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 quarter ended September 30, 2018 Commission file number 1-31763

KRONOS WORLDWIDE, INC.

(Exact name of Registrant as specified in its charter)

DELAWARE (State or other jurisdiction of incorporation or organization) 76-0294959 (IRS Employer Identification No.)

5430 LBJ Freeway, Suite 1700 Dallas, Texas 75240-2620 (Address of principal executive offices)

Registrant's telephone number, including area code: (972) 233-1700

Indicate by check mark whether the Registrant (1) has filed a 1934 during the preceding 12 months and (2) has been subject		· · · · · · · · · · · · · · · · · · ·						
Indicate by check mark whether the registrant has submitted 405 of Regulation S-T during the preceding 12 months files). Yes \boxtimes No \square	5 5	•						
Indicate by check mark whether the Registrant is a large acce an emerging growth company. See the definitions of "large growth company" in Rule 12b-2 of the Exchange Act.								
Large accelerated filer		Accelerated filer ⊠						
Non-accelerated filer		Smaller reporting company \Box						
Emerging growth company								
If an emerging growth company, indicate by check mark if the regist financial accounting standards provided pursuant to Section 13(a) of		sition period for complying with any new or revised						
Indicate by check mark whether the Registrant is a shell company (as	s defined in Rule 12b-2 of the Act). Yes \Box	No ⊠						
Tumber of shares of the Registrant's common stock outstanding on October 31, 2018: 115,907,698.								
								

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KRONOS WORLDWIDE, INC. AND SUBSIDIARIES CONDENSED CONSOLIDATED BALANCE SHEETS (In millions)

ASSETS	December 31, 2017	September 30, 2018 (unaudited)
Current assets:		
Cash and cash equivalents	\$ 322.0	\$ 432.3
Restricted cash	1.7	1.1
Accounts and other receivables	346.5	340.7
Inventories, net	382.3	446.2
Prepaid expenses and other	10.0	18.1
Total current assets	1,062.5	1,238.4
Other assets:		
Investment in TiO ₂ manufacturing joint venture	86.5	79. 7
Marketable securities	10.7	4.0
Note receivable from Valhi	13.6	-
Deferred income taxes	139.2	115.6
Other	5.5	5.3
Total other assets	255.5	204.6
Property and equipment:		
Land	42.0	41.4
Buildings	221.6	217.8
Equipment	1,103.2	1,125.7
Mining properties	115.7	119.5
Construction in progress	52.6	34.8
	1,535.1	1,539.2
Less accumulated depreciation and amortization	1,028.7	1,047.3
Net property and equipment	506.4	491.9
Total assets	\$ 1,824.4	\$ 1,934.9

CONDENSED CONSOLIDATED BALANCE SHEETS (CONTINUED)

(In millions)

	Dec	December 31, 		tember 30, 2018 naudited)
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current liabilities:	d.	7	d.	7
Current maturities of long-term debt	\$.7	\$.7
Accounts payable and accrued liabilities		205.8		212.3
Income taxes		25.0		36.6
Total current liabilities		231.5		249.6
Noncurrent liabilities:				
Long-term debt		473.8		465.2
Accrued pension costs		254.2		247.5
Accrued postretirement benefits costs		7.7		7. 5
Payable to affiliate - income taxes		70.1		58.1
Deferred income taxes		11.3		11.9
Other		21.5		21.7
Total noncurrent liabilities		838.6		811.9
Stockholders' equity:				
Common stock		1.2		1.2
Additional paid-in capital		1,399.0		1,399.1
Retained deficit		(267.2)		(140.5)
Accumulated other comprehensive loss		(378.7)		(386.4)
Total stockholders' equity		754.3		873.4
			_	77.011
Total liabilities and stockholders' equity	\$	1,824.4	\$	1,934.9

Commitments and contingencies (Notes 11 and 13)

CONDENSED CONSOLIDATED STATEMENTS OF INCOME

(In millions, except per share data)

		Three months ended September 30,				Nine months ended September 30,		
		2017		2018		2017		2018
Net sales	\$	464.5	\$	(unau 410.3	dited) \$	1,275.7	\$	1,312.5
Cost of sales	Ψ	309.5	Ψ	291.2	Ψ	882.3	Ψ	846.8
			_		_			
Gross margin		155.0		119.1		393.4		465.7
ŭ								
Selling, general and administrative expense		51.3		57.3		147.6		173.7
Other operating income (expense):								
Currency transactions, net		(4.3)		(.6)		(8.0)		4.2
Other operating expense, net		(3.3)		(3.1)		(11.0)		(10.7)
Income from operations		96.1		58.1		226.8		285.5
Other income (expense):								
Interest and dividend income		.4		1.5		.7		3.7
Marketable equity securities		-		(4.3)		-		(6.7)
Other components of net periodic pension and OPEB cost		(4.5)		(3.7)		(12.8)		(11.3)
Loss on prepayment of debt, net		(7.1)		-		(7.1)		-
Interest expense		(5.0)		(4.9)		(14.5)		(14.7)
Income before income taxes		79.9		46.7		193.1		256.5
						(44.4.0)		
Income tax expense (benefit)		6.1		14.1		(114.0)		75.5
N '	ф	72.0	ф	22.0	Ф	205.4	Ф	404.0
Net income	\$	73.8	\$	32.6	\$	307.1	\$	181.0
N	di di	0.4	Φ.	20	Φ.	2.05	Φ.	4 = 0
Net income per basic and diluted share	<u>\$</u>	.64	\$.28	\$	2.65	\$	1.56
Cash dividends per share	\$.15	\$.17	\$.45	\$.51
Weighted average shares used in the calculation				_				
of net income per share		115.9		115.9		115.9		115.9

CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(In millions)

	Three months ended September 30,				Nine months ended September 30,				
		2017		2018		2017		2018	
				(unau	dited)				
Net income	\$	73.8	\$	32.6	\$	307.1	\$	181.0	
Other comprehensive income (loss), net of tax:									
Currency translation		29.9		4.5		53.7		(10.0)	
Defined benefit pension plans		2.4		2.4		6.3		7.3	
Other postretirement benefit plans		-		-		(.2)		(.2)	
Marketable securities		(.6)		-		(1.2)		-	
Interest rate swap		1.8		-		2.0		-	
	,								
Total other comprehensive income (loss), net		33.5		6.9		60.6		(2.9)	
Comprehensive income	\$	107.3	\$	39.5	\$	367.7	\$	178.1	

CONDENSED CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY

Nine months ended September 30, 2018

(In millions)

	 Common stock	Additional paid-in capital	Retained earnings (deficit) (unaudited)	Accumulated other omprehensive loss	Total
Balance at December 31, 2017	\$ 1.2	\$ 1,399.0	\$ ` ,	\$ (378.7)	\$ 754.3
Change in accounting principle - ASU 2016-01	-	-	4.8	(4.8)	-
Balance at January 1, 2018, as adjusted	1.2	1,399.0	(262.4)	(383.5)	754.3
Net income	-	-	181.0	-	181.0
Other comprehensive loss, net of tax	-	-	-	(2.9)	(2.9)
Issuance of common stock	-	.1	-	-	.1
Dividends paid	-	-	(59.1)	-	(59.1)
Balance at September 30, 2018	\$ 1.2	\$ 1,399.1	\$ (140.5)	\$ (386.4)	\$ 873.4

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

(In millions)

		iths ended iber 30,
	2017	2018
Cash flows from operating activities:	(unau	dited)
Net income	\$ 307.1	\$ 181.0
Depreciation and amortization	30.7	36.9
Deferred income taxes	(139.9)	20.5
Benefit plan expense greater than cash funding	9.2	6.5
Marketable equity securities	-	6.7
Distributions from TiO ₂ manufacturing joint venture, net	3.8	5.5
Loss on prepayment of debt	7.1	-
Payment for termination of interest rate swap contract	(3.3)	_
Other, net	1.7	1.8
Change in assets and liabilities:	1.7	1.0
Accounts and other receivables	(77.0)	(25.6)
Inventories	39.9	(70.3)
Prepaid expenses	(1.5)	(8.1)
Accounts payable and accrued liabilities	43.8	13.0
Income taxes Accounts with affiliates	15.3	11.9
	(15.1)	17.1
Other, net	(3.5)	2.1
	240	400.0
Net cash provided by operating activities	218.3	199.0
Cash flows from investing activities:		
Capital expenditures	(40.7)	(35.4)
Loan to Valhi:		
Loans	(2.8)	(2.6)
Collections	2.8	16.2
Net cash used in investing activities	(40.7)	(21.8)
Cash flows from financing activities:		
Indebtedness:		
Borrowings	731.5	-
Principal payments	(594.3)	(.5)
Deferred financing fees	(8.3)	-
Dividends paid	(52.2)	(59.1)
•		
Net cash provided by (used in) financing activities	76.7	(59.6)
The cush provided by (used in) immembrace rules		(3313)
Cash, cash equivalents and restricted cash - net change from:		
Operating, investing and financing activities	254.3	117.6
Currency translation	11.4	(7.9)
Balance at beginning of period	52.3	323.7
parance at negiminish or herror	52.3	343./
Palance at and of pariod	¢ 210.0	¢ 422.4
Balance at end of period	\$ 318.0	\$ 433.4

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (CONTINUED)

(In millions)

	Nine months ended September 30,					
	 2017					
	(unau	dited)				
Supplemental disclosures:						
Cash paid for:						
Interest, net of amount capitalized	\$ 15.4	\$	18.3			
Income taxes	18.7		36.4			
Accrual for capital expenditures	3.7		3.5			

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

September 30, 2018

(unaudited)

Note 1 - Organization and basis of presentation:

Organization - At September 30, 2018, Valhi, Inc. (NYSE: VHI) held approximately 50% of our outstanding common stock and a wholly-owned subsidiary of NL Industries, Inc. (NYSE: NL) held approximately 30% of our common stock, Valhi owned approximately 83% of NL's outstanding common stock and a wholly-owned subsidiary of Contran Corporation held approximately 92% of Valhi's outstanding common stock. All of Contran's outstanding voting stock is held by a family trust established for the benefit of Lisa K. Simmons and Serena Simmons Connelly and their children, for which Ms. Simmons and Ms. Connelly are co-trustees, or is held directly by Ms. Simmons and Ms. Connelly or entities related to them. Consequently, Ms. Simmons and Ms. Connelly may be deemed to control Contran, Valhi, NL and us.

Basis of presentation - The unaudited Condensed Consolidated Financial Statements contained in this Quarterly Report have been prepared on the same basis as the audited Consolidated Financial Statements in our Annual Report on Form 10-K for the year ended December 31, 2017 that we filed with the Securities and Exchange Commission ("SEC") on March 12, 2018 ("2017 Annual Report"). In our opinion, we have made all necessary adjustments (which include only normal recurring adjustments other than the reversal of the deferred income tax asset valuation allowance recognized in the second quarter of 2017, as discussed in Note 11), in order to state fairly, in all material respects, our consolidated financial position, results of operations and cash flows as of the dates and for the periods presented. We have condensed the Consolidated Balance Sheet at December 31, 2017 contained in this Quarterly Report as compared to our audited Consolidated Financial Statements at that date, and we have omitted certain information and footnote disclosures (including those related to the Consolidated Balance Sheet at December 31, 2017) normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP"). Our results of operations for the interim periods ended September 30, 2018 may not be indicative of our operating results for the full year. The Condensed Consolidated Financial Statements contained in this Quarterly Report should be read in conjunction with our 2017 Consolidated Financial Statements contained in our 2017 Annual Report.

Unless otherwise indicated, references in this report to "we," "us" or "our" refer to Kronos Worldwide, Inc. and its subsidiaries (NYSE: KRO) taken as a whole.

Note 2 - Accounts and other receivables:

	nber 31, 017	S	September 30, 2018
	(In mi	llions)	
Trade receivables	\$ 301.4	\$	318.5
Recoverable VAT and other receivables	19.0		20.1
Receivable from affiliates:			
Income taxes, net - Valhi	15.3		-
Louisiana Pigment Company, L.P. ("LPC")	8.9		-
Other	3.2		3.3
Refundable income taxes	.1		-
Allowance for doubtful accounts	(1.4)		(1.2)
Total	\$ 346.5	\$	340.7

Note 3 - Inventories, net:

	Dec	ember 31, 2017	September 30, 2018		
Raw materials	\$	(In mi 106.9	\$	106.1	
Work in process	Ψ	20.8	Ψ	26.6	
Finished products		191.5		248.8	
Supplies		63.1		64.7	
Total	\$	382.3	\$	446.2	

Note 4 - Marketable securities:

Our marketable securities consist of investments in the publicly-traded shares of related parties: Valhi, NL and CompX International Inc. NL owns the majority of CompX's outstanding common stock. All of our marketable securities are accounted for as available-for-sale securities, which are carried at fair value using quoted market prices in active markets for each marketable security. Prior to 2018, any unrealized gains or losses on the securities were recognized through other comprehensive income, net of deferred income taxes. Beginning on January 1, 2018 with the adoption of Accounting Standards Update ("ASU") 2016-01, all of our marketable equity securities will continue to be carried at fair value as noted above, but any unrealized gains or losses on the securities are now recognized in Marketable equity securities on our Condensed Consolidated Statements of Income. The fair value of our equity securities represent a Level 1 input within the fair value hierarchy. See Note 14.

