VALHI INC /DE/
Form 10-Q
November 08, 2018

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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 1-5467

VALHI, INC.

(Exact name of Registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	87-0110150 (IRS Employer Identification No.)
5430 LBJ Freeway, Suite 1700, Dallas, Texas (Address of principal executive offices)	75240-2620 (Zip Code)

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

Indicate by check mark:

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months and (2) has been subject to such filing

requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by checkmark whether the Registrant is a large accelerated filer, an accelerated filer, non-accelerated filer, smaller reporting company or emerging growth company. See definitions of “large accelerated filer”, “accelerated filer,” smaller reporting company,” and “emerging growth company” in Rule 12b-2 of the Act.

Large accelerated filer	Accelerated filer
Non-accelerated filer	Smaller reporting company
Emerging growth company	

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

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

Number of shares of the Registrant’s common stock outstanding on November 2, 2018: 339,185,449

VALHI, INC. AND SUBSIDIARIES

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Items 2, 3, 4 and 5 of Part II are omitted because there is no information to report.

VALHI, INC. AND SUBSIDIARIES

CONDENSED CONSOLIDATED BALANCE SHEETS

(In millions)

	December 31, 2017	September 30, 2018 (unaudited)
ASSETS		
Current assets:		
Cash and cash equivalents	$ 435.7	$ 571.5
Restricted cash equivalents	16.1	15.6
Marketable securities	3.0	2.2
Accounts and other receivables, net	365.8	381.7
Land held for development	16.5	9.9
Inventories, net	398.4	464.2
Other current assets	15.5	24.9
Current assets of discontinued operations	11.2	—
Total current assets	1,262.2	1,470.0
Other assets:		
Marketable securities	255.7	5.1
Investment in TiO_2 manufacturing joint venture	86.5	79.7
Goodwill	379.7	379.7
Deferred income taxes	119.8	94.8
Other assets	174.1	170.0
Noncurrent assets of discontinued operations	40.8	—
Total other assets	1,056.6	729.3
Property and equipment:		
Land	47.0	46.8
Buildings	261.6	256.1
Equipment	1,150.8	1,171.2
Mining properties	35.0	31.9
Construction in progress	58.3	41.1
	1,552.7	1,547.1
Less accumulated depreciation	964.0	977.0
Net property and equipment	588.7	570.1
Total assets	$ 2,907.5	$ 2,769.4

VALHI, INC. AND SUBSIDIARIES

CONDENSED CONSOLIDATED BALANCE SHEETS (CONTINUED)

(In millions)

	December 31, 2017	September 30, 2018 (unaudited)
LIABILITIES AND EQUITY		
Current liabilities:		
Current maturities of long-term debt	$ 1.6	$ 1.6
Accounts payable and accrual liabilities	257.1	343.6
Income taxes	25.1	36.7
Current liabilities of discontinued operations	47.3	—
Total current liabilities	331.1	381.9
Noncurrent liabilities:		
Long-term debt	1,041.5	809.7
Deferred income taxes	183.2	44.9
Payable to affiliates – income taxes	70.1	57.8
Accrued pension costs	266.4	256.7
Accrued environmental remediation and related costs	110.7	97.7
Accrued postretirement benefits costs	11.3	10.8
Other liabilities	73.6	94.9
Noncurrent liabilities of discontinued operations	52.9	—
Total noncurrent liabilities	1,809.7	1,372.5
Equity:		
Valhi stockholders' equity:		
Preferred stock	667.3	667.3
Common stock	3.6	3.6
Additional paid-in capital	—	—
Retained earnings (deficit)	(17.9)	209.3
Accumulated other comprehensive loss	(179.0)	(180.6)
Treasury stock, at cost	(49.6)	(49.6)
Total Valhi stockholders' equity	424.4	650.0
Noncontrolling interest in subsidiaries	342.3	365.0
Total equity	766.7	1,015.0
Total liabilities and equity	$ 2,907.5	$ 2,769.4

Commitments and contingencies (Notes 14 and 17)

See accompanying Notes to Condensed Consolidated Financial Statements.

