UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K	
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CURRENT REPORT
Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): November 8, 2018

KOPPERS HOLDINGS INC.

(Exact name of registrant as specified in its charter)

Pennsylvania (State or other jurisdiction of incorporation) 1-32737 (Commission File Number) 20-1878963 (IRS Employer Identification No.)

436 Seventh Avenue Pittsburgh, Pennsylvania (Address of principal executive offices)

15219 (Zip Code)

Registrant's telephone number, including area code: (412) 227-2001

 $\begin{tabular}{ll} Not \ Applicable \\ (Former name or former address, if changed since last report) \end{tabular}$

	e appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following s (see General Instruction A.2. below):
□ W	ritten communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
□ So	oliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
□ Pr	re-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
□ Pr	re-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
	by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§ 230.405 of this chapter) 2b-2 of the Securities Exchange Act of 1934 (§ 240.12b-2 of this chapter)
Emerging	g growth company \square
	rging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or nancial accounting standards provided pursuant to Section 13(a) of the Exchange Act. \Box
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Item 2.02 Results of Operations and Financial Condition.

On November 8, 2018 we issued a press release announcing third quarter 2018 results. A copy of the press release is included in this Current Report on Form 8-K as Exhibit 99.1 and is furnished herewith.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits. The following exhibit is furnished herewith:

99.1 <u>Press Release dated November 8, 2018</u>

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 hereunto duly authorized.

Dated: November 8, 2018

KOPPERS HOLDINGS INC.

By: /s/ Michael J. Zugay

Michael J. Zugay

Chief Financial Officer and Treasurer



436 Seventh Avenue Pittsburgh, PA 15219-1800 Tel 412 227 2001 www.koppers.com

News Release

FOR IMMEDIATE RELEASE

For Information: Michael J. Zugay, Chief Financial Officer

412 227 2231

ZugayMJ@koppers.com

Koppers Holdings Inc. Reports Third Quarter 2018 Results
Q3 2018 Diluted EPS of \$0.35 vs. Prior Year of \$0.91
Adjusted O3 2018 EPS of \$0.73 vs. Prior Year of \$1.43

Revises 2018 Guidance to \$220 Million Adjusted EBITDA and \$3.30 to \$3.40 Adjusted EPS
Announces Profitability Improvement Actions to Realize \$25 Million to \$40 Million of Benefits

PITTSBURGH, November 8, 2018 – Koppers Holdings Inc. (NYSE: KOP), an integrated global provider of treated wood products, wood treatment chemicals and carbon compounds, today reported net income attributable to Koppers for the third quarter of \$7.6 million, or \$0.35 per diluted share compared to net income of \$19.8 million, or \$0.91 per diluted share in the prior year quarter.

Adjusted net income and adjusted earnings per share (EPS) were \$15.6 million and \$0.73 per share for the third quarter of 2018 compared to \$31.5 million and \$1.43 per share in the prior year quarter, respectively.

Adjustments to pre-tax income totaled \$9.8 million for the third quarter of 2018 and \$13.8 million for the prior year quarter. The current year quarter primarily reflected restructuring expenses, LIFO expenses, costs related to mark-to-market commodity hedging and a loss on the sale of a business. The prior year quarter consisted of pension settlement charges and restructuring expenses, partially offset by a benefit associated with mark-to-market commodity hedging.

Consolidated sales were \$442.7 million for the third quarter of 2018, an increase of \$57.9 million, or 15.0 percent, from sales of \$384.8 million in the prior year quarter. Excluding an unfavorable impact from foreign currency translation of \$5.0 million, sales increased by \$62.9 million, or 16.3 percent, from the prior year quarter. The Railroad and Utility Products and Services (RUPS) business reported increased sales, which were due to acquisitions in the current year as well as increased volumes in the commercial crosstie market, partially offset by lower Class I treating volumes due to lack of dry crosstie inventory. The Carbon Materials and Chemicals (CMC) business reported higher sales prices for carbon pitch in Europe, North America and Australia, partially offset by lower volumes of soft pitch in China and phthalic anhydride in North America. The Performance Chemicals (PC) business recorded slightly lower sales compared with prior year, reflecting the continued trend of customers reducing or delaying wood-treating activities due to volatility in lumber prices.

While RUPS profitability benefited from the contribution from recent acquisitions, lack of dry crosstie inventory prevented the legacy railroad business from benefiting further as Class I demand has begun to improve from trough levels. CMC reported lower profitability compared to prior year primarily due to a production curtailment at a major customer in China. PC reported a margin decline due to higher raw material prices, transportation costs and short-term supply disruptions driving costs higher.

Commenting on the quarter, President and CEO Leroy Ball said, "Our results would have been much different if not for our main customer in China curtailing production during the third quarter. In our legacy RUPS segment, demand metrics continued to improve and matched our prior year numbers for the first time since the second quarter of 2016, which validates that we are turning the corner as expected. The fundamentals in our PC business remain solid, but increased cost and limited availability of certain raw materials were issues that have had a ripple effect throughout our supply chain."