Marketable security	Fair value measurement level	Market value	(Cost basis In millions)	U	nrealized gain
December 31, 2017:						
Valhi common stock	1	\$ 10.6	\$	3.2	\$	7.4
NL and CompX common stocks	1	 .1		.1		<u>-</u>
Total		\$ 10.7	\$	3.3	\$	7.4
September 30, 2018:						
Valhi common stock	1	\$ 3.9	\$	3.2	\$.7
NL and CompX common stocks	1	 .1		.1		_
Total		\$ 4.0	\$	3.3	\$.7

At December 31, 2017 and September 30, 2018, we held approximately 1.7 million shares of Valhi's common stock. We also held a nominal number of shares of CompX and NL common stocks. At December 31, 2017 and September 30, 2018, the quoted per share market price of Valhi's common stock was \$6.17 and \$2.28, respectively. During the first nine months of 2018 we recognized a loss of \$6.7 million related to the aggregate net change in market value of our marketable equity securities during such period.

The Valhi, CompX and NL common stocks we own are subject to the restrictions on resale pursuant to certain provisions of SEC Rule 144. In addition, as a majority-owned subsidiary of Valhi we cannot vote our shares of Valhi common stock under Delaware General Corporation law, but we do receive dividends from Valhi on these shares, when declared and paid.

Note 5 - Other noncurrent assets:

		nber 31, 017	S	eptember 30, 2018
	'	(In mil	lions)	
Pension asset	\$	1.6	\$	3.3
Deferred financing costs, net		1.1		.9
Other		2.8		1.1
Total	\$	5.5	\$	5.3

Note 6 - Long-term debt:

	Decer 2	S	eptember 30, 2018	
		illions)		
Kronos International, Inc. 3.75% Senior Secured Notes	\$	471.1	\$	463.0
Other		3.4		2.9
Total debt		474.5		465.9
Less current maturities		.7		.7
Total long-term debt	\$	473.8	\$	465.2

Senior Secured Notes - At September 30, 2018, the carrying value of our 3.75% Senior Secured Notes due September 15, 2025 (€400 million aggregate principal amount outstanding) is stated net of unamortized debt issuance costs of \$6.7 million.

Revolving credit facilities – During the first nine months of 2018, we had no borrowings or repayments under our North American revolving credit facility and our European revolving credit facility. At September 30, 2018, approximately \$106.2 million was available for additional borrowing under the North American revolving credit facility. Our European revolving credit facility requires the maintenance of certain financial ratios, and one of such requirements is based on the ratio of net debt to last twelve months earnings before income tax, interest, depreciation and amortization expense ("EBITDA") of the borrowers. Based upon the borrowers' last twelve months EBITDA as of September 30, 2018 and the net debt to EBITDA financial test, the full €90 million amount of the credit facility (\$105.7 million) is available for borrowing at September 30, 2018.

Other - We are in compliance with all of our debt covenants at September 30, 2018.

Note 7 - Accounts payable and accrued liabilities:

	Dec	ember 31, 2017	S	eptember 30, 2018
		(In mi	llions)	
Accounts payable	\$	107.9	\$	105.8
Employee benefits		27.0		29.1
Accrued sales discounts and rebates		11.7		25.4
Payable to affiliates:				
LPC		16.2		12.7
Income taxes, net - Valhi		-		5.5
Other		43.0		33.8
Total	\$	205.8	\$	212.3

Note 8 - Other noncurrent liabilities:

		nber 31,)17	:	September 30, 2018	
	(In million				
Employee benefits	\$	8.5	\$	8.3	
Other		13.0		13.4	
Total	\$	21.5	\$	21.7	

Note 9 - Revenue recognition:

Our sales involve single performance obligations to ship our products pursuant to customer purchase orders. In some cases, the purchase order is supported by an underlying master sales agreement, but our purchase order acceptance generally evidences the contract with our customer by specifying the key terms of product and quantity ordered, price and delivery and payment terms. Effective January 1, 2018 with the adoption of ASU 2014-09, *Revenue from Contracts with Customers (Topic 606)*, see Note 15, we record revenue when we satisfy our performance obligation to our customers by transferring control of our products to them, which generally occurs at point of shipment or upon delivery. Such transfer of control is also evidenced by transfer of legal title and other risks and rewards of ownership (giving the customer the ability to direct the use of, and obtain substantially all of the benefits of, the product), and our customers becoming obligated to pay us and such payment is probable of occurring. In certain arrangements we provide shipping and handling activities after the transfer of control to our customer (e.g. when control transfers prior to delivery) that are considered fulfillment activities, and accordingly, such costs are accrued when the related revenue is recognized. Sales

arrangements with consignment customers occur when our product is shipped to a consignment customer location but we maintain control until the product is used in the customer's manufacturing process. In these instances, we recognize sales when the consignment customer uses our product, as control of our product has not passed to the customer until that time and all other revenue recognition criteria have been satisfied.

Revenue is recorded in an amount that reflects the net consideration we expect to receive in exchange for our products. Prices for our products are based on terms specified in published list prices and purchase orders, which generally do not include financing components, noncash consideration or consideration paid to our customers. As our standard payment terms are less than one year, we have elected the practical expedient under ASC 606 and have not assessed whether a contract has a significant financing component. We state sales net of price, early payment, and distributor discounts and volume rebates (collectively, variable consideration). Variable consideration, to the extent present, is recognized as the amount to which we are most-likely to be entitled, using all information (historical, current and forecasted) that is reasonably available to us, and only to the extent that a significant reversal in the amount of the cumulative revenue recognized is not probable of occurring in a future period. Differences, if any, between estimates of the amount of variable consideration to which we will be entitled and the actual amount of such variable consideration have not been material in the past. Amounts received or receivable from our customers with respect to variable consideration we expect to refund to our customers is recognized as a current liability and classified as accrued sales discounts and rebates (see Note 7). We report any tax assessed by a governmental authority that we collect from our customers that is both imposed on and concurrent with our revenue-producing activities (such as sales, use, value added and excise taxes) on a net basis (meaning we do not recognize these taxes either in our revenues or in our costs and expenses).

Frequently, we receive orders for products to be delivered over dates that may extend across reporting periods. We invoice for each delivery upon shipment and recognize revenue for each distinct shipment when all sales recognition criteria for that shipment have been satisfied. As scheduled delivery dates for these orders are within a one year period, under the optional exemption provided by ASC 606, we do not disclose sales allocated to future shipments of partially completed contracts.

The following table disaggregates our net sales by place of manufacture (point of origin) and to the location of the customer (point of destination), which are the categories that depict how the nature, amount, timing and uncertainty of revenue and cash flows are affected by economic factors (as required by ASC 606).

		Three months ended September 30,				Nine months ended September 30,				
		2017		2018		2017		2018		
				(In mi	llions)					
Net sales - point of origin:										
Germany	\$	256.6	\$	211.9	\$	672.1	\$	704.1		
United States		209.3		234.5		623.6		640.2		
Canada		70.4		82.3		228.2		236.1		
Belgium		75.6		66.4		205.7		205.0		
Norway		58.2		49.8		156.8		159.4		
Eliminations		(205.6)		(234.6)		(610.7)		(632.3)		
Total	\$	464.5	\$	410.3	\$	1,275.7	\$	1,312.5		
	<u> </u>	<u> </u>								
Net sales - point of destination:										
Europe	\$	246.0	\$	191.8	\$	652.3	\$	664.2		
North America		131.4		142.0		393.5		412.6		
Other		87.1		76.5		229.9		235.7		
Total	\$	464.5	\$	410.3	\$	1,275.7	\$	1,312.5		

Note 10 - Employee benefit plans:

The components of net periodic defined benefit pension cost are presented in the table below.

	Three months ended September 30,				Nine months ended September 30,			
		2017		2018		2017		2018
				(In mi	lions)			
Service cost	\$	3.0	\$	2.9	\$	8.5	\$	8.8
Interest cost		3.6		3.5		10.3		10.7
Expected return on plan assets		(2.6)		(3.3)		(7.6)		(9.9)
Amortization of prior service cost		-		.1		.2		.2
Recognized actuarial losses		3.5		3.3		10.0		10.3
Total	\$	7.5	\$	6.5	\$	21.4	\$	20.1

The components of net periodic postretirement benefits other than pension ("OPEB") cost are presented in the table below.

	Three months ended September 30,			Nine months ended September 30,				
	20)17 2	018	2017	2	2018		
			(In millio	ns)				
Service cost	\$	- \$	- \$.1	\$.1		
Interest cost		.1	.1	.2		.2		
Amortization of prior service credit		(.1)	(.1)	(.4)		(.4)		
Recognized actuarial losses		-	.1	.1		.2		
Total	\$	- \$.1	-	\$.1		

Upon the adoption of ASU 2017-07, *Compensation - Retirement Benefits (Topic 715) Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost*, our net periodic defined benefit pension cost and other postretirement benefit cost, other than the service cost component, is presented as a separate line item ("Other components of net periodic pension and OPEB cost") in our Condensed Consolidated Statements of Income for all periods presented. See Note 15.

We expect our 2018 contributions for our pension and other postretirement plans to be approximately \$17 million.

Note 11 - Income taxes:

		Three months ended September 30,				Nine months ended September 30,			
		2017		2018	-	2017		2018	
- , , , , , , , , , , , , , , , , , , ,				(In mi	llions)				
Expected tax expense, at U.S. federal statutory	_		_		_				
income tax rate of 35% in 2017 and 21% in 2018	\$	28.0	\$	9.8	\$	67.6	\$	53.9	
Non-U.S. tax rates		(3.4)		3.6		(8.2)		18.6	
Incremental net tax expense on earnings and losses									
of U.S. and non-U.S. companies		.2		1.8		6.8		2.9	
Valuation allowance		(7.8)		-		(170.4)		-	
Adjustment to reserve for uncertain tax positions, net		(8.1)		-		(7.6)		1.4	
Transition tax		-		(1.7)		-		(1.7)	
Canada-Germany APA		(3.2)		-		(3.2)		(1.4)	
Other, net		.4		.6		1.0		1.8	
Income tax expense (benefit)	\$	6.1	\$	14.1	\$	(114.0)	\$	75.5	
Comprehensive provision for income taxes (benefit) allocable to:									
Net income	\$	6.1	\$	14.1	\$	(114.0)	\$	75.5	
Other comprehensive income (loss):						,			
Currency translation		6.4		-		19.7		-	
Pension plans		1.1		1.0		3.2		3.2	
OPEB plans		-		-		(.1)		(.1)	
Marketable securities		(.3)		-		(.6)		-	
Interest rate swap		1.0		-		1.1		-	
Total	\$	14.3	\$	15.1	\$	(90.7)	\$	78.6	

The amount shown in the above table of our income tax rate reconciliation for non-U.S. tax rates represents the result determined by multiplying the pre-tax earnings or losses of each of our non-U.S. subsidiaries by the difference between the applicable statutory income tax rate for each non-U.S. jurisdiction and the U.S. federal statutory tax rate of 35% in 2017 and 21% in 2018. The amount shown on such table for incremental net tax expense on earnings and losses of U.S. and non-U.S. companies includes, as applicable, (i) deferred income taxes (or deferred income tax benefits) associated with the current-year change in the aggregate amount of undistributed earnings of our Canadian subsidiary and, beginning in 2018, deferred income taxes (or deferred income tax benefits) associated with the current-year earnings of all of our non-U.S. subsidiaries (the undistributed earnings of our European subsidiaries were subject to a permanent reinvestment plan until December 31, 2017) and (ii) current U.S. income taxes (or current income tax benefit), including U.S. personal holding company tax, as applicable, attributable to current-year income (losses) of one of our non-U.S. subsidiaries, which subsidiary is treated as a dual resident for U.S. income tax purposes, to the extent the current-year income (losses) of such subsidiary is subject to U.S. income tax under the U.S. dual-resident provisions of the Internal Revenue Code.