VALHI, INC. AND SUBSIDIARIES

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
	(unaudited)			
Revenues and other income:				
Net sales	$496.5	$455.2	$1,383.6	$ 1,431.4
Other income, net	4.3	20.1	15.7	59.8
Total revenues and other income	500.8	475.3	1,399.3	1,491.2
Costs and expenses:				
Cost of sales	332.1	322.5	958.8	929.4
Selling, general and administrative	65.2	78.2	194.8	237.9
Litigation settlement expense, net	—	—	—	62.0
Loss on prepayment of debt	7.1	—	7.1	—
Other components of net periodic pension and OPEB expense	4.5	3.7	12.9	11.2
Interest	15.0	14.0	44.2	45.4
Total costs and expenses	423.9	418.4	1,217.8	1,285.9
Income from continuing operations before income taxes	76.9	56.9	181.5	205.3
Income tax expense (benefit)	14.7	(91.4)	(67.5)	(33.2)
Net income from continuing operations	62.2	148.3	249.0	238.5
Income (loss) from discontinued operations	1.7	.7	(108.2)	38.7
Net income	63.9	149.0	140.8	277.2
Noncontrolling interest in net income of subsidiaries	18.0	5.5	73.4	32.7
Net income attributable to Valhi stockholders	$45.9	$143.5	$67.4	$ 244.5
Amount attributable to Valhi stockholders:				
Income from continuing operations	$44.2	$142.8	$75.6	$ 205.8
Income (loss) from discontinued operations	1.7	.7	(108.2)	38.7
Net income attributable to Valhi stockholders	$45.9	143.5	$67.4	$ 244.5
Basic and diluted net income per share:				
Income from continuing operations	$.13	$.42	$.21	$ .60
Income (loss) from discontinued operations	–	—	(.31)	.11
Net income attributable to Valhi stockholders	$.13	$.42	$.20	$ .71
Cash dividends per share	$.02	$.02	$.06	$ .06

Basic and diluted weighted average shares outstanding	342.0	342.1	342.0	342.0

See accompanying Notes to Condensed Consolidated Financial Statements.

VALHI, INC. AND SUBSIDIARIES

CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(In millions)

	Three months ended September 30,		Nine months ended September 30,	
	2017	2018	2017	2018
	(unaudited)			
Net income	$63.9	$149.0	$140.8	$277.2
Other comprehensive income (loss), net of tax:				
Currency translation	26.1	4.2	46.2	(8.9)
Marketable securities	(1.1)	—	(1.9)	(.1)
Interest rate swap	1.6	—	1.7	—
Defined benefit pension plans	2.4	2.5	6.0	7.6
Other postretirement benefit plans	(.3)	(.2)	(.7)	(.7)
Total other comprehensive income (loss), net	28.7	6.5	51.3	(2.1)
Comprehensive income	92.6	155.5	192.1	275.1
Comprehensive income attributable to noncontrolling interest	24.7	7.3	85.7	32.2
Comprehensive income attributable to Valhi stockholders	$67.9	$148.2	$106.4	$242.9

See accompanying Notes to Condensed Consolidated Financial Statements.

VALHI, INC. AND SUBSIDIARIES

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

(In millions)

	Nine months ended September 30,	
	2017	2018
	(unaudited)	
Cash flows from operating activities:		
Net income	$140.8	$277.2
Depreciation and amortization	46.1	43.5
Benefit plan expense greater than cash funding	7.9	3.7
Deferred income taxes	(171.6)	(72.8)
Gain on sale of WCS	—	(58.4)
Gain on land sales	—	(12.5)
Securities transactions, net	(.1)	(12.6)
Distributions from TiO_2 manufacturing joint venture, net	3.8	5.5
Long-lived asset impairment	170.6	—
Loss on prepayment of debt	7.1	—
Payment for termination of interest rate swap	(3.3)	—
Other, net	2.2	14.3
Change in assets and liabilities:		
Accounts and other receivables, net	(75.7)	(45.3)
Inventories, net	39.6	(72.2)
Land held for development, net	(.2)	2.8
Accounts payable and accrued liabilities	47.0	73.0
Accounts with affiliates	(14.6)	27.8
Income taxes	13.7	9.6
Other, net	(9.0)	7.9
Net cash provided by operating activities	204.3	191.5
Cash flows from investing activities:		
Capital expenditures	(45.9)	(39.1)
Cash, cash equivalents and restricted cash and cash equivalents of discontinued operations at time of sale	—	(28.8)
Capitalized permit costs	(2.2)	—
Proceeds from sale of land	—	19.5
Purchases of marketable securities	(7.7)	(3.8)
Disposals of marketable securities	8.2	17.6
Other, net	(.2)	.1
Net cash used in investing activities	(47.8)	(34.5)
Cash flows from financing activities:		
Indebtedness:		
Borrowings	748.1	—
Principal payments	(597.8)	(10.2)
Deferred financing costs paid	(8.4)	—