Third-Quarter Financial Performance

- Sales for RUPS of \$185.0 million increased by \$53.3 million, or 40.5 percent, compared to sales of \$131.7 million in the prior year quarter. Earlier in the year, Koppers acquired M.A. Energy Resources as well as the Industrial Division of Cox Industries, now renamed as Koppers Utility and Industrial Products (UIP). The sales increase was due to acquisitions in the current year as well as increased volumes in the commercial crosstie market, partially offset by lower Class I treating volumes. Operating profit for the third quarter was \$5.8 million, or 3.1 percent, compared with an operating profit of \$9.5 million, or 7.2 percent, in the prior year quarter. Adjusted EBITDA for the third quarter was \$12.3 million, or 6.6 percent, compared with \$11.9 million, or 9.0 percent, in the prior year quarter. The increase in adjusted EBITDA was due to the contribution from recent acquisitions, partially offset by lower treating volumes due to the lack of dry crosstie inventory.
- Sales for PC of \$108.2 million decreased by \$1.5 million, or 1.4 percent, compared to sales of \$109.7 million in the prior year quarter. Customers are continuing to reduce or delay wood-treating activities as volatility in lumber prices during the quarter hampered the purchases of treated wood by independent dealers due to credit constraints. Operating profit was \$11.0 million, or 10.2 percent, for the third quarter, compared with \$18.4 million, or 16.8 percent, in the prior year quarter. Adjusted EBITDA was \$16.6 million, or 15.3 percent, for the third quarter, compared with \$22.2 million, or 20.2 percent, in the prior year quarter. The lower profitability was driven by higher raw material prices, transportation costs and higher costs from short-term supply disruptions.
- Sales for CMC of \$149.5 million increased by \$6.1 million, or 4.3 percent, compared to sales of \$143.4 million in the prior year quarter. Excluding an unfavorable impact from foreign currency translation of \$3.3 million, sales increased by \$9.4 million, or 6.6 percent, from the prior year quarter. The sales increase was due to higher sales prices for carbon pitch in Europe, North America and Australia, partially offset by lower volumes of soft pitch in China and phthalic anhydride in North America. Operating profit was \$14.9 million, or 10.0 percent, in the third quarter, compared with \$16.3 million, or 11.4 percent, in the prior year quarter. Adjusted EBITDA was \$24.9 million, or 16.7 percent, in the third quarter, compared with \$26.1 million, or 18.2 percent, in the prior year quarter. The unfavorable margin performance was due to a major customer's production curtailment in China.
- Operating profit was \$31.2 million, or 7.0 percent, compared with \$35.0 million, or 9.1 percent, in the prior year quarter. Adjusted EBITDA was \$53.3 million, or 12.0 percent, compared with \$60.5 million, or 15.7 percent, in the prior year quarter. Operating profit margin and adjusted EBITDA margin are calculated as a percentage of GAAP sales.
- Net income attributable to Koppers in the third quarter was \$7.6 million compared with net income of \$19.8 million in the prior year quarter. Adjusted net income was \$15.6 million, compared with \$31.5 million in the prior year quarter.
- In the third quarter of 2018, items excluded from adjusted EBITDA consisted of \$8.7 million of pre-tax charges, while adjusted net income and adjusted EPS for the quarter excluded \$9.8 million of pre-tax charges, both of which primarily consisted of restructuring expenses, LIFO expenses, costs related to mark-to-market commodity hedging and a loss on the sale of a business.
- In the third quarter of 2018, the income tax provision was \$8.6 million, or 55.5 percent of income before taxes, compared with \$4.8 million, or 19.4 percent of income before taxes, in the prior year quarter. The income tax provision for the current year quarter was unfavorably impacted by new tax elements of the 2017 Tax Cut and Jobs Act and the cumulative catch-up impact from the change in estimated tax rate from the prior quarter, partially offset by the reversal of a valuation allowance on foreign net operating losses. The impact in the third quarter compared with prior year was approximately \$0.23 on diluted EPS, and approximately \$0.22 on adjusted diluted EPS.
- Diluted EPS was \$0.35, compared with \$0.91 per share in the prior year quarter. Adjusted EPS for the quarter was \$0.73, compared with \$1.43 for the prior year period.
- Capital expenditures for the nine months ending September 30, 2018, were \$81.4 million compared with \$48.6 million for the prior year period. The current year amount consists of spending on the new naphthalene unit in Stickney, Illinois, capacity expansions at PC production facilities in the U.S. and general spending to maintain the safety and efficiency of global operations.
- Total debt was at \$1.045 billion and, net of cash and cash equivalents, net debt was \$982.4 million at September 30, 2018, compared with total debt of \$677.0 million and net debt of \$616.7 million at December 31, 2017. Compared to year-end, the net debt at the end of the third quarter was higher by \$365.7 million, primarily due to acquisitions and working capital increases. At September 30, 2018, the company's net leverage ratio was 4.5 and on a pro-forma basis, including acquisitions, was 4.3.