We have substantial net operating loss ("NOL") carryforwards in Germany (the equivalent of \$652 million for German corporate purposes and \$.5 million for German trade tax purposes at December 31, 2017) and in Belgium (the equivalent of \$50 million for Belgian corporate tax purposes at December 31, 2017), all of which have an indefinite carryforward period. As a result, we have net deferred income tax assets with respect to these two jurisdictions, primarily related to these NOL carryforwards. The German corporate tax is similar to the U.S. federal income tax, and the German trade tax is similar to the U.S. state income tax. As discussed in the 2017 Annual Report, commencing June 30, 2015, we concluded that we were required to recognize a non-cash deferred income tax asset valuation allowance under the more-likely-than-not recognition criteria with respect to our German and Belgian net deferred income tax assets at such date. During the first six months of 2017, we recognized an aggregate non-cash deferred income tax benefit of \$12.7 million as a result of a net decrease in such deferred income tax asset valuation allowance, due to utilizing a portion of both the German and Belgian NOL during the period, including \$7.7 million in the second quarter of 2017. As also discussed in the 2017 Annual Report, at June 30, 2017, we concluded we had sufficient positive evidence under the more-likely-than-not recognition criteria to support reversal of the entire valuation allowance related to our German and Belgian operations. In accordance with the ASC 740-270 guidance regarding accounting for income taxes at interim dates, the amount of the valuation allowance reversed at June 30, 2017 (\$149.9 million, of which \$141.9 million related to Germany and \$8.0 million related to Belgium) relates to our change in judgment at that date regarding the realizability of the related deferred income tax asset as it relates to future years (i.e., 2018 and after). A change in judgment regarding the realizability of deferred tax assets as

periods subsequent to the date of the change in judgment. Accordingly, our income tax benefit in calendar 2017 includes an aggregate non-cash deferred income tax benefit of \$186.7 million related to the reversal of the German and Belgian valuation allowance, comprised of \$12.7 million recognized in the first half of 2017 (noted above) related to the utilization of a portion of both the German and Belgian NOLs during such period, \$149.9 million related to the portion of the valuation allowance reversed as of June 30, 2017 and \$24.1 million recognized in the second half of 2017 (including \$7.8 million reversed in the third quarter) related to the utilization of a portion of both the German and Belgian NOLs during such period. Our deferred income tax asset valuation allowance increased \$13.7 million in 2017 as a result of changes in currency exchange rates, which increase was recognized as part of other comprehensive income (loss).

As discussed in the 2017 Annual Report, on December 22, 2017, the 2017 Tax Act was enacted into law. This new tax legislation, among other changes, (i) reduced the U.S. Federal corporate income tax rate from 35% to 21% effective January 1, 2018; (ii) implemented a territorial tax system and imposed a one-time repatriation tax ("Transition Tax") on the deemed repatriation of the post-1986 undistributed earnings of non-U.S. subsidiaries accumulated up through December 31, 2017, regardless of whether such earnings are repatriated; (iii) eliminated U.S. tax on future non-U.S. earnings (subject to certain exceptions); (iv) eliminated the domestic production activities deduction beginning in 2018; (v) eliminated the net operating loss carryback and provides for an indefinite carryforward period subject to an 80% annual usage limitation; (vi) allows for the expensing of certain capital expenditures; (vii) imposed a tax on global intangible low-tax income ("GILTI") beginning in 2018; (viii) imposed a base erosion anti-abuse tax ("BEAT") beginning in 2018; and (ix) amended the rules limiting the deduction for business interest expense beginning in 2018. Following the enactment of the 2017 Tax Act, the Securities and Exchange Commission issued Staff Accounting Bulletin ("SAB") 118 to provide guidance on the accounting and reporting impacts of the 2017 Tax Act. SAB 118 states that companies should account for changes related to the 2017 Tax Act in the period of enactment if all information is available and the accounting can be completed. In situations where companies do not have enough information to complete the accounting in the period of enactment, a company must either 1) record an estimated provisional amount if the impact of the change can be reasonably estimated; or 2) continue to apply the accounting guidance that was in effect immediately prior to the 2017 Tax Act if the impact of the change cannot be reasonably estimated. If estimated provisional amounts are recorded, SAB 118 provides a measurement period of no

Under GAAP, we are required to revalue our net deferred tax asset associated with our U.S. net deductible temporary differences in the period in which the new tax legislation is enacted based on deferred tax balances as of the enactment date, to reflect the effect of such reduction in the corporate income tax rate. Our temporary differences as of December 31, 2017 were not materially different from our temporary differences as of the enactment date, accordingly revaluation of our net deductible temporary differences was based on our net deferred tax asset as of December 31, 2017. Such revaluation was recognized in continuing operations and was not material to us.

Prior to the enactment of the 2017 Tax Act, the undistributed earnings of our European subsidiaries were deemed to be permanently reinvested (we had not made a similar determination with respect to the undistributed earnings of our Canadian subsidiary). Pursuant to the Transition Tax provisions imposing a one-time repatriation tax on post-1986 undistributed earnings, we recognized a provisional current income tax expense of \$76.2 million in the fourth quarter of 2017. The amounts recorded as of December 31, 2017 as a result of the 2017 Tax Act represented estimates based on information currently available. We elected to pay such tax over an eight year period beginning in 2018, including approximately \$6.1 million which was paid in April 2018 (for the 2017 tax year) and \$4.6 million which was paid in the second and third quarters of 2018 (for the 2018 tax year). We did not make any measurement-period adjustments to the provisional amounts recorded for this item during the first six months of 2018 because no new information became available during the period that required an adjustment. During the third quarter of 2018, in conjunction with finalizing our federal income tax return and based on additional information that became available (including proposed regulations issued by the IRS in August 2018 with respect to the Transition Tax), we recognized a provisional income tax benefit of \$1.7 million which amount is recorded as a measurement-period adjustment, reducing the provisional income tax expense of \$76.2 million recognized in the fourth quarter of 2017. As a result, at September 30, 2018, taking into account the prior Transition Tax installments payments of \$10.7 million (noted above), the balance of our unpaid Transition Tax aggregates \$63.8 million, which will be paid in quarterly installments over the remainder of the eight year period. Of such \$63.8 million, \$58.1 million is recorded as a noncurrent payable to affiliate (income taxes payable to Valhi) classified as a noncurrent liability in our Condensed Consolidated Balance Sheet at September 30, 2018, and \$5.7 million is included with our current payable to affiliate (income taxes payable to Valhi) classified as a current liability (a portion of our noncurrent income tax payable to affiliate was reclassified to our current payable to affiliate for the portion of our 2019 Transition Tax installment due within the next twelve months). The issuance of final regulations and/or additional guidance with respect to the Transition Tax may impact the amount of the Transition Tax recognized in the fourth quarter of 2017, as adjusted in the third quarter of 2018. We are also continuing to gather information and await further guidance from the state jurisdictions in which we operate with respect to the Transition Tax. We will complete our accounting for this item within the prescribed measurement period ending December 22, 2018, pursuant to the guidance under SAB 118, and if we determine an

adjustment to the provisional amounts recognized at December 31, 2017 and September 30, 2018 is required, we will recognize such adjustment in the reporting period within the SAB 118 measurement period in which such adjustment is determined.

Prior to the enactment of the 2017 Tax Act the undistributed earnings of our European subsidiaries were deemed to be permanently reinvested (we had not made a similar determination with respect to the undistributed earnings of our Canadian subsidiary). As a result of the implementation of a territorial tax system under the 2017 Tax Act, effective January 1, 2018, and the Transition Tax which in effect taxes the post-1986 undistributed earnings of our non-U.S. subsidiaries accumulated up through December 31, 2017, we determined effective December 31, 2017 that all of the post-1986 undistributed earnings of our European subsidiaries are not permanently reinvested. Accordingly, in the fourth quarter of 2017 we recognized an aggregate provisional non-cash deferred income tax expense of \$4.5 million based on our reasonable estimates of the U.S. state and non-U.S. income tax and withholding tax liability attributable to all of such previously-considered permanently reinvested undistributed earnings through December 31, 2017. The amounts recorded as of December 31, 2017 as a result of the 2017 Tax Act represented estimates based on information currently available. We have not made any measurement-period adjustments to the provisional amounts recorded at December 31, 2017 for this item during the first nine months of 2018. However, we recorded a provisional non-cash deferred income tax expense of \$2.5 million for the estimated U.S. state and non-U.S. income tax and withholding tax liability attributable to the 2018 undistributed earnings of our non-U.S. subsidiaries in the first nine months of 2018, including withholding taxes related to the undistributed earnings of our Canadian subsidiary. We are continuing our review of certain other provisions under the 2017 Tax Act and waiting on further guidance primarily from the state jurisdictions in which we operate that may impact our determination of the aggregate temporary differences attributable to our investments in our non-U.S. subsidiaries. We will complete our accounting for this item within the prescribed measurement period ending December 22, 2018, pursuant to the guidance under SAB 118, and if we determine an adjustment to the provisional amounts recognized at December 31, 2017 and September 30, 2018 are required, we will recognize such adjustment in the reporting period within the SAB 118 measurement period in which such adjustment is determined.

Under U.S. GAAP, as it relates to the new GILTI tax rules, we are allowed to make an accounting policy choice of either (1) treating taxes due on future U.S. inclusions in taxable income related to GILTI as a current-period expense when incurred (the "period cost method") or (2) factoring such amounts into the measurement of our deferred taxes (the "deferred method"). Our selection of an accounting policy related to the GILTI tax provisions will depend, in part, on analyzing our global income to determine whether we expect to have future U.S. inclusions in taxable income related to GILTI and, if so, what the impact is expected to be. While our future global operations depend on a number of different factors, we do expect to have future U.S. inclusions in taxable income related to GILTI. As such, we performed an analysis of GILTI's impact on our provision and determined the impact is not material. Because the impact is not material to our tax provision, we have not recorded any adjustments related to potential GILTI tax in our financial statements in the first nine months of 2018. Further, we have not made a policy decision regarding whether to record deferred taxes on GILTI or record GILTI tax as a current-period expense when incurred. We will complete our policy election for this item within the prescribed measurement period ending December 22, 2018, pursuant to the guidance under SAB 118 and if we determine such policy election impacts our provision, we will recognize an adjustment in the reporting period within the SAB 118 measurement period in which such adjustment is determined. Similarly, we have evaluated the tax impact of BEAT on our tax provision in the first nine months of 2018 and determined that the tax law has no material impact on our tax provision as we have historically not entered into international payments between related parties that are unrelated to cost of goods sold.

None of our U.S. and non-U.S. tax returns are currently under examination. As a result of prior audits in certain jurisdictions, which are now settled, in 2008 we filed Advance Pricing Agreement Requests with the tax authorities in the U.S., Canada and Germany. These requests have been under review with the respective tax authorities since 2008 and prior to 2016, it was uncertain whether an agreement would be reached between the tax authorities and whether we would agree to execute and finalize such agreements.

- During the third quarter of 2017, our Canadian subsidiary executed and finalized an Advance Pricing Agreement with the Competent Authority for Canada (the "Canada-Germany APA") effective for tax years 2005 2017. Pursuant to the terms of the Canada-Germany APA, the Canadian and German tax authorities agreed to certain prior year changes to taxable income of our Canadian and German subsidiaries. As a result of such agreed-upon changes, we reversed a significant portion of our reserve for uncertain tax positions and recognized a non-cash income tax benefit of \$8.1 million related to such reversal in the third quarter of 2017. In addition, we recognized a \$2.6 million non-cash income tax benefit related to an increase in our German NOLs and a \$.6 million German cash tax refund related to the Canada-Germany APA in the third quarter of 2017.
- During the first quarter of 2018, our German subsidiary executed and finalized the related Advance Pricing Agreement with the Competent Authority for Germany (the "Germany-Canada APA") effective for tax years 2005 2017. In the first quarter of 2018, we recognized a net \$1.4 million non-cash income tax benefit related to an APA tax settlement payment between our German and Canadian subsidiaries.

We believe we have adequate accruals for additional taxes and related interest expense which could ultimately result from tax examinations. During the first nine months of 2018, we recognized a \$1.4 million increase to our reserve for uncertain tax positions (recognized in the first quarter of 2018). We believe the ultimate disposition of any future tax examinations should not have a material adverse effect on our consolidated financial position, results of operations or liquidity. We do not expect our unrecognized tax benefits to materially change during the next twelve months.

Note 12 - Accumulated other comprehensive loss:

Changes in accumulated other comprehensive loss are presented in the table below. See Note 4 for further discussion of our marketable securities, Note 10 for discussion of our defined benefit pension plans and OPEB plans, and Note 14 for discussion of our interest rate swap contract.

