings under the Securities Exchange Act is recorded, processed, summarized and reported within the periods specified in the rules and forms of the SEC and that such information is accumulated and communicated to PCA's management, including its Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

Prior to filing this report, PCA completed an evaluation under the supervision and with the participation of PCA's management, including PCA's Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of PCA's disclosure controls and procedures as of March 31, 2019. The evaluation of PCA's disclosure controls and procedures included a review of the controls' objectives and design, PCA's implementation of the controls, and the effect of the controls on the information generated for use in this report. Based on this evaluation, PCA's Chief Executive Officer and Chief Financial Officer concluded that PCA's disclosure controls and procedures were effective at the reasonable assurance level as of March 31, 2019.

Changes in Internal Control over Financial Reporting

The Company implemented technology, processes, and controls related to the recording of right-of-use assets and lease liabilities in connection with the adoption of ASC 842, *Leases*, as described in Notes 2 and 3 in this Quarterly Report on Form 10-Q. Otherwise, there were no changes in our internal control over financial reporting identified in connection with the evaluation that occurred during the period covered by this report that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II
OTHER INFORMATION

Item 1. LEGAL PROCEEDINGS

The disclosure set forth under the caption "Legal Proceedings" in Note 20, Commitments, Guarantees, Indemnifications and Legal Proceedings, of the Condensed Notes to Unaudited Quarterly Consolidated Financial Statements in "Part I, Item 1. Financial Statements" of this Form 10-Q is incorporated herein by reference.

Item 1A. RISK FACTORS

There have been no material changes to the risk factors disclosed in "Part I, Item 1A. Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2018.

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

The following table presents information related to our repurchases of common stock made under repurchase plans authorized by PCA's Board of Directors, and shares withheld to cover taxes on vesting of equity awards, during the three months ended March 31, 2019:

Issuer Purchases of Equity Securities				
Period	Total Number of Shares Purchased (a)	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares That May Yet Be Purchased Under the Plans or Programs (in millions)
January 1-31, 2019	50	\$ 94.32	—	\$ 193.0
February 1-28, 2019	—	—	—	193.0
March 1-31, 2019	—	—	—	193.0
Total	50	\$ 94.32	—	\$ 193.0

(a) All shares were withheld from employees to cover income and payroll taxes on equity awards that vested during the period.

Item 3. DEFAULTS UPON SENIOR SECURITIES

None.

Item 4. MINE SAFETY DISCLOSURES

Not applicable.

Item 5. OTHER INFORMATION

None.

Item 6. EXHIBITS

Exhibit Number	Description
31.1	<u>Certification of Chief Executive Officer, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. †</u>
31.2	<u>Certification of Chief Financial Officer, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. †</u>
32	<u>Certification of Chief Executive Officer and Chief Financial Officer Pursuant to 18 U.S.C. §1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. †</u>
101	The following financial information from Packaging Corporation of America's Quarterly Report on Form 10-Q for the quarter ended March 31, 2019, formatted in XBRL (eXtensible Business Reporting Language): (i) Consolidated Statements of Income and Comprehensive Income for the three months ended March 31, 2019 and 2018, (ii) Consolidated Balance Sheets at March 31, 2019 and December 31, 2018, (iii) Consolidated Statements of Cash Flows for the three months ended March 31, 2019 and 2018, (iv) Consolidated Statements of Changes in Stockholders' Equity for the three months ended March 31, 2019 and 2018, and (v) the Condensed Notes to Unaudited Quarterly Consolidated Financial Statements. †

† Filed herewith.

SIGNATURES

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.

Packaging Corporation of America

/s/ MARK W. KOWLZAN

Mark W. Kowlzan

Chairman and Chief Executive Officer

/s/ ROBERT P. MUNDY

Robert P. Mundy

Executive Vice President and Chief Financial Officer

/s/ PAMELA A. BARNES

Pamela A. Barnes

Senior Vice President, Finance and Controller

Date: May 8, 2019

**CEO CERTIFICATION PURSUANT TO SECTION 302
OF THE SARBANES-OXLEY ACT OF 2002**

I, Mark W. Kowlzan, certify that:

- (1) I have reviewed this quarterly report on Form 10-Q of Packaging Corporation of America (PCA);
- (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 PCA as of, and for, the periods presented in this report;
- (4) PCA'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 PCA 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 PCA, 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 PCA'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 PCA's internal control over financial reporting that occurred during PCA's most recent fiscal quarter (PCA's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, PCA's internal control over financial reporting; and
- (5) PCA's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to PCA's auditors and the Audit Committee of PCA'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 PCA'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 PCA's internal control over financial reporting.

/s/ Mark W. Kowlzan

Mark W. Kowlzan
Chairman and Chief Executive Officer

Date: May 8, 2019

**CFO CERTIFICATION PURSUANT TO SECTION 302
OF THE SARBANES-OXLEY ACT OF 2002**

I, Robert P. Mundy, certify that:

- (1) I have reviewed this quarterly report on Form 10-Q of Packaging Corporation of America (PCA);
- (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 PCA as of, and for, the periods presented in this report;
- (4) PCA'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 PCA 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 PCA, 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 PCA'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 PCA's internal control over financial reporting that occurred during PCA's most recent fiscal quarter (PCA's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, PCA's internal control over financial reporting; and
- (5) PCA's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to PCA's auditors and the Audit Committee of PCA'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 PCA'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 PCA's internal control over financial reporting.

/s/ Robert P. Mundy

Robert P. Mundy
Executive Vice President and Chief Financial Officer

Date: May 8, 2019

**CERTIFICATIONS OF CHIEF EXECUTIVE OFFICER AND
CHIEF FINANCIAL OFFICER
PURSUANT TO 18 U.S.C. §1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

I, Mark W. Kowlzan, Chief Executive Officer of Packaging Corporation of America (the “Company”), certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

(1) The Quarterly Report of the Company on Form 10-Q for the period ended March 31, 2019 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 such Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Mark W. Kowlzan

Mark W. Kowlzan

Chairman and Chief Executive Officer

Date: May 8, 2019

I, Robert P. Mundy, Chief Financial Officer of Packaging Corporation of America (the “Company”), certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

(1) The Quarterly Report of the Company on Form 10-Q for the period ended March 31, 2019 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 such Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Robert P. Mundy

Robert P. Mundy

Executive Vice President and Chief Financial Officer

Date: May 8, 2019