2018 Outlook

Including current year acquisitions, Koppers expects that 2018 sales will now be approximately \$1.7 billion, compared with \$1.8 billion previously. On an adjusted basis, the company now expects EBITDA of approximately \$220 million for 2018, compared with \$240 million previously. Accordingly, the adjusted EPS for 2018 is forecasted to be in the range of \$3.30 to \$3.40, compared with \$4.05 and \$4.25 previously.

The company now estimates capital expenditures in the range of \$85 million to \$90 million, due to pulling forward spending on several projects that were originally scheduled to occur in 2019. Therefore, capital expenditures in 2019 will be revised to be less than \$50 million to account for the accelerated spending in 2018. The pro-forma net debt to adjusted EBITDA ratio is now projected to be approximately 4.2x by December 31, 2018.

Commenting on the forecast, Mr. Ball said, "Due to the idling of our major customer's facility in China during the third quarter and potentially for the fourth quarter, we are lowering our expectations for 2018. As an upside, the eventual resolution of commercial issues in China represent significant benefits that aren't presently being accounted for in our earnings or cash forecast. Even so, we continue to anticipate that 2018 results will represent our fourth straight year of growth in adjusted EBITDA. Moreover, as part of recently refreshing our long-term strategic plan, we have identified actionable organic opportunities to improve profitability by \$25 million to \$40 million over the next five years in the categories of network optimization, commercial development, raw materials, and other cost savings."

2019 Outlook

Based on the prevailing indicators, Koppers expects to deliver its fifth consecutive year of adjusted EBITDA growth in 2019. Additionally, it is anticipated that there will be a meaningful shift in the mix of earnings to be more consistent with the company's stated strategy of focusing on wood-based technologies. In addition to at least \$10 million of strategic initiative benefits, the overall results should also improve from the ongoing cyclical recovery in the Railroad and Utility Products and Services business, several new commercial opportunities in the Performance Chemicals business, an entire year of contribution from acquisitions, and projected savings of approximately \$15 million related to the completed naphthalene unit at the Stickney facility, which will more than offset the headwinds associated with lower expected earnings out of China and higher raw material costs.

Investor Conference Call and Webcast

Koppers management will conduct a conference call this morning, beginning at 11:00 a.m. Eastern Time to discuss the company's performance. Presentation materials will be available at least 15 minutes before the call on www.koppers.com in the Investor Relations section of the company's website.

Interested parties may access the live audio broadcast by dialing 833-366-1128 in the United States/Canada, or 412-902-6774 for international, Conference ID number 10125338. Participants are requested to access the call at least five minutes before the scheduled start time to complete a brief registration.

The conference call will be broadcast live online at: https://services.choruscall.com/links/koppers181108.html. (Due to the length of this URL, it may be necessary to copy and paste this hyperlink into your internet browser's URL address field.)

An audio replay will be available approximately two hours after the completion of the call at 877-344-7529 for U.S. toll free, 855-669-9658 for Canada toll free, or 412-317-0088 for international, Conference ID number 10125338. The recording will be available for replay through December 7, 2018.

About Koppers

Koppers, with corporate headquarters in Pittsburgh, Pennsylvania, is an integrated global provider of treated wood products, wood treatment chemicals and carbon compounds. Our products and services are used in a variety of niche applications in a diverse range of end-markets, including the railroad, specialty chemical, utility, residential lumber, agriculture, aluminum, steel, rubber, and construction industries. Including our joint ventures, we serve our customers through a comprehensive global manufacturing and distribution network, with facilities located in North America, South America, Australasia, China and Europe. The stock of Koppers Holdings Inc. is publicly traded on the New York Stock Exchange under the symbol "KOP." For more information, visit us on the Web: www.koppers.com. Questions concerning investor relations should be directed to Michael J. Zugay at 412 227 2231 or Quynh McGuire at 412 227 2049.

Non-GAAP Financial Measures

This press release contains certain non-GAAP financial measures. Koppers believes that adjusted EBITDA, adjusted EBITDA margin, adjusted net income, adjusted earnings per share, net debt and net leverage ratio provide information useful to investors in understanding the underlying operational performance of the company, its business and performance trends, and facilitate comparisons between periods and with other corporations in similar industries. The exclusion of certain items permits evaluation and a comparison of results for ongoing business operations, and it is on this basis that Koppers management internally assesses the company's performance. In addition, the Board of Directors and executive management team use adjusted EBITDA as a performance measure under the company's annual incentive plans.

Although Koppers believes that these non-GAAP financial measures enhance investors' understanding of its business and performance, these non-GAAP financial measures should not be considered an alternative to GAAP basis financial measures and should be read in conjunction with the relevant GAAP financial measure. Other companies in a similar industry may define or calculate these measures differently than the company, limiting their usefulness as comparative measures. Because of these limitations, these non-GAAP financial measures should not be considered in isolation or as substitutes for performance measures calculated in accordance with GAAP.