		Three mor		ed		Nine mon Septem	ed	
		2017		2018		2017		2018
cumulated other comprehensive loss, net of tax:				(In mi	mons)			
Currency translation:								
Balance at beginning of period	\$	(245.8)	\$	(226.4)	\$	(269.6)	\$	(211
Other comprehensive income (loss)	Ψ	29.9	Ψ	4.5	Ψ	53.7	Ψ	(10
Balance at end of period	\$	(215.9)	\$	(221.9)	\$	(215.9)	\$	(221
Buttinee at end of period	Ψ	(215.5)	Ψ	(221.5)	Ψ	(215.5)	Ψ	(22)
Defined benefit pension plans:								
Balance at beginning of period	\$	(180.9)	\$	(167.9)	\$	(184.8)	\$	(172
Other comprehensive income - amortization	•	(====)		(-	(==)		(
of prior service cost and net losses included in								
net periodic pension cost		2.4		2.4		6.3		7
Balance at end of period	\$	(178.5)	\$	(165.5)	\$	(178.5)	\$	(165
·				<u> </u>		`		·
OPEB plans:								
Balance at beginning of period	\$	1.6	\$	1.0	\$	1.8	\$	1
Other comprehensive loss - amortization								
of prior service credit and net losses								
included in net periodic OPEB cost		_		_		(.2)		
Balance at end of period	\$	1.6	\$	1.0	\$	1.6	\$	1
Marketable securities:								
Balance at beginning of period	\$	1.2	\$	-	\$	1.8	\$	4
Change in accounting principle						<u> </u>		(4
Balance at beginning of period, as adjusted		1.2		-		1.8		
Other comprehensive loss -								
unrealized losses arising during the period		(.6)		-		(1.2)		
Balance at end of period	\$.6	\$	<u> </u>	\$.6	\$	
Interest rate swap:								
Balance at beginning of period	\$	(1.8)	\$	-	\$	(2.0)	\$	
Other comprehensive income (loss):								
Unrealized losses arising during the period		(.7)		-		(1.5)		
Reclassification adjustment for amounts								
included in earnings		2.5				3.5		
Balance at end of period	\$	-	\$	-	\$	-	\$	
m.1 1.1.1								
Total accumulated other comprehensive loss:	ф	(405.5)		(202.2)	Φ.	(450.0)		(D=0
Balance at beginning of period	\$	(425.7)	\$	(393.3)	\$	(452.8)	\$	(378
Change in accounting principle		- (10)		- (202.2)		- (1=0.0)		(4
Balance at beginning of period, as adjusted		(425.7)		(393.3)		(452.8)		(383
Other comprehensive income (loss)		33.5		6.9		60.6		(2
Balance at end of period	\$	(392.2)	\$	(386.4)	\$	(392.2)	\$	(386

Note 13 - Commitments and contingencies:

We are involved in various environmental, contractual, product liability, patent (or intellectual property), employment and other claims and disputes incidental to our business. At least quarterly our management discusses and evaluates the status of any pending litigation to which we are a party. The factors considered in such evaluation include, among other things, the nature of such pending cases, the status of such pending cases, the advice of legal counsel and our experience in similar cases (if any). Based on such evaluation, we make a determination as to whether we believe (i) it is probable a loss has been incurred, and if so if the amount of such loss (or a range of loss) is reasonably estimable, or (ii) it is reasonably possible but not probable a loss has been incurred, and if so if the amount of such loss (or a range of loss) is reasonably estimable, or (iii) the probability a loss has been incurred is remote.

In March 2013, we were served with the complaint, Los Gatos Mercantile, Inc. d/b/a Los Gatos Ace Hardware, et al v. E.I. Du Pont de Nemours and Company, et al. (United States District Court, for the Northern District of California, Case No. 3:13-cv-01180-SI). The defendants include us, E.I. Du Pont de Nemours & Company, Huntsman International LLC and Millennium Inorganic Chemicals, Inc. As amended by plaintiffs' third amended complaint (Harrison, Jan, et al v. E.I. Du Pont de Nemours and Company, et al), plaintiffs seek to represent a class consisting of indirect purchasers of titanium dioxide in the states of Arizona, Arkansas, California, the District of Columbia, Florida, Iowa, Kansas, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Hampshire, New Mexico, New York, North Carolina, Oregon and Tennessee that indirectly purchased titanium dioxide from one or more of the defendants on or after March 1, 2002. The complaint alleges that the defendants conspired and combined to fix, raise, maintain, and stabilize the price at which titanium dioxide was sold in the United States and engaged in other anticompetitive conduct. In December 2017, the Court preliminarily approved a settlement agreement with the class plaintiffs. In January 2018, without admitting any fault or wrongdoing, we paid an immaterial amount in full settlement of this matter, and in August 2018 the Court issued a final approval of the settlement.

Note 14 - Financial instruments:

The following table summarizes the valuation of our financial instruments recorded on a fair value basis as of December 31, 2017 and September 30, 2018:

	Fair Value Measurements								_
				Quoted	S	ignificant			
				prices in		other		Significant	
		Total		active markets (Level 1)		bservable inputs (Level 2)		unobservable inputs (Level 3)	
				(In m	illions)			,	_
Asset:									
December 31, 2017 -									
Noncurrent marketable securities (See Note 4)	\$	10.7	\$	10.7	\$	-	\$	-	-
September 30, 2018 -									
Noncurrent marketable securities (See Note 4)	\$	4.0	\$	4.0	\$	-	\$	-	-

Our earnings and cash flows are subject to fluctuations due to changes in currency exchange rates and interest rates. Our risk management policy allows for the use of derivative financial instruments to prudently manage exposure to currency exchange rates and interest rates. Derivatives that we use are primarily currency forward contracts and interest rate swaps. We have not entered into these contracts for trading or speculative purposes in the past, nor do we currently anticipate entering into such contracts for trading or speculative purposes in the future.

Currency forward contracts - Certain of our sales generated by our non-U.S. operations are denominated in U.S. dollars. We periodically use currency forward contracts to manage a very nominal portion of currency exchange rate risk associated with trade receivables denominated in a currency other than the holder's functional currency or similar exchange rate risk associated with future sales. Derivatives used to hedge forecasted transactions and specific cash flows associated with financial assets and liabilities denominated in currencies other than the U.S. dollar and which meet the criteria for hedge accounting are designated as cash flow hedges. Consequently, the effective portion of gains and losses is deferred as a component of accumulated other comprehensive income and is recognized in earnings at the time the hedged item affects earnings. Contracts that do not meet the criteria for hedge accounting are marked-to-market at each balance sheet date with any resulting gain or loss recognized in income currently as part of net currency transaction gains and losses. The fair value of the currency forward contracts is determined using Level 1 inputs based on the currency spot forward rates quoted by banks or currency dealers.

During 2017 and the first nine months of 2018, we had no currency forward contracts outstanding.

Interest rate swap contract – See the 2017 Annual Report for a discussion of the interest rate swap we had entered into in August 2015, and which was voluntarily terminated in September 2017.

The following table presents the financial instruments that are not carried at fair value but which require fair value disclosure:

	December 31, 2017				September 30, 2018			
	Carryi	ng amount		Fair value		Carrying amount		Fair value
				(In mi	llions)			
Cash, cash equivalents and restricted cash	\$	323.7	\$	323.7	\$	433.4	\$	433.4
Long-term debt -								
Fixed rate Senior Notes		471.1		495.1		463.0		455.1
Common stockholders' equity		754.3		2,986.8		873.4		1,883.5

At September 30, 2018, the estimated market price of our Senior Notes was €969 per €1,000 principal amount. The fair value of our Senior Notes is based on quoted market prices; however, these quoted market prices represented Level 2 inputs because the markets in which the Senior Notes trade are not active. The fair value of our common stockholders' equity is based upon quoted market prices at each balance sheet date, which represent Level 1 inputs.

Note 15 - Recent accounting pronouncements:

Adopted

On January 1, 2018, we adopted ASU No. 2014-09, *Revenue from Contracts with Customers (Topic 606)* for all contracts which were not completed as of January 1, 2018 using the modified retrospective method. Prior to adoption of this standard, we recorded sales when our products were shipped and title and other risks and rewards of ownership had passed to our customer, which was generally at the time of shipment (although in some instances shipping terms were FOB destination point, for which we did not recognize revenue until the product was received by our customer). Following adoption of this standard, we record sales when we satisfy our performance obligation to our customers by transferring control of our products to them, which we have determined is at the same point in time as when we would have recognized revenue prior to adoption of this new standard. Accordingly, the adoption of Topic 606 as of January 1, 2018 did not have a material impact on our consolidated financial statements, and we believe adoption of this standard will have a minimal effect on our revenues on an ongoing basis. See Note 9.

On January 1, 2018, we adopted ASU 2016-01, *Financial Instruments-Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities*, which addresses certain aspects related to the recognition, measurement, presentation and disclosure of financial instruments. The ASU requires equity investments (except for those accounted for under the equity method of accounting or those that result in the consolidation of the investee) to generally be measured at fair value with changes in fair value recognized in net income (previously, changes in fair value of such securities were recognized in other comprehensive income). The amendment also requires a number of other changes, including among others: simplifying the impairment assessment for equity instruments without readily determinable fair values; eliminating the requirement for public business entities to disclose methods and assumptions used to determine fair value for financial instruments measured at amortized cost; requiring an exit price notion when measuring the fair value of financial instruments for disclosure purposes; and requiring separate presentation of financial assets and liabilities by measurement category and form of asset. We adopted the new standard prospectively. The most significant aspect of adopting this ASU is the requirement to recognize changes in fair value of our available-for-sale marketable equity securities in net income. At December 31, 2017, our entire portfolio of marketable securities consisted of marketable equity securities. Upon adoption of the ASU on January 1, 2018, the entire balance of our accumulated other comprehensive income related to marketable securities of \$4.8 million was reclassified to our beginning retained earnings pursuant to the transition requirements of the ASU.

In March 2017, the FASB issued ASU 2017-07, *Compensation - Retirement Benefits (Topic 715) Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost*, which requires that the service cost component of net periodic defined benefit pension and OPEB cost be reported in the same line item as other compensation costs for applicable employees incurred during the period. Other components of such net benefit cost are required to be presented in the income statement separately from the service cost component, and below income from operations (if such a subtotal is presented). These other net benefit cost components must be disclosed either on the face of the financial statements or in the notes to the financial statements. In addition only the service cost component is eligible for capitalization in assets where applicable (inventory or internally constructed

fixed assets for example). We adopted the amendments in ASU 2017-07 beginning in the first quarter of 2018, with retrospective presentation in our Condensed Consolidated Statements of Income. We began applying ASU 2017-07 prospectively beginning on January 1, 2018 as it relates to the capitalization of the service cost component of net benefit cost into assets (primarily inventory). We are availing ourselves of the practical expedient that permits us to use amounts we previously disclosed as components of our net periodic defined benefit pension and OPEB cost for periods prior to the adoption of this ASU as the estimation basis for applying the retrospective presentation requirements. As a result we have reclassified \$2.8 million and \$1.7 million, respectively, for the third quarter of 2017 and \$8.0 million and \$4.8 million, respectively, for the nine months ended September 30, 2017 previously classified as part of cost of sales and selling, general and administrative expenses to Other components of net periodic pension and OPEB cost in our Condensed Consolidated Statement of Income.

Pending Adoption

In February 2016, the FASB issued ASU 2016-02, Leases (Topic 842), which is a comprehensive rewriting of the lease accounting guidance which aims to increase comparability and transparency with regard to lease transactions. The primary change will be the recognition of lease assets for the right-ofuse of the underlying asset and lease liabilities for the obligation to make payments by lessees on the balance sheet for leases currently classified as operating leases. The ASU, as amended, also requires increased qualitative disclosure about leases in addition to quantitative disclosures currently required. Upon adoption, companies are required to either apply a modified retrospective transition approach, or recognize a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption with no restatement of prior period financial statement. We expect to elect the cumulative-effect adjustment method of transition. The ASU also provides a practical expedient which will allow companies to continue to account for existing leases under the prior guidance unless a lease is modified, other than the requirement to recognize the right-of-use asset and lease liability for all operating leases. The changes indicated above will be effective for us beginning in the first quarter of 2019, with early adoption permitted. We expect to adopt ASU 2016-02 beginning in the first quarter of 2019. We are in the process of assessing all of our current leases. We are in the process of evaluating the effect this ASU will have on our Consolidated Financial Statements, but given the material amount of our future minimum payments under non-cancellable operating leases at December 31, 2017 discussed in Note 17 to our 2017 Annual Report, we expect to recognize a material right-of-use lease asset and lease liability upon adoption of the ASU. This ASU permits companies to elect certain practical expedients upon adoption, and at adoption we expect to elect such practical expedients related to, among other things, lease classification (in which existing leases classified as operating leases under current GAAP would be classified as an operating lease under the new ASU, and existing leases classified as a capital lease under current GAAP would be classified as a finance lease under the new ASU), nonlease components (in which nonlease components associated with a lease and paid by us to the lessor, such as property taxes, insurance and maintenance, would be treated as a lease component and considered part of minimum lease rent payments), and short-term leases (in which leases with an original term of 12 months or less would be excluded from the recognition requirements of the new ASU).