See the attached tables for the following reconciliations of non-GAAP financial measures included in this press release: Unaudited Reconciliation of Operating Profit to EBITDA and Adjusted EBITDA; Unaudited Reconciliation of Net Income to EBITDA and Adjusted EBITDA; Unaudited Reconciliation of Net Income Attributable to Koppers and Adjusted Net Income; Unaudited Reconciliation of Diluted Earnings Per Share and Adjusted Earnings Per Share; Unaudited Reconciliation of Total Debt to Net Debt and Net Leverage Ratio; and Unaudited Reconciliation of Net Income to EBITDA and Adjusted EBITDA on a Latest Twelve Month Basis.

For the company's guidance, adjusted EBITDA, adjusted EBITDA margin and adjusted EPS excludes restructuring, impairment, non-cash LIFO charges, acquisition-related costs, and non-cash mark-to-market commodity hedging. The forecasted amounts for these items cannot be reasonably estimated due to their nature, but may be significant. For that reason, the company is unable to provide GAAP earnings estimates at this time.

Safe Harbor Statement

Certain statements in this press release are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995 and may include, but are not limited to, statements about sales levels, acquisitions, restructuring, declines in the value of Koppers assets and the effect of any resulting impairment charges, profitability and anticipated expenses and cash outflows. All forward-looking statements involve risks and uncertainties. All statements contained herein that are not clearly historical in nature are forward-looking, and words such as "outlook," "guidance," "forecast," "believe," "anticipate," "expect," "estimate," "may," "will," "should," "continue," "plans," "potential," "intends," "likely," or other similar words or phrases are generally intended to identify forward-looking statements. Any forward-looking statement contained herein, in other press releases, written statements or other documents filed with the Securities and Exchange Commission, or in Koppers communications and discussions with investors and analysts in the normal course of business through meetings, phone calls and conference calls, regarding expectations with respect to sales, earnings, cash flows, operating efficiencies, restructurings, the benefits of acquisitions, divestitures, joint ventures or other matters as well as financings and debt reduction, are subject to known and unknown risks, uncertainties and contingencies. Many of these risks, uncertainties and contingencies are beyond our control, and may cause actual results, performance or achievements to differ materially from anticipated results, performance or achievements. Factors that might affect such forward-looking statements include, among other things, the impact of changes in commodity prices, such as oil and copper, on product margins; general economic and business conditions; potential difficulties in protecting our intellectual property; the ratings on our debt and our ability to repay or refinance our outstanding indebtedness as it matures; our ability to operate within the limitations of our debt covenants; potential impairment of our goodwill and/or long-lived assets; demand for Koppers goods and services; competitive conditions; interest rate and foreign currency rate fluctuations; availability and costs of key raw materials; unfavorable resolution of claims against us, as well as those discussed more fully elsewhere in this release and in documents filed with the Securities and Exchange Commission by Koppers, particularly our latest annual report on Form 10-K and quarterly report on Form 10-Q. Any forward-looking statements in this release speak only as of the date of this release, and we undertake no obligation to update any forward-looking statement to reflect events or circumstances after that date or to reflect the occurrence of unanticipated events.

Koppers Holdings Inc.

Unaudited Consolidated Statement of Operations

(Dollars in millions, except per share amounts)

	s Ended September 30,			September 30,	
2018			2018		2017
Net sales \$ 442.7			1,284.8	\$	1,109.4
Cost of sales (excluding items below) 359.7			1,023.9		863.0
Depreciation and amortization 13.0			38.5		35.0
Impairment and restructuring charges 0.9	2.2		3.8		5.8
Loss on pension settlement 0.0	8.8		0.0		8.8
Selling, general and administrative expenses 37.9	33.2		121.8		95.6
Operating profit 31.2			96.8		101.2
Other (loss) income (0.6			(1.1)		2.0
Interest expense 15.1	10.5		40.1		31.9
Loss on extinguishment of debt 0.0	0.0		0.0		13.3
Income before income taxes 15.5	24.8		55.6		58.0
Income tax provision 8.6	4.8		24.4		12.4
Income from continuing operations 6.9	20.0		31.2		45.6
Income (loss) from discontinued operations, net of tax					
(expense) benefit of \$(0.0), \$0.0, \$(0.3) and \$0.4	(0.1)	0.4		(1.3)
Net income 6.9	19.9		31.6		44.3
Net (loss) income attributable to noncontrolling interests (0.7)) 0.1		5.6		0.4
Net income attributable to Koppers \$ 7.6	\$ 19.8	\$	26.0	\$	43.9
Earnings (loss) per common share attributable to Koppers					
common shareholders:					
Basic -					
Continuing operations \$ 0.36	\$ 0.96	\$	1.22	\$	2.17
Discontinued operations 0.00	0.00		0.02		(0.06)
Earnings per basic common share \$ 0.36	\$ 0.96	\$	1.24	\$	2.11
Diluted -					
Continuing operations \$ 0.35	\$ 0.91	\$	1.17	\$	2.06
Discontinued operations 0.00	0.00		0.02		(0.06)
Earnings per diluted common share \$ 0.35	\$ 0.91	\$	1.19	\$	2.00
Comprehensive (loss) income \$ (2.0) \$ 36.8	\$	(6.5)	\$	73.7
Comprehensive (loss) income attributable to noncontrolling	,		,		
interests (1.1) 0.2		4.7		0.6
Comprehensive (loss) income attributable to Koppers \$ (0.9)) \$ 36.6	\$	(11.2)	\$	73.1
Weighted average shares outstanding (in thousands):			, ,		
Basic 20,946	20,746		20,992		20,750
Diluted 21,700	21,911		21,892		21,927

Koppers Holdings Inc.

Unaudited Consolidated Balance Sheet

(Dollars in millions, except per share amounts)

	September 30, 2018	December 31, 2017
Assets		
Cash and cash equivalents	\$ 62.5	\$ 60.3
Accounts receivable, net of allowance of \$2.2 and \$2.5	220.8	159.2
Income tax receivable	1.5	1.7
Inventories, net	289.3	236.9
Other current assets	31.5	48.6
Total current assets	605.6	506.7
Property, plant and equipment, net	398.4	328.0
Goodwill	296.5	188.2
Intangible assets, net	193.5	129.6
Deferred tax assets	18.4	18.4
Other assets	23.2	29.3
Total assets	\$ 1,535.6	\$ 1,200.2
Liabilities		
Accounts payable	\$ 166.2	\$ 141.9
Accrued liabilities	101.7	127.9
Current maturities of long-term debt	15.1	11.4
Total current liabilities	283.0	281.2
Long-term debt	1,029.8	665.6
Accrued postretirement benefits	46.6	46.3
Deferred tax liabilities	6.8	7.3
Other long-term liabilities	90.0	94.0
Total liabilities	1,456.2	1,094.4
Commitments and contingent liabilities (Note 18)		
Equity		
Senior Convertible Preferred Stock, \$0.01 par value per share;		
10,000,000 shares authorized; no shares issued	0.0	0.0
Common Stock, \$0.01 par value per share; 80,000,000 shares		
authorized; 22,979,575 and 22,384,476 shares issued	0.2	0.2
Additional paid-in capital	202.3	190.6
Retained earnings	29.8	7.4
Accumulated other comprehensive loss	(73.7)	(40.1)
Treasury stock, at cost, 2,472,299 and 1,606,028	(89.8)	(58.2)
Total Koppers shareholders' equity	68.8	99.9
Noncontrolling interests	10.6	5.9
Total equity	 79.4	105.8
Total liabilities and equity	\$ 1,535.6	\$ 1,200.2

Koppers Holdings Inc.

Unaudited Consolidated Statement of Cash Flows

(Dollars in millions)

		Nine Months Ende	ed September 30.
		2018	2017
Cash provided by (used in) operating activities:			
Net income	\$	31.6 \$	44.3
Adjustments to reconcile net cash provided by (used in) operating activities:			
Depreciation and amortization		38.5	35.0
Loss on extinguishment of debt		0.0	13.3
Loss (gain) on disposal of assets and investment		2.2	(1.4)
Gain on insurance proceeds		(1.5)	0.0
Deferred income taxes		5.0	0.8
Change in other liabilities		(6.2)	(18.6)
Non-cash interest expense		1.8	1.5
Stock-based compensation		9.3	7.8
Loss on pension settlement		0.0	8.8
Other - net		6.5	2.0
Changes in working capital:			
Accounts receivable		(36.3)	(37.6)
Inventories		(20.3)	10.5
Accounts payable		17.7	(14.4)
Accrued liabilities		(38.6)	(1.1)
Other working capital		(1.7)	(2.4)
Net cash provided by operating activities		8.0	48.5
Cash (used in) provided by investing activities:			
Capital expenditures		(81.4)	(48.6)
Acquisitions, net of cash acquired		(264.0)	0.0
Insurance proceeds received		1.5	0.0
Repayments received on loan		0.0	9.5
Net cash provided by divestitures and asset sales		2.3	1.1
Net cash used in investing activities		(341.6)	(38.0)
Cash provided by (used in) financing activities:		,	,
Net increase in revolving credit facility borrowings		282.8	74.1
Borrowings of long-term debt		100.0	500.0
Repayments of long-term debt		(12.9)	(541.4)
Issuances of Common Stock		2.5	1.9
Repurchases of Common Stock		(31.7)	(5.1)
Payment of debt issuance costs		(2.9)	(11.0)
Net cash provided by financing activities		337.8	18.5
Effect of exchange rate changes on cash		(2.0)	0.4
Net increase in cash and cash equivalents		2.2	29.4
Cash and cash equivalents at beginning of period		60.3	20.8
Cash and cash equivalents at end of period	\$	62.5 \$	50.2
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Unaudited Segment Information

The following tables set forth certain sales and operating data, net of all intersegment transactions, for the company's businesses for the periods indicated.