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

RESULTS OF OPERATIONS

Business overview

We are a leading global producer and marketer of value-added titanium dioxide pigments ("TiO₂"). TiO₂ is used for a variety of manufacturing applications, including paints, plastics, paper and other industrial products. For the nine months ended September 30, 2018, approximately one-half of our sales volumes were sold into European markets. Our production facilities are located in Europe and North America.

We consider TiO₂ to be a "quality of life" product, with demand affected by gross domestic product, or GDP, and overall economic conditions in our markets located in various regions of the world. Over the long-term, we expect demand for TiO₂ will grow by 2% to 3% per year, consistent with our expectations for the long-term growth in GDP. However, even if we and our competitors maintain consistent shares of the worldwide market, demand for TiO₂ in any interim or annual period may not change in the same proportion as the change in global GDP, in part due to relative changes in the TiO₂ inventory levels of our customers. We believe that our customers' inventory levels are influenced in part by their expectations for future changes in TiO₂ market selling prices as well as their expectations for future availability of product. Although certain of our TiO₂ grades are considered specialty pigments, the majority of our grades and substantially all of our production are considered commodity pigment products, with price and availability being the most significant competitive factors along with quality and customer service.

The factors having the most impact on our reported operating results are:

- TiO₂ selling prices,
- our TiO₂ sales and production volumes,
- manufacturing costs, particularly raw materials such as third-party feedstock ore, maintenance and energy-related expenses, and
- currency exchange rates (particularly the exchange rate for the U.S. dollar relative to the euro, Norwegian krone and the Canadian dollar).

Our key performance indicators are our TiO₂ average selling prices, our level of TiO₂ sales and production volumes and the cost of our third-party feedstock ore. TiO₂ selling prices generally follow industry trends and prices will increase or decrease generally as a result of competitive market pressures.

Executive summary

We reported income from operations of \$58.1 million in the third quarter of 2018 as compared to \$96.1 million in the third quarter of 2017. We reported income from operations of \$285.5 million in the first nine months of 2018 as compared to \$226.8 million in the first nine months of 2017. Our income from operations was lower in the third quarter of 2018 compared to the same period in 2017 as the favorable impact of higher average selling prices was more than offset by the unfavorable impact of lower sales and production volumes and higher raw materials and other production costs, as discussed below. Our income from operations was higher in the first nine months of 2018 compared to the same period in 2017 as the favorable impact of higher average selling prices more than offset the unfavorable impact of lower sales and production volumes and higher raw materials and other production costs as discussed below.

We reported net income of \$32.6 million, or \$.28 per share, in the third quarter of 2018 as compared to net income of \$73.8 million, or \$.64 per share, in the third quarter of 2017. For the first nine months of 2018, we reported net income of \$181.0 million, or \$1.56 per share, compared to net income of \$307.1 million, or \$2.65 per share, in the first nine months of 2017. We reported lower net income in the third quarter of 2018 as compared to the third quarter of 2017 primarily due to lower income from operations. We reported lower net income in the first nine months of 2018 compared to the same period in 2017 primarily due to the recognition in 2017 of a non-cash deferred income tax benefit as a result of a net decrease in our deferred income tax asset valuation allowance associated with our German and Belgian operations.

Our results in the first nine months of 2017 include:

- the recognition of a non-cash deferred income tax benefit as a result of a net decrease in our deferred income tax asset valuation allowance related to our German and Belgian operations (\$7.8 million, or \$.07 per share, in the third quarter and \$170.4 million, or \$1.47 per share, in the year-to-date period),
- the third quarter recognition of an \$11.3 million (\$.10 per share) aggregate income tax benefit related to the execution and finalization of an Advance Pricing Agreement between Canada and Germany, and
- an aggregate charge of \$7.1 million (\$4.6 million, or \$.04 per share, net of income tax benefit) recognized in the third quarter related to the loss on prepayment of debt.

Forward-looking information

This report contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended. Statements in this Quarterly Report on Form 10-Q that are not historical facts are forward-looking in nature and represent management's beliefs and assumptions based on currently available information. Statements in this report including, but not limited to, statements found in Item 2 - "Management's Discussion and Analysis of Financial Condition and Results of Operations," are forward-looking statements that represent our management's beliefs and assumptions based on currently available information. In some cases you can identify forward-looking statements by the use of words such as "believes," "intends," "may," "should," "could," "anticipates," "expects" or comparable terminology, or by discussions of strategies or trends. Although we believe the expectations reflected in forward-looking statements are reasonable, we do not know if these expectations will be correct. Such statements by their nature involve substantial risks and uncertainties that could significantly impact expected results. Actual future results could differ materially from those predicted. The factors that could cause our actual future results to differ materially from those described herein are the risks and uncertainties discussed in this Quarterly Report and those described from time to time in our other filings with the SEC including, but are not limited to, the following:

- Future supply and demand for our products
- The extent of the dependence of certain of our businesses on certain market sectors
- The cyclicality of our business
- Customer and producer inventory levels
- Unexpected or earlier-than-expected industry capacity expansion
- Changes in raw material and other operating costs (such as energy and ore costs)
- Changes in the availability of raw materials (such as ore)
- General global economic and political conditions (such as changes in the level of gross domestic product in various regions of the world and the impact of such changes on demand for TiO₂)
- Competitive products and substitute products
- Customer and competitor strategies
- Potential consolidation of our competitors
- Potential consolidation of our customers
- The impact of pricing and production decisions
- Competitive technology positions
- Potential difficulties in upgrading or implementing new accounting and manufacturing software systems (such as our new enterprise resource planning system)
- The introduction of trade barriers
- Possible disruption of our business, or increases in our cost of doing business, resulting from terrorist activities or global conflicts
- Fluctuations in currency exchange rates (such as changes in the exchange rate between the U.S. dollar and each of the euro, the Norwegian krone and the Canadian dollar), or possible disruptions to our business resulting from potential instability resulting from uncertainties associated with the euro or other currencies

- Operating interruptions (including, but not limited to, labor disputes, leaks, natural disasters, fires, explosions, unscheduled or unplanned downtime, transportation interruptions and cyber attacks)
- Our ability to renew or refinance credit facilities
- Our ability to maintain sufficient liquidity
- The ultimate outcome of income tax audits, tax settlement initiatives or other tax matters, including future tax reform
- Our ability to utilize income tax attributes, the benefits of which may or may not have been recognized under the more-likely-than-not recognition criteria
- Environmental matters (such as those requiring compliance with emission and discharge standards for existing and new facilities)
- Government laws and regulations and possible changes therein
- The ultimate resolution of pending litigation
- Possible future litigation.

Should one or more of these risks materialize (or the consequences of such a development worsen), or should the underlying assumptions prove incorrect, actual results could differ materially from those forecasted or expected. We disclaim any intention or obligation to update or revise any forward-looking statement whether as a result of changes in information, future events or otherwise.

Results of operations

Current industry conditions

Due to the successful implementation of previously-announced price increases, average selling prices rose throughout 2017 and the first six months of 2018. Our average TiO₂ selling prices at the end of 2017 were 27% higher than at the end of 2016, and our average selling prices at the end of the second quarter of 2018 were 3% higher than at the end of 2017, with most of the increase occurring during the first quarter. Our average selling prices declined during the third quarter of 2018. Our average selling prices at the end of the third quarter of 2018 were 2% lower than at the end of the second quarter of 2018, and were 1% higher than at the end of 2017. Higher prices in the European and North American markets were partially offset by lower prices in the Latin American and export markets (attributable to changes in customer mix) at the end of the third quarter of 2018 as compared to the end of 2017. We experienced lower sales volumes in all major markets in the first nine months of 2018 as compared to the record sales volumes achieved in the same period of 2017.

We operated our production facilities at overall average capacity utilization rates of 95% in the first nine months of 2018 compared to full practical capacity utilization rates in the first nine months of 2017. Our production rates in the third quarter of 2018 were impacted by maintenance activities at certain facilities. The table below lists our comparative quarterly capacity utilization rates.

	Production Capacity Util	ization Rates
	2017	2018
First quarter	100%	95%
Second quarter	100%	97%
Third quarter	100%	92%

Due to a moderate rise in the cost of third-party feedstock ore we procured in 2017 and the first nine months of 2018, our cost of sales per metric ton of TiO_2 sold in the first nine months of 2018 was higher as compared to the first nine months of 2017 (excluding the effect of changes in currency exchange rates).

			Three months ended Septem	ber 30,	
		2017	-	2018	
	· ·		(Dollars in millions)		<u> </u>
Net sales	\$	464.5	100 % \$	410.3	100%
Cost of sales		309.5	67	291.2	71
Gross margin		155.0	33	119.1	29
Selling, general and administrative expense		51.3	11	57.3	14
Other operating income (expense):					
Currency transactions, net		(4.3)	(1)	(.6)	-
Other operating expense, net		(3.3)	-	(3.1)	(1)
Income from operations	\$	96.1	21 % \$	58.1	14%

			% Change
TiO ₂ operating statistics:			
Sales volumes*	150	123	(19)%
Production volumes*	141	131	(7)%
Percentage change in net sales:			
TiO ₂ product pricing			9%
TiO ₂ sales volumes			(19)
TiO ₂ product mix/other			(2)
Total		•	(12)%

Thousands of metric tons

Net sales - Net sales in the third quarter of 2018 decreased 12%, or \$54.2 million, compared to the third quarter of 2017 primarily due to the net effect of a 9% increase in average TiO_2 selling prices (which increased net sales by approximately \$42 million) and a 19% decrease in sales volumes (which decreased net sales by approximately \$88 million). TiO_2 selling prices will increase or decrease generally as a result of competitive market pressures, changes in the relative level of supply and demand as well as changes in raw material and other manufacturing costs.

Our sales volumes decreased 19% in the third quarter of 2018 as compared to the record third quarter sales volumes of 2017 primarily due to lower sales in the European and export markets reflecting the effects of reduced shipments as customer inventory levels returned to more normal levels. In addition to the impact of changes in average TiO₂ selling prices and sales volumes, we estimate that changes in currency exchange rates (primarily the euro) had a nominal effect on our net sales as compared to the third quarter of 2017.

Cost of sales and gross margin - Cost of sales decreased \$18.3 million or 6% in the third quarter of 2018 compared to the third quarter of 2017 due to the net effect of a 19% decrease in sales volumes, a 7% decrease in TiO₂ production volumes, higher raw materials and other production costs of approximately \$40 million and currency fluctuations (primarily the euro). The decrease in TiO₂ production volumes in the third quarter of 2018 compared to the production volumes in the third quarter of 2017 was primarily due to maintenance activities at certain facilities in 2018. Our cost of sales as a percentage of net sales increased to 71% in the third quarter of 2018 compared to 67% in the same period of 2017 as the unfavorable effects related to lower production volumes and higher raw materials and other production costs more than offset the favorable impact of higher average selling prices, as discussed above.

Gross margin as a percentage of net sales decreased to 29% in the third quarter of 2018 compared to 33% in the third quarter of 2017. As discussed and quantified above, our gross margin decreased primarily due to the net effect of higher average selling prices, lower sales and production volumes and higher raw materials and other production costs.

Selling, general and administrative expense - Selling, general and administrative expense in the third quarter of 2018 was \$57.3 million, an increase of \$6.0 million compared to the third quarter of 2017 in part due to higher general and administrative costs related to the implementation of a new accounting and manufacturing software system and higher sales support costs.

Income from operations - Income from operations decreased by \$38.0 million, or 40%, in the third quarter of 2018 compared to the third quarter of 2017. Income from operations as a percentage of net sales decreased to 14% in the third quarter of 2018 from 21% in the same period of 2017. This decrease was driven by the decrease in gross margin, discussed above. We estimate that changes in

currency exchange rates increased income from operations by approximately \$7 million in the third quarter of 2018 as compared to the same period in 2017, as discussed below.

Other non-operating income (expense) - Beginning on January 1, 2018 with the adoption of Accounting Standards Update ("ASU") 2016-01, all of our marketable equity securities will continue to be carried at fair value, but any unrealized gains or losses on the securities are now recognized in Marketable equity securities on our Condensed Consolidated Statements of Income. See Notes 4 and 15 to our Condensed Consolidated Financial Statements. Other components of net periodic pension and OPEB cost in the third quarter of 2018 was comparable to the third quarter of 2017. See Notes 10 and 15 to our Condensed Consolidated Financial Statements. Interest expense in the third quarter of 2018 was comparable to the third quarter of 2017. We currently expect our interest expense for all of 2018 will be comparable to 2017, as higher average debt levels in 2018 resulting from the September 2017 issuance of our Senior Secured Notes would be offset by lower average interest rates on outstanding indebtedness. We also recognized a loss on prepayment of debt in the third quarter of 2017 aggregating \$7.1 million, associated with the prepayment and termination of our term loan indebtedness.