	<u></u>	Three Months	s Ended S	eptember 30,		Nine Months	eptember 30,	
		2018		2017		2018		2017
(Dollars in millions)								
Net sales:								
Railroad and Utility Products and Services	\$	185.0	\$	131.7	\$	470.6	\$	403.1
Performance Chemicals		108.2		109.7		320.7		318.2
Carbon Materials and Chemicals		149.5		143.4		493.5		388.1
Total	\$	442.7	\$	384.8	\$	1,284.8	\$	1,109.4
Operating profit (loss):								
Railroad and Utility Products and Services	\$	5.8	\$	9.5	\$	5.9	\$	30.1
Performance Chemicals		11.0		18.4		28.2		56.6
Carbon Materials and Chemicals		14.9		16.3		64.6		24.9
Corporate Unallocated		(0.5)		(9.2)		(1.9)		(10.4)
Total	\$	31.2	\$	35.0	\$	96.8	\$	101.2
Operating profit margin:								
Railroad and Utility Products and Services		3.1%		7.2%		1.3%		7.5%
Performance Chemicals		10.2%		16.8%		8.8%		17.8%
Carbon Materials and Chemicals		10.0%	10.0% 11.4%			13.1%		6.4%
Total		7.0%		9.1%		7.5%		9.1%
Depreciation and amortization:								
Railroad and Utility Products and Services	\$	4.9	\$	2.9	\$	12.8	\$	8.8
Performance Chemicals		4.4		4.4		13.3		13.3
Carbon Materials and Chemicals		3.7		4.8		12.4		12.9
Total	\$	13.0	\$	12.1	\$	38.5	\$	35.0
Adjusted EBITDA(1):	•		·		•		-	
Railroad and Utility Products and Services	\$	12.3	\$	11.9	\$	31.5	\$	37.4
Performance Chemicals	•	16.6		22.2	•	48.3	•	69.4
Carbon Materials and Chemicals		24.9		26.1		95.2		51.5
Corporate Unallocated		(0.5)		0.3		(0.3)		(0.2)
Total	\$	53.3	\$	60.5	\$	174.7	\$	158.1
Adjusted EBITDA margin(2):	·		•					
Railroad and Utility Products and Services		6.6%		9.0%		6.7%		9.3%
Performance Chemicals		15.3%		20.2%		15.1%		21.8%
Carbon Materials and Chemicals		16.7%		18.2%		19.3%		13.3%
Total		12.0%		15.7%		13.6%		14.3%

The tables below describe the adjustments to EBITDA for the three and nine months ended September 30, 2018 and 2017, respectively. Adjusted EBITDA as a percentage of GAAP sales.

⁽¹⁾ (2)

UNAUDITED RECONCILIATION OF OPERATING PROFIT TO EBITDA AND ADJUSTED EBITDA

(In millions)

				Thre	ee mont	hs ended Se _l	otembei	30, 2018
					Co	orporate		
	F	RUPS	PC	CMC	Una	allocated	Consolidated	
Operating profit (loss)	\$	5.8	\$ 11.0	\$ 14.9	\$	(0.5)	\$	31.2
Other income (loss)		(0.2)	0.2	(0.6)		(0.1)		(0.7)
Depreciation and amortization		4.9	4.4	3.7		0.0		13.0
Depreciation in impairment and restructuring charges		0.0	0.0	1.0		0.0		1.0
EBITDA with noncontrolling interest	\$	10.5	\$ 15.6	\$ 19.0	\$	(0.6)	\$	44.5
Unusual items impacting EBITDA:								
CMC restructuring		0.0	0.0	4.7		0.0		4.7
RUPS treating plant closures		(0.2)	0.0	0.0		0.0		(0.2)
Non-cash LIFO expense		1.4	0.0	0.3		0.0		1.7
Acquisition closing costs		0.0	0.0	0.0		0.1		0.1
Mark-to-market commodity hedging		0.0	1.0	0.0		0.0		1.0
Contract buyout		0.1	0.0	0.0		0.0		0.1
UIP inventory purchase accounting adjustment		0.5	0.0	0.0		0.0		0.5
Sale of specialty chemicals business		0.0	0.0	0.9		0.0		0.9
Adjusted EBITDA	\$	12.3	\$ 16.6	\$ 24.9	\$	(0.5)	\$	53.3
Adj. EBITDA % of Consolidated Adj. EBITDA (excluding corporate unallocated)		22.9%	30.9%	46.3%				

UNAUDITED RECONCILIATION OF OPERATING PROFIT TO EBITDA AND ADJUSTED EBITDA

(In millions)

	•	,							
					Thre	ee montl	ns ended Se _l	otembe	r 30, 2017
						Со	rporate		
	RUPS		PC		CMC	Unallocated		Con	solidated
Operating profit (loss)	\$	9.5	\$	18.4	\$ 16.3	\$	(9.2)	\$	35.0
Other income (loss)		(0.6)		0.4	(0.2)		0.7		0.3
Depreciation and amortization		2.9		4.4	4.8		0.0		12.1
Depreciation in impairment and restructuring charges		0.0		0.0	1.3		0.0		1.3
EBITDA with noncontrolling interest	\$	11.8	\$	23.2	\$ 22.2	\$	(8.5)	\$	48.7
Unusual items impacting EBITDA:									
CMC restructuring		0.0		0.0	4.3		0.0		4.3
RUPS treating plant closures		0.2		0.0	0.0		0.0		0.2
Non-cash LIFO benefit		(0.1)		0.0	(0.4)		0.0		(0.5)
Mark-to-market commodity hedging (non-cash)		0.0		(1.0)	0.0		0.0		(1.0)
Pension settlement charge		0.0		0.0	0.0		8.8		8.8
Adjusted EBITDA	\$	11.9	\$	22.2	\$ 26.1	\$	0.3	\$	60.5
Adj. EBITDA % of Consolidated Adj. EBITDA (excluding corporate					 				
unallocated)		19.8%		36.9%	43.4%				

UNAUDITED RECONCILIATION OF OPERATING PROFIT TO EBITDA AND ADJUSTED EBITDA

(In millions)

				Nin	ne Month	ns Ended Se _l	otembe	er 30, 2018
					Co	rporate		
	F	RUPS	PC	CMC	Unallocated		Cor	nsolidated
Operating profit (loss)	\$	5.9	\$ 28.2	\$ 64.6	\$	(1.9)	\$	96.8
Other (loss) income		0.0	2.4	0.1		(3.7)		(1.2)
Depreciation and amortization		12.8	13.3	12.4		0.0		38.5
Depreciation in impairment and restructuring charges		0.0	0.0	3.7		0.0		3.7
EBITDA with noncontrolling interest	\$	18.7	\$ 43.9	\$ 80.8	\$	(5.6)	\$	137.8
Unusual items impacting EBITDA:								
CMC restructuring		0.0	0.0	12.4		0.0		12.4
Non-cash LIFO expense		5.2	0.0	1.1		0.0		6.3
Mark-to-market commodity hedging		0.0	5.5	0.0		0.0		5.5
Acquisition closing costs		0.0	0.0	0.0		3.1		3.1
Sale of land		0.0	(1.1)	0.0		2.2		1.1
Contract buyout		1.6	0.0	0.0		0.0		1.6
UIP inventory purchase accounting adjustment		6.0	0.0	0.0		0.0		6.0
Sale of specialty chemicals business		0.0	0.0	0.9		0.0		0.9
Adjusted EBITDA	\$	31.5	\$ 48.3	\$ 95.2	\$	(0.3)	\$	174.7
Adj. EBITDA % of Consolidated Adj. EBITDA (excluding corporate unallocated)		18.0%	27.6%	54.4%			_	

UNAUDITED RECONCILIATION OF OPERATING PROFIT TO EBITDA AND ADJUSTED EBITDA

(In millions)

	(
				Nir	e Mont	hs Ended Sep	otembe	er 30, 2017
					Co	orporate		
	F	RUPS	PC	CMC	Una	allocated	Cor	solidated
Operating profit (loss)	\$	30.1	\$ 56.6	\$ 24.9	\$	(10.4)	\$	101.2
Other (loss) income		(1.4)	1.5	0.6		1.3		2.0
Depreciation and amortization		8.8	13.3	12.9		0.0		35.0
Depreciation in impairment and restructuring charges		0.0	0.0	4.5		0.0		4.5
EBITDA with noncontrolling interest	\$	37.5	\$ 71.4	\$ 42.9	\$	(9.1)	\$	142.7
Unusual items impacting EBITDA:								
CMC restructuring		0.0	0.0	9.8		0.0		9.8
RUPS treating plant closures		0.4	0.0	0.0		0.0		0.4
Non-cash LIFO benefit		(0.5)	0.0	(1.2)		0.0		(1.7)
Mark-to-market commodity hedging		0.0	(2.0)	0.0		0.0		(2.0)
Debt refinancing costs		0.0	0.0	0.0		0.1		0.1
Pension settlement charge		0.0	0.0	0.0		8.8		8.8
Adjusted EBITDA	\$	37.4	\$ 69.4	\$ 51.5	\$	(0.2)	\$	158.1
Adj. EBITDA % of Consolidated Adj. EBITDA (excluding corporate								
unallocated)		23.6%	43.8%	32.5%				

UNAUDITED RECONCILIATION OF NET INCOME TO EBITDA AND ADJUSTED EBITDA

(In millions)

	Three	tember 30,	Nine Mor	otember 30,				
		2018		2017		2018		2017
Net income	\$	6.9	\$	19.9	\$	31.6	\$	44.3
Interest expense		15.1		10.5	4	40.1		31.9
Loss on extinguishment of debt		0.0		0.0		0.0		13.3
Depreciation and amortization		14.0		13.4	4	12.2		39.5
Income taxes		8.6		4.8	:	24.4		12.4
(Income) loss from discontinued operations		0.0		0.1		(0.4)		1.3
EBITDA with noncontrolling interests		44.6		48.7	1:	37.9		142.7
Unusual items impacting net income(1)								
Impairment, restructuring and plant closure costs		4.4		4.5		L2.4		10.2
Mark-to-market commodity hedging		1.0		(1.0)		5.5		(2.0)
Non-cash LIFO expense (benefit)		1.7		(0.5)		6.3		(1.7)
Sale of specialty chemicals business		0.9		0.0		0.9		0.0
Debt refinancing costs		0.0		0.0		0.0		0.1
Pension settlement charge		0.0		8.8		0.0		8.8
Acquisition closing costs		0.1		0.0		3.0		0.0
Sale of land		0.0		0.0		1.1		0.0
Contract buyout		0.1		0.0		1.6		0.0
UIP inventory purchase accounting adjustment		0.5		0.0		6.0		0.0
Total adjustments		8.7		11.8		36.8		15.4
Adjusted EBITDA with noncontrolling interests	\$	53.3	\$	60.5	\$ 1	74.7	\$	158.1

⁽¹⁾ Refer to adjustments under Unaudited Segment Information.