Income tax expense - We recognized income tax expense of \$14.1 million in the third quarter of 2018 compared to income tax expense of \$6.1 million in the third quarter of 2017. The difference is primarily due to the net effect of higher earnings in the third quarter of 2017, the reversal of our deferred income tax asset valuation allowance associated with our German and Belgian operations in 2017 and the reversal of a significant portion of our reserve for uncertain tax positions in 2017. Our earnings are subject to income tax in various U.S. and non-U.S. jurisdictions, and effective in 2018 the income tax rates applicable to our pre-tax earnings (losses) of our non-U.S. operations. Excluding the effect of any increase or decrease in our deferred income tax asset valuation allowance or changes in our reserve for uncertain tax positions, we would generally expect our overall effective tax rate to be higher than the U.S. federal statutory tax rate of 21% primarily because of our non-U.S. operations. Prior to 2018, the income tax rates applicable to our pre-tax earnings (losses) of our non-U.S. operations were generally lower than the U.S. federal statutory tax rate of 35%. See Note 11 to our Condensed Consolidated Financial Statements for a tabular reconciliation of our statutory income tax provision to our actual tax provision.

We have substantial net operating loss ("NOL") carryforwards in Germany (the equivalent of \$652 million for German corporate purposes and \$.5 million for German trade tax purposes at December 31, 2017) and in Belgium (the equivalent of \$50 million for Belgian corporate tax purposes at December 31, 2017), all of which have an indefinite carryforward period. As a result, we have net deferred income tax assets with respect to these two jurisdictions, primarily related to these NOL carryforwards. The German corporate tax is similar to the U.S. federal income tax, and the German trade tax is similar to the U.S. state income tax. As discussed in the 2017 Annual Report, commencing June 30, 2015, we concluded that we were required to recognize a non-cash deferred income tax asset valuation allowance under the more-likely-than-not recognition criteria with respect to our German and Belgian net deferred income tax assets at such date. During the first six months of 2017, we recognized an aggregate non-cash deferred income tax benefit of \$12.7 million as a result of a net decrease in such deferred income tax asset valuation allowance, due to utilizing a portion of both the German and Belgian NOL during the period, including \$7.7 million in the second quarter of 2017. As also discussed in the 2017 Annual Report, at June 30, 2017, we concluded we had sufficient positive evidence under the more-likely-than-not recognition criteria to support reversal of the entire valuation allowance related to our German and Belgian operations. In accordance with the ASC 740-270 guidance regarding accounting for income taxes at interim dates, the amount of the valuation allowance reversed at June 30, 2017 (\$149.9 million, of which \$141.9 million related to Germany and \$8.0 million related to Belgium) relates to our change in judgment at that date regarding the realizability of the related deferred income tax asset as it relates to future years (i.e. 2018 and after). A change in judgment regarding the realizability of deferred tax assets as it relates to the current year is considered in determining the estimated annual effective tax rate for the year and is recognized throughout the year, including interim periods subsequent to the date of the change in judgment. Accordingly, our income tax benefit in calendar 2017 includes an aggregate non-cash deferred income tax benefit of \$186.7 million related to the reversal of the German and Belgian valuation allowance, comprised of \$12.7 million recognized in the first half of 2017 (noted above) related to the utilization of a portion of both the German and Belgian NOLs during such period, \$149.9 million related to the portion of the valuation allowance reversed as of June 30, 2017 and \$24.1 million recognized in the second half of 2017 (including \$7.8 million reversed in the third quarter) related to the utilization of a portion of both the German and Belgian NOLs during such period. Our deferred income tax asset valuation allowance increased \$13.7 million in 2017 as a result of changes in currency exchange rates, which increase was recognized as part of other comprehensive income (loss).

As discussed in the 2017 Annual Report, on December 22, 2017, the 2017 Tax Act was enacted into law. This new tax legislation, among other changes, (i) reduced the U.S. Federal corporate income tax rate from 35% to 21% effective January 1, 2018; (ii) implemented a territorial tax system and imposed a one-time repatriation tax ("Transition Tax") on the deemed repatriation of the post-1986 undistributed earnings of non-U.S. subsidiaries accumulated up through December 31, 2017, regardless of whether such earnings are repatriated; (iii) eliminated U.S. tax on future non-U.S. earnings (subject to certain exceptions); (iv) eliminated the domestic production activities deduction beginning in 2018; (v) eliminated the net operating loss carryback and provides for an indefinite carryforward period subject to an 80% annual usage limitation; (vi) allows for the expensing of certain capital expenditures;

(vii) imposed a tax on global intangible low-tax income ("GILTI") beginning in 2018; (viii) imposed a base erosion anti-abuse tax ("BEAT") beginning in 2018; and (ix) amended the rules limiting the deduction for business interest expense beginning in 2018. Following the enactment of the 2017 Tax Act, the Securities and Exchange Commission issued Staff Accounting Bulletin ("SAB") 118 to provide guidance on the accounting and reporting impacts of the 2017 Tax Act. SAB 118 states that companies should account for changes related to the 2017 Tax Act in the period of enactment if all information is available and the accounting can be completed. In situations where companies do not have enough information to complete the accounting in the period of enactment, a company must either 1) record an estimated provisional amount if the impact of the change can be reasonably estimated; or 2) continue to apply the accounting guidance that was in effect immediately prior to the 2017 Tax Act if the impact of the change cannot be reasonably estimated. If estimated provisional amounts are recorded, SAB 118 provides a measurement period of no longer than one year during which companies should adjust those amounts as additional information becomes available in the reporting period within the measurement period in which such adjustment is determined.

Under GAAP, we are required to revalue our net deferred tax asset associated with our U.S. net deductible temporary differences in the period in which the new tax legislation is enacted based on deferred tax balances as of the enactment date, to reflect the effect of such reduction in the corporate income tax rate. Our temporary differences as of December 31, 2017 were not materially different from our temporary differences as of the enactment date, accordingly revaluation of our net deductible temporary differences was based on our net deferred tax asset as of December 31, 2017. Such revaluation was recognized in continuing operations and was not material to us.

Prior to the enactment of the 2017 Tax Act, the undistributed earnings of our European subsidiaries were deemed to be permanently reinvested (we had not made a similar determination with respect to the undistributed earnings of our Canadian subsidiary). Pursuant to the Transition Tax provisions imposing a one-time repatriation tax on post-1986 undistributed earnings, we recognized a provisional current income tax expense of \$76.2 million in the fourth quarter of 2017. The amounts recorded as of December 31, 2017 as a result of the 2017 Tax Act represented estimates based on information currently available. We elected to pay such tax over an eight year period beginning in 2018, including approximately \$6.1 million which was paid in April 2018 (for the 2017 tax year) and \$4.6 million which was paid in the second and third quarters of 2018 (for the 2018 tax year). We did not make any measurement-period adjustments to the provisional amounts recorded for this item during the first six months of 2018 because no new information became available during the period that required an adjustment. During the third quarter of 2018, in conjunction with finalizing our federal income tax return and based on additional information that became available (including proposed regulations issued by the IRS in August 2018 with respect to the Transition Tax), we recognized a provisional income tax benefit of \$1.7 million which amount is recorded as a measurement-period adjustment, reducing the provisional income tax expense of \$76.2 million recognized in the fourth quarter of 2017. As a result, at September 30, 2018, taking into account the prior Transition Tax installments payments of \$10.7 million (noted above), the balance of our unpaid Transition Tax aggregates \$63.8 million, which will be paid in quarterly installments over the remainder of the eight year period. Of such \$63.8 million, \$58.1 million is recorded as a noncurrent payable to affiliate (income taxes payable to Valhi) classified as a noncurrent liability in our Condensed Consolidated Balance Sheet at September 30, 2018, and \$5.7 million is included with our current payable to affiliate (income taxes payable to Valhi) classified as a current liability (a portion of our noncurrent income tax payable to affiliate was reclassified to our current payable to affiliate for the portion of our 2019 Transition Tax installment due within the next twelve months). The issuance of final regulations and/or additional guidance with respect to the Transition Tax may impact the amount of the Transition Tax recognized in the fourth quarter of 2017, as adjusted in the third quarter of 2018. We are also continuing to gather information and await further guidance from the state jurisdictions in which we operate with respect to the Transition Tax. We will complete our accounting for this item within the prescribed measurement period ending December 22, 2018, pursuant to the guidance under SAB 118, and if we determine an adjustment to the provisional amounts recognized at December 31, 2017 and September 30, 2018 is required, we will recognize such adjustment in the reporting period within the SAB 118 measurement period in which such adjustment is determined.

Prior to the enactment of the 2017 Tax Act the undistributed earnings of our European subsidiaries were deemed to be permanently reinvested (we had not made a similar determination with respect to the undistributed earnings of our Canadian subsidiary). As a result of the implementation of a territorial tax system under the 2017 Tax Act, effective January 1, 2018, and the Transition Tax which in effect taxes the post-1986 undistributed earnings of our non-U.S. subsidiaries accumulated up through December 31, 2017, we determined effective December 31, 2017 that all of the post-1986 undistributed earnings of our European subsidiaries are not permanently reinvested. Accordingly, in the fourth quarter of 2017 we recognized an aggregate provisional non-cash deferred income tax expense of \$4.5 million based on our reasonable estimates of the U.S. state and non-U.S. income tax and withholding tax liability attributable to all of such previously-considered permanently reinvested undistributed earnings through December 31, 2017. The amounts recorded as of December 31, 2017 as a result of the 2017 Tax Act represented estimates based on information currently available. We have not made any measurement-period adjustments to the provisional amounts recorded at December 31, 2017 for this item during the first nine months of 2018. However, we recorded a provisional non-cash deferred income tax expense of \$2.5 million for the estimated U.S. state and non-U.S. income tax and withholding tax liability attributable to the 2018 undistributed earnings of our non-U.S. subsidiaries in the first nine months of 2018, including withholding taxes related to the undistributed earnings of our Canadian subsidiary. We are continuing our review of certain other provisions under the 2017 Tax Act

and waiting on further guidance primarily from the state jurisdictions in which we operate that may impact our determination of the aggregate temporary differences attributable to our investments in our non-U.S. subsidiaries. We will complete our accounting for this item within the prescribed measurement period ending December 22, 2018, pursuant to the guidance under SAB 118, and if we determine an adjustment to the provisional amounts recognized at December 31, 2017 and September 30, 2018 are required, we will recognize such adjustment in the reporting period within the SAB 118 measurement period in which such adjustment is determined.

Under U.S. GAAP, as it relates to the new GILTI tax rules, we are allowed to make an accounting policy choice of either (1) treating taxes due on future U.S. inclusions in taxable income related to GILTI as a current-period expense when incurred (the "period cost method") or (2) factoring such amounts into the measurement of our deferred taxes (the "deferred method"). Our selection of an accounting policy related to the GILTI tax provisions will depend, in part, on analyzing our global income to determine whether we expect to have future U.S. inclusions in taxable income related to GILTI and, if so, what the impact is expected to be. While our future global operations depend on a number of different factors, we do expect to have future U.S. inclusions in taxable income related to GILTI. As such, we performed an analysis of GILTI's impact on our provision and determined the impact is not material. Because the impact is not material to our tax provision, we have not recorded any adjustments related to potential GILTI tax in our financial statements in the first nine months of 2018. Further, we have not made a policy decision regarding whether to record deferred taxes on GILTI or record GILTI tax as a current-period expense when incurred. We will complete our policy election for this item within the prescribed measurement period ending December 22, 2018, pursuant to the guidance under SAB 118 and if we determine such policy election impacts our provision, we will recognize an adjustment in the reporting period within the SAB 118 measurement period in which such adjustment is determined. Similarly, we have evaluated the tax impact of BEAT on our tax provision in the first nine months of 2018 and determined that the tax law has no material impact on our tax provision as we have historically not entered into international payments between related parties that are unrelated to cost of goods sold.

Nine months ended September 30, 2018 compared to the nine months ended September 30, 2017

2018 1,312.5 846.8	100%
•	
•	
846.8	0=
	65
465.7	35
173.7	13
4.2	1
(10.7)	(1)
285.5	22%
	4.2 (10.7)

			% Change
TiO ₂ operating statistics:			
Sales volumes*	450	385	(15)%
Production volumes*	427	400	(6)%
Percentage change in net sales:			
TiO ₂ product pricing			18%
TiO ₂ sales volumes			(15)
TiO ₂ product mix/other			(4)
Changes in currency exchange rates			4
Total		_	3%
		_	

 ^{*} Thousands of metric tons

Net sales - Net sales in the first nine months of 2018 increased 3%, or \$36.8 million, compared to the first nine months of 2017 primarily due to the net effect of an 18% increase in average TiO_2 selling prices (which increased net sales by approximately \$230 million) and a 15% decrease in sales volumes (which decreased net sales by approximately \$191 million). TiO_2 selling prices will increase or decrease generally as a result of competitive market pressures, changes in the relative level of supply and demand as well as changes in raw material and other manufacturing costs.