UNAUDITED RECONCILIATION OF NET INCOME ATTRIBUTABLE TO KOPPERS AND ADJUSTED NET INCOME (In millions)

	Three	Months Ended	September 30,	80, Nine Months Ended Septemb				
		2018	2017	2018	2017			
Net income attributable to Koppers	\$	7.6	\$ 19.8	\$ 26.0	\$ 43.9			
Unusual items impacting net income								
Impairment, restructuring and plant closure costs		5.5	6.5	16.6	15.7			
Mark-to-market commodity hedging		1.0	(1.0)	5.5	(2.0)			
Non-cash LIFO expense (benefit)		1.7	(0.5)	6.3	(1.7)			
Debt refinancing costs		0.0	0.0	0.0	13.3			
Pension settlement charge		0.0	8.8	0.0	8.8			
Acquisition closing costs		0.1	0.0	3.1	0.0			
Sale of land		0.0	0.0	1.1	0.0			
Sale of specialty chemicals business		0.9	0.0	0.9	0.0			
Contract buyout		0.1	0.0	1.6	0.0			
UIP inventory purchase accounting adjustment		0.5	0.0	6.0	0.0			
Total adjustments		9.8	13.8	41.1	34.1			
Adjustments to income tax and noncontrolling interests								
Income tax on adjustments to pre-tax income		(2.2)	(2.2)	(9.7)	(7.4)			
Income tax - U.S. Tax Reform		0.4	0.0	5.3	0.0			
Noncontrolling interests		0.0	0.0	0.0	0.2			
Effect on adjusted net income		8.0	11.6	36.7	26.9			
Adjusted net income including discontinued operations		15.6	31.4	62.7	70.8			
(Income) loss from discontinued operations		0.0	0.1	(0.4)	1.3			
Adjusted net income	\$	15.6	\$ 31.5	\$ 62.3	\$ 72.1			

UNAUDITED RECONCILIATION OF DILUTED EARNINGS PER SHARE AND ADJUSTED EARNINGS PER SHARE

(In millions except share amounts)

	Three Months Ended September 30,				Nine Months Ended September 30,			
		2018		2017		2018		2017
Net income attributable to Koppers	\$	7.6	\$	19.8	\$	26.0	\$	43.9
Adjusted net income (from above)	\$	15.6	\$	31.5	\$	62.3	\$	72.1
Denominator for diluted earnings per share (in thousands)		21,700		21,911		21,892		21,927
Earnings per share:								
Diluted earnings per share	\$	0.35	\$	0.91	\$	1.19	\$	2.00
Adjusted earnings per share	\$	0.73	\$	1.43	\$	2.84	\$	3.29

UNAUDITED RECONCILIATION OF TOTAL DEBT TO NET DEBT AND NET LEVERAGE RATIO

(In millions)

			Twelve months ended
	September 30, 2018	Proforma September 30, 2018	December 31, 2017
Total Debt	\$ 1,044.9	\$ 1,044.9	\$ 677.0
Less: Cash	62.5	62.5	60.3
Net Debt	\$ 982.4	\$ 982.4	\$ 616.7
Adjusted EBITDA	\$ 217.1	\$ 227.6	\$ 200.4
Net Leverage Ratio	4.5	4.3	3.1

UNAUDITED RECONCILIATION OF NET INCOME TO EBITDA AND ADJUSTED EBITDA ON A LATEST TWELVE MONTH BASIS (In millions)

*			
<u></u> .			Twelve months ended
	September 30, 2018		December 31, 2017
\$	17.8	\$	30.5
	50.4		55.8
	65.5		62.8
	41.1		29.0
	(0.8)		0.8
	174.0		178.9
	18.1		15.9
	7.5		(0.5)
	4.0		(3.5)
	(0.3)		(0.4)
	3.1		0.0
	1.1		0.0
	1.6		0.0
	6.0		0.0
	0.9		0.0
	1.1		10.0
\$	217.1	\$	200.4
	10.5		0.0
\$	227.6	\$	200.4
	\$	\$ 17.8 50.4 65.5 41.1 (0.8) 174.0 18.1 7.5 4.0 (0.3) 3.1 1.1 1.6 6.0 0.9 1.1 \$ 217.1 10.5	\$ 17.8 \$ 50.4 65.5 41.1 (0.8) 174.0 18.1 7.5 4.0 (0.3) 3.1 1.1 1.6 6.0 0.9 1.1 \$ 217.1 \$ 10.5