Our sales volumes decreased 15% in the first nine months of 2018 as compared to the record first nine months of 2017 primarily due to a combination of factors including (i) lower sales in all major markets resulting from a controlled ramp-up in January 2018 as we brought the second phase of our new global enterprise resource planning system online; (ii) inventory management to assure adequate supply to our customers during the spring and summer necessitated by the lower production volumes in the first three months

of the year (as discussed below); (iii) product availability in the second quarter; and (iv) customer inventory level changes in the second and third quarters as discussed above. In addition to the impact of changes in average TiO₂ selling prices and sales volumes, we estimate that changes in currency exchange rates increased our net sales by approximately \$53 million as compared to the first nine months of 2017.

Cost of sales and gross margin - Cost of sales decreased \$35.5 million in the first nine months of 2018 compared to the same period in 2017 primarily due to the net impact of a 15% decrease in sales volumes, 6% decrease in TiO₂ production volumes, higher raw materials and other production costs of approximately \$75 million (primarily caused by higher third-party feedstock ore costs) and currency fluctuations (primarily the euro). The decrease in TiO₂ production volumes in the first nine months of 2018 compared to the production volumes in the first nine months of 2017 was primarily due to maintenance activities at certain facilities in 2018, and the implementation of a productivity-enhancing improvement project at our Belgian facility in the first quarter of 2018. Our cost of sales as a percentage of net sales decreased to 65% in the first nine months of 2018 compared to 69% in the same period of 2017 as the favorable impact of higher average selling prices more than offset the unfavorable effects related to lower production volumes and higher raw materials and other production costs, as discussed above.

Gross margin as a percentage of net sales increased to 35% in the first nine months of 2018 compared to 31% in the first nine months of 2017. As discussed and quantified above, our gross margin increased primarily due to the net effect of higher average selling prices, lower sales and production volumes and higher raw materials and other production costs.

Selling, general and administrative expense - Selling, general and administrative expense in the first nine months of 2018 was \$173.7 million, an increase of \$26.1 million compared to the first nine months of 2017 in part due to higher general and administrative costs related to the implementation of a new accounting and manufacturing software system and higher sales support costs.

Income from operations - Income from operations increased by \$58.7 million, or 26%, in the first nine months of 2018 compared to the first nine months of 2017. Income from operations as a percentage of net sales increased to 22% in the first nine months of 2018 from 18% in the same period of 2017. This increase was driven by the increase in gross margin, discussed above. We estimate that changes in currency exchange rates increased income from operations by approximately \$26 million in the first nine months of 2018 as compared to the same period in 2017.

Other non-operating income (expense) - Beginning on January 1, 2018 with the adoption of ASU 2016-01, all of our marketable equity securities will continue to be carried at fair value, but any unrealized gains or losses on the securities are now recognized in Marketable equity securities on our Condensed Consolidated Statements of Income. See Notes 4 and 15 to our Condensed Consolidated Financial Statements. Other components of net periodic pension and OPEB cost in the first nine months of 2018 was comparable to the first nine months of 2017. See Notes 10 and 15 to our Condensed Consolidated Financial Statements. Interest expense in the first nine months of 2018 was comparable to the first nine months of 2017. We currently expect our interest expense for all of 2018 will be comparable to 2017, as higher average debt levels in 2018 resulting from the September 2017 issuance of our Senior Secured Notes would be offset by lower average interest rates on outstanding indebtedness. We also recognized a loss on prepayment of debt in the third quarter of 2017 aggregating \$7.1 million, associated with the prepayment and termination of our term loan indebtedness.

Income tax expense (benefit) - We recognized income tax expense of \$75.5 million in the first nine months of 2018 compared to an income tax benefit of \$114.0 million in the first nine months of 2017. The difference is primarily due to the effect of the reversal of our deferred income tax asset valuation allowance associated with our German and Belgian operations in 2017, as discussed above. Our earnings are subject to income tax in various U.S. and non-U.S. jurisdictions, and effective in 2018 the income tax rates applicable to our pre-tax earnings (losses) of our non-U.S. operations are generally higher than the income tax rates applicable to our U.S. operations. Excluding the effect of any increase or decrease in our deferred income tax asset valuation allowance or changes in our reserve for uncertain tax positions, we would generally expect our overall effective tax rate to be higher than the U.S. federal statutory tax rate of 21% primarily because of our non-U.S. operations. Prior to 2018, the income tax rates applicable to our pre-tax earnings (losses) of our non-U.S. operations were generally lower than the U.S. federal statutory tax rate of 35%. See Note 11 to our Condensed Consolidated Financial Statements for a tabular reconciliation of our statutory income tax provision to our actual tax provision.

Effects of Currency Exchange Rates

We have substantial operations and assets located outside the United States (primarily in Germany, Belgium, Norway and Canada). The majority of our sales from non-U.S. operations are denominated in currencies other than the U.S. dollar, principally the euro, other major European currencies and the Canadian dollar. A portion of our sales generated from our non-U.S. operations is denominated in the U.S. dollar (and consequently our non-U.S. operations will generally hold U.S. dollars from time to time). Certain raw materials used in all our production facilities, primarily titanium-containing feedstocks, are purchased in U.S. dollars, while labor

and other production and administrative costs are incurred primarily in local currencies. Consequently, the translated U.S. dollar value of our non-U.S. sales and operating results are subject to currency exchange rate fluctuations which may favorably or unfavorably impact reported earnings and may affect the comparability of period-to-period operating results. In addition to the impact of the translation of sales and expenses over time, our non-U.S. operations also generate currency transaction gains and losses which primarily relate to (i) the difference between the currency exchange rates in effect when non-local currency sales or operating costs (primarily U.S. dollar denominated) are initially accrued and when such amounts are settled with the non-local currency, (ii) changes in currency exchange rates during time periods when our non-U.S. operations are holding non-local currency (primarily U.S. dollars), and (iii) relative changes in the aggregate fair value of currency forward contracts held from time to time. As discussed in Note 14 to our Condensed Consolidated Financial Statements, we periodically use currency forward contracts to manage a portion of our currency exchange risk, and relative changes in the aggregate fair value of any currency forward contracts we hold from time to time serves in part to mitigate the currency transaction gains or losses we would otherwise recognize from the first two items described above.

Overall, we estimate that fluctuations in currency exchange rates had the following effects on the reported amounts of our sales and income from operations for the periods indicated.

thr	impact of ee months ende	cnanges in currency 1 September 30, 201	/ excnange rates 18 vs September 30, 2	017		
		Transaction gains/(losses) recognized				Total currency impact
	2	017 2	2018 Ch			8 vs 2017
			(In m	nillions)		
Impact on:						
Net sales	\$	- \$	- \$	- \$	- \$	-
Income from operations		(4)	(1)	3	4	7

Changes in currency exchange rates (primarily the euro) had a nominal effect on our net sales as compared to the third quarter of 2017.

The \$7 million increase in income from operations was comprised of the following:

- Approximately \$3 million from net currency transaction gains primarily caused by relative changes in currency exchange rates at each
 applicable balance sheet date between the U.S. dollar and the euro, Canadian dollar and the Norwegian krone, which causes increases or
 decreases, as applicable, in U.S. dollar-denominated receivables and payables and U.S. dollar currency held by our non-U.S. operations, and
- Approximately \$4 million from net currency translation gains primarily caused by the strengthening of the U.S. dollar relative to the Canadian dollar, as its local currency-denominated operating costs were translated into less U.S. dollars in 2018 as compared to 2017 and such translation, as it related to the U.S. dollar relative to the euro, had a nominal effect on income from operations in 2018 as compared to 2017.

Impact of changes in currency exchange rates nine months ended September 30, 2018 vs September 30 2017 Translation Transaction gains/(losses) gains -Total currency recognized impact of impact 2018 vs 2017 2017 2018 Change rate changes (In millions) Impact on: Net sales \$ \$ \$ \$ 53 \$ 53 Income from operations (8)4 14 26

The \$53 million increase in net sales (translation gain) was caused primarily by a weakening of the U.S. dollar relative to the euro, as our eurodenominated sales were translated into more U.S. dollars in 2018 as compared to 2017. The weakening of the U.S. dollar relative to the Canadian dollar and the Norwegian krone in 2018 did not have a significant effect on the reported amount of our net sales, as a substantial portion of the sales generated by our Canadian and Norwegian operations are denominated in the U.S. dollar.

The \$26 million increase in income from operations was comprised of the following:

- Approximately \$12 million from net currency transaction gains primarily caused by relative changes in currency exchange rates at each
 applicable balance sheet date between the U.S. dollar and the euro, Canadian dollar and the Norwegian krone, which causes increases or
 decreases, as applicable, in U.S. dollar-denominated receivables and payables and U.S. dollar currency held by our non-U.S. operations, and
- Approximately \$14 million from net currency translation gains primarily caused by a weakening of the U.S. dollar relative to the euro as the positive effects of the weaker U.S. dollar on euro-denominated sales more than offset the unfavorable effects of euro-denominated operating costs being translated into more U.S. dollars in 2018 as compared to 2017, partially offset by the weakening of the U.S. dollar relative to the Canadian dollar, as its local currency-denominated operating costs were translated into more U.S. dollars in 2018 as compared to 2017.

Outlook

We expect our production volumes in 2018 to be lower as compared to the record 2017 production volumes. Assuming current global economic conditions continue and based on anticipated production levels, we expect our 2018 sales volumes to be lower as compared to record 2017 sales volumes. As expected, customer inventory level changes we experienced in the second quarter of 2018 continued into the third quarter. However, we believe customer inventory level changes were short term and worldwide demand remains solid. We will continue to monitor current and anticipated near-term customer demand levels and align our production and inventories accordingly.

The cost of third-party feedstock ore we purchased in the first nine months of 2018 was higher as compared to the fourth quarter of 2017, and such higher cost feedstock ore was reflected in our results of operations beginning in the second quarter of 2018. We expect our cost of sales per metric ton of TiO₂ sold in 2018 will be moderately higher than our per-metric ton cost in 2017 primarily due to higher third-party feedstock ore costs along with the unfavorable effects of lower production volumes.

We started 2018 with average selling prices 27% higher than the beginning of 2017, and average selling prices increased by an additional 3% in the first six months of 2018 (most of which occurred in the first quarter). Average selling prices declined by 2% during the third quarter of 2018. Industry data indicates that overall TiO₂ inventory held by producers stood at adequate-to-low levels in the third quarter of 2018. We expect changes in customer inventory levels to continue to decrease through the fourth quarter of 2018 which could lead to some selling price decreases during the fourth quarter of 2018.

Overall, we expect our sales in 2018 will be comparable to 2017, as the favorable impact of expected higher average selling prices in 2018 would be offset by the unfavorable impact of expected lower sales volumes. In addition, we expect our income from operations in 2018 will be comparable to 2017, as the favorable impact of expected higher average selling prices in 2018 would be offset by the unfavorable impact of expected lower sales and production volumes and higher raw material and other production costs (principally feedstock ore). However, we expect our net income in 2018 will be lower as compared to 2017 due to the favorable impact of the aggregate net income tax benefit of \$136.5 million we recognized in 2017.

Due to the constraints of high capital costs and extended lead time associated with adding significant new TiO₂ production capacity, especially for premium grades of TiO₂ products produced from the chloride process, we believe increased and sustained profit margins will be necessary to financially justify major expansions of western producers' TiO₂ production capacity required to meet expected future growth in demand. Any such major expansion of TiO₂ production capacity, if announced, would take a number of years before such production would become available to meet future growth in demand. Certain Chinese producers have recently announced expansion plans, but the extent to which such expansion plans will be implemented, or if implemented the resulting additional capacity and the timing thereof is uncertain.

Our expectations for our future operating results are based upon a number of factors beyond our control, including worldwide growth of gross domestic product, competition in the marketplace, continued operation of competitors, unexpected or earlier-than-expected capacity additions or reductions and technological advances. If actual developments differ from our expectations, our results of operations could be unfavorably affected.

LIQUIDITY AND CAPITAL RESOURCES

Consolidated cash flows

Operating activities

Trends in cash flows as a result of our operating activities (excluding the impact of significant asset dispositions and relative changes in assets and liabilities) are generally similar to trends in our earnings. In addition to the impact of the operating, investing and financing cash flows discussed below, changes in the amount of cash, cash equivalents and restricted cash we report from period to period can be impacted by changes in currency exchange rates, since a portion of our cash, cash equivalents and restricted cash is held by our non-U.S. subsidiaries.

Cash provided by operating activities was \$199.0 million in the first nine months of 2018 compared to \$218.3 million in the first nine months of 2017. This \$19.3 million decrease in the amount of cash provided was primarily due to the net effect of the following:

- higher income from operations in 2018 of \$58.7 million,
- higher amount of net cash used associated with relative changes in our inventories, receivables, payables and accruals in 2018 of \$58.5 million as compared to 2017, and
- higher cash paid for taxes in 2018 of \$17.7 million due to timing of tax payments as well as the aggregate \$10.7 million we paid in 2018 related to the Transition Tax provisions of the 2017 Tax Act.

Changes in working capital were affected by accounts receivable and inventory changes. As shown below:

- Our average days sales outstanding, or DSO, increased from December 31, 2017 to September 30, 2018, primarily due to the effects of lower sales volumes and relative changes in the timing of collections, and
- Our average days sales in inventory, or DSI, increased from December 31, 2017 to September 30, 2018, primarily due to higher inventory volumes.

For comparative purposes, we have also provided comparable prior year numbers below.

	December 31, 2016	September 30, 2017	December 31, 2017	September 30, 2018
DSO	65 days	66 days	63 days	74 days
DSI	71 days	47 days	62 days	77 days

Investing activities

Our capital expenditures of \$40.7 million and \$35.4 million in the first nine months of 2017 and 2018, respectively, were primarily to maintain and improve the cost effectiveness of our manufacturing facilities. In addition, approximately \$14.3 million and \$1.7 million, respectively, of such capital expenditures relate to the implementation of our new accounting and manufacturing system.

In addition, during the first nine months of 2018 we loaned \$2.6 million and subsequently collected \$16.2 million under our unsecured revolving demand promissory note with Valhi.

Financing activities

During the first nine months of 2018, we paid quarterly dividends to stockholders aggregating \$.51 per share (\$59.1 million). We paid quarterly dividends aggregating \$.45 per share (\$52.2 million) during the first nine months of 2017.

Outstanding debt obligations

At September 30, 2018, our consolidated debt comprised:

- €400 million aggregate outstanding on our KII 3.75% Senior Secured Notes (\$463.0 million carrying amount, net of unamortized debt issuance costs) due in September 2025, and
- approximately \$2.9 million of other indebtedness.

Our North American and European revolvers and our Senior Notes contain a number of covenants and restrictions which, among other things, restrict our ability to incur or guarantee additional debt, incur liens, pay dividends or make other restricted payments, or merge or consolidate with, or sell or transfer substantially all of our assets to, another entity, and contain other provisions and restrictive covenants customary in lending transactions of this type. Certain of our credit agreements contain provisions which

could result in the acceleration of indebtedness prior to their stated maturity for reasons other than defaults for failure to comply with typical financial or payment covenants. For example, certain credit agreements allow the lender to accelerate the maturity of the indebtedness upon a change of control (as defined in the agreement) of the borrower. In addition, certain credit agreements could result in the acceleration of all or a portion of the indebtedness following a sale of assets outside the ordinary course of business. Our European revolving credit facility also requires the maintenance of certain financial ratios, and one of such requirements is based on the ratio of net debt to the last twelve months EBITDA of the borrowers. The terms of all of our debt instruments (including revolving lines of credit for which we have no outstanding borrowings at September 30, 2018) are discussed in Note 8 to our Consolidated Financial Statements included in our 2017 Annual Report. We are in compliance with all of our debt covenants at September 30, 2018. We believe that we will be able to continue to comply with the financial covenants contained in our credit facilities through their maturity.

Our assets consist primarily of investments in operating subsidiaries, and our ability to service our obligations, including the Senior Notes, depends in part upon the distribution of earnings of our subsidiaries, whether in the form of dividends, advances or payments on account of intercompany obligations or otherwise. Our Senior Notes are collateralized by, among other things, a first priority lien on (i) 100% of the common stock or other ownership interests of each existing and future direct domestic subsidiary of KII and the guarantors, and (ii) 65% of the voting common stock or other ownership interests and 100% of the non-voting common stock or other ownership interests of each non-U.S. subsidiary that is directly owned by KII or any guarantor. Our North American revolving credit facility is collateralized by, among other things, a first priority lien on the borrower's trade receivables and inventories. Our European revolving credit facility is collateralized by, among other things, the accounts receivable and inventories of the borrowers plus a limited pledge of all the other assets of the Belgian borrower.

Future cash requirements

Liquidity

Our primary source of liquidity on an ongoing basis is cash flows from operating activities which is generally used to (i) fund capital expenditures, (ii) repay any short-term indebtedness incurred for working capital purposes and (iii) provide for the payment of dividends. From time-to-time we will incur indebtedness, generally to (i) fund short-term working capital needs, (ii) refinance existing indebtedness or (iii) fund major capital expenditures or the acquisition of other assets outside the ordinary course of business. We will also from time-to-time sell assets outside the ordinary course of business and use the proceeds to (i) repay existing indebtedness, (ii) make investments in marketable and other securities, (iii) fund major capital expenditures or the acquisition of other assets outside the ordinary course of business or (iv) pay dividends.

The TiO_2 industry is cyclical, and changes in industry economic conditions significantly impact earnings and operating cash flows. Changes in TiO_2 pricing, production volumes and customer demand, among other things, could significantly affect our liquidity.

We routinely evaluate our liquidity requirements, alternative uses of capital, capital needs and availability of resources in view of, among other things, our dividend policy, our debt service and capital expenditure requirements and estimated future operating cash flows. As a result of this process, we have in the past and may in the future seek to reduce, refinance, repurchase or restructure indebtedness, raise additional capital, repurchase shares of our common stock, modify our dividend policy, restructure ownership interests, sell interests in our subsidiaries or other assets, or take a combination of these steps or other steps to manage our liquidity and capital resources. Such activities have in the past and may in the future involve related companies. In the normal course of our business, we may investigate, evaluate, discuss and engage in acquisition, joint venture, strategic relationship and other business combination opportunities in the TiO_2 industry. In the event of any future acquisition or joint venture opportunity, we may consider using then-available liquidity, issuing our equity securities or incurring additional indebtedness.

At September 30, 2018, we had aggregate cash, cash equivalents and restricted cash on hand of \$433.4 million, of which \$205.4 million was held by non-U.S. subsidiaries. Following implementation of a territorial tax system under the 2017 Tax Act, repatriation of any cash and cash equivalents held by our non-U.S. subsidiaries would not be expected to result in any material income tax liability as a result of such repatriation. At September 30, 2018, we had approximately \$106.2 million available for additional borrowing under our North American revolving credit facility. Based on the terms of our European revolving credit facility (including the net debt to EBITDA financial test discussed above) and the borrowers' EBITDA over the last twelve months ended September 30, 2018, the full €90.0 million amount of the credit facility (\$105.7 million) was available for borrowing at September 30, 2018. We could borrow all available amounts under each of our credit facilities without violating our existing debt covenants. Based upon our expectation for the TiO₂ industry and anticipated demands on cash resources, we expect to have sufficient liquidity to meet our short term obligations (defined as the twelve-month period ending September 30, 2019) and our long-term obligations (defined as the five-year period ending September 30, 2023, our time period for long-term budgeting). If actual developments differ from our expectations, our liquidity could be adversely affected.

Capital expenditures

We currently estimate that we will invest approximately \$65 million in capital expenditures primarily to maintain and improve our existing facilities during 2018, including the \$35.4 million we have spent through September 30, 2018.

Stock repurchase program

At September 30, 2018, we have 1,951,000 shares available for repurchase under a stock repurchase program authorized by our board of directors.

Off-balance sheet financing

We do not have any off-balance sheet financing agreements other than the operating leases discussed in our 2017 Annual Report.

Commitments and contingencies

See Notes 11 and 13 to the Condensed Consolidated Financial Statements for a description of certain income tax contingencies and legal proceedings.

Recent accounting pronouncements

See Note 15 to our Condensed Consolidated Financial Statements.

Critical accounting policies

For a discussion of our critical accounting policies, refer to Part I, Item 7 - "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our 2017 Annual Report. There have been no changes in our critical accounting policies during the first nine months of 2018.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK

General

We are exposed to market risk, including currency exchange rates, interest rates, equity security and raw material prices. There have been no material changes in these market risks since we filed our 2017 Annual Report. See also Part I, Item 7A. - "Quantitative and Qualitative Disclosure About Market Risk" in our 2017 Annual Report, and Note 14 to our Condensed Consolidated Financial Statements.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of disclosure controls and procedures

We maintain disclosure controls and procedures which, as defined in Exchange Act Rule 13a-15(e), means controls and other procedures that are designed to ensure that information required to be disclosed in the reports that we file or submit to the SEC under the Securities Exchange Act of 1934, as amended (the "Act"), is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information we are required to disclose in the reports we file or submit to the SEC under the Act is accumulated and communicated to our management, including our principal executive officer and our principal financial officer, or persons performing similar functions, as appropriate to allow timely decisions to be made regarding required disclosure. Each of Robert D. Graham, our Vice Chairman of the Board, President and Chief Executive Officer and Gregory M. Swalwell, our Executive Vice President and Chief Financial Officer, have evaluated the design and effectiveness of our disclosure controls and procedures as of September 30, 2018. Based upon their evaluation, these executive officers have concluded that our disclosure controls and procedures are effective as of the date of such evaluation.

Internal control over financial reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting which, as defined by Exchange Act Rule 13a-15(f) means a process designed by, or under the supervision of, our principal executive and principal financial officers, or persons performing similar functions, and effected by the board of directors, management and other personnel, 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, and includes those policies and procedures that:

- Pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of our assets,
- Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors, and
- Provide reasonable assurance regarding prevention or timely detection of an unauthorized acquisition, use or disposition of our assets that could have a material effect on our Condensed Consolidated Financial Statements.

Other

As permitted by the SEC, our assessment of internal control over financial reporting excludes (i) internal control over financial reporting of our equity method investees and (ii) internal control over the preparation of any financial statement schedules which would be required by Article 12 of Regulation S-X. However, our assessment of internal control over financial reporting with respect to our equity method investees did include our controls over the recording of amounts related to our investment that are recorded in our Condensed Consolidated Financial Statements, including controls over the selection of accounting methods for our investments, the recognition of equity method earnings and losses and the determination, valuation and recording of our investment account balances.

Changes in internal control over financial reporting

In January 2018, we implemented a new enterprise resource planning system covering sales, procurement, manufacturing and plant maintenance. We believe we have maintained appropriate internal control over financial reporting during such implementation period. There has been no other change to our internal control over financial reporting during the quarter ended September 30, 2018 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Part II. OTHER INFORMATION

Item 1. Legal Proceedings

Refer to Note 13 to our Condensed Consolidated Financial Statements and our 2017 Annual Report for descriptions of certain legal proceedings.

Item 1A. Risk Factors

For a discussion of the risk factors related to our businesses, refer to Part I, Item 1A, "Risk Factors," in our 2017 Annual Report. There have been no material changes to such risk factors during the nine months ended September 30, 2018.

n 6.	Exhibits	
	31.1	Certification
	31.2	Certification
	32.1	Certification
	101.INS	XBRL Instance Document
	101.SCH	XBRL Taxonomy Extension Schema
	101.CAL	XBRL Taxonomy Extension Calculation Linkbase
	101.DEF	XBRL Taxonomy Extension Definition Linkbase
	101.LAB	XBRL Taxonomy Extension Label Linkbase
	101.PRE	XBRL Taxonomy Extension Presentation Linkbase

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.

Kronos Worldwide, Inc.

(Registrant)

Date: November 7, 2018 /s/ Gregory M. Swalwell

Gregory M. Swalwell Executive Vice President and Chief Financial Officer (Principal Financial Officer)

Date: November 7, 2018 /s/ Tim C. Hafer

Tim C. Hafer

Vice President and Controller (Principal Accounting Officer)

CERTIFICATION

I, Robert D. Graham, certify that:

- 1) I have reviewed this quarterly report on Form 10-Q of Kronos Worldwide, Inc.;
- 2) Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report:
- 3) Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4) The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e)) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5) The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 7, 2018

/s/ Robert D. Graham Robert D. Graham Chief Executive Officer

CERTIFICATION

I, Gregory M. Swalwell, certify that:

- 1) I have reviewed this quarterly report on Form 10-Q of Kronos Worldwide, Inc.;
- 2) Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3) Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4) The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5) The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 7, 2018

/s/ Gregory M. Swalwell Gregory M. Swalwell Chief Financial Officer

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Kronos Worldwide, Inc. (the Company) on Form 10-Q for the quarter ended September 30, 2018 as filed with the Securities and Exchange Commission on the date hereof (the Report), I, Robert D. Graham, Chief Executive Officer of the Company, and I, Gregory M. Swalwell, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Robert D. Graham	
Robert D. Graham	
Chief Executive Officer	
/s/ Gregory M. Swalwell	
Gregory M. Swalwell	
Chief Financial Officer	

November 7, 2018

Note: The certification the registrant furnishes in this exhibit is not deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that Section. Registration Statements or other documents filed with the Securities and Exchange Commission shall not incorporate this exhibit by reference, except as otherwise expressly stated in such filing.