Valhi cash dividends paid	(20.4)	(20.4)
Distributions to noncontrolling interest in subsidiaries	(10.5)	(11.8)
Net cash provided by (used in) financing activities	111.0	(42.4)
Cash, cash equivalents and restricted cash and cash equivalents - net change from:		
Operating, investing and financing activities	267.5	114.6
Effect of exchange rates on cash	11.3	(7.9)
Balance at beginning of period	196.5	489.4
Balance at end of period	$475.3	$596.1
Supplemental disclosures:		
Cash paid for:		
Interest, net of capitalized interest	$43.9	$48.2
Income taxes, net	36.6	31.2
Noncash investing activities:		
Change in accruals for capital expenditures	4.1	2.5
Sale of investment in Amalgamated Sugar Company LLC	—	250.0
Noncash financing activities:		
Trade payable to affiliate converted to indebtedness	—	36.3
Deemed repayment of Snake River Sugar Company indebtedness	—	(250.0)
Indebtedness borrowings paid directly to lender to settle refinanced indebtedness	9.3	—
Indebtedness principal payments paid directly by lender	(8.4)	—
Indebtedness borrowings paid directly to lender for debt issuance costs	(.9)	—

See accompanying Notes to Condensed Consolidated Financial Statements.

VALHI, INC. AND SUBSIDIARIES

CONDENSED CONSOLIDATED STATEMENT OF EQUITY

Nine months ended September 30, 2018

(In millions)

(unaudited)

	Valhi Stockholders' Equity							
	Preferred stock	Common stock	Additional paid-in capital	Retained earnings (deficit)	Accumulated other comprehensive loss	Treasury stock	Non-controlling interest	Total equity
Balance at December 31, 2017	$667.3	$ 3.6	$ ––	$ (17.9)	$ (179.0)	$ (49.6)	$ 342.3	$766.7
Change in accounting principle – ASU 2014-09	––	––	––	2.7	––	––	2.3	5.0
Balance at January 1, 2018, as adjusted	667.3	3.6	––	(15.2)	(179.0)	(49.6)	344.6	771.7
Net income	––	––	––	244.5	––	––	32.7	277.2
Other comprehensive loss, net	––	––	––	––	(1.6)	––	(.5)	(2.1)
Cash dividends	––	––	(.4)	(20.0)		––	(11.8)	(32.2)
Other, net	––	––	.4	––	––	––	—	.4
Balance at September 30, 2018	$667.3	$ 3.6	$ —	$ 209.3	$ (180.6)	$ (49.6)	$ 365.0	$1,015.0

See accompanying Notes to Condensed Consolidated Financial Statements.

VALHI, INC. AND SUBSIDIARIES

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

September 30, 2018

(unaudited)

Note 1—Organization and basis of presentation:

Organization— We are majority owned by a wholly-owned subsidiary of Contran Corporation ("Contran"), which owns approximately 92% of our outstanding common stock at September 30, 2018. 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 and us.

Basis of Presentation—Consolidated in this Quarterly Report are the results of our majority-owned and wholly-owned subsidiaries, including NL Industries, Inc., Kronos Worldwide, Inc., CompX International Inc., Tremont LLC, Basic Management, Inc. ("BMI") and The LandWell Company ("LandWell"). Kronos (NYSE: KRO), NL (NYSE: NL), and CompX (NYSE American: CIX) each file periodic reports with the Securities and Exchange Commission ("SEC"). In January 2018, we sold Waste Control Specialists LLC ("WCS"). See Note 3.

The unaudited Condensed Consolidated Financial Statements contained in this Quarterly Report have been prepared on the same basis as the audited Consolidated Financial Statements included in our Annual Report on Form 10-K for the year ended December 31, 2017 that we filed with the SEC on March 15, 2018 (the "2017 Annual Report"). In our opinion, we have made all necessary adjustments (which include only normal recurring adjustments, other than the gain on the sale of WCS recognized in the first quarter of 2018 as discussed in Note 3), 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 Valhi, Inc. and its subsidiaries (NYSE: VHI), taken as a whole.

Note 2—Business segment information:

Business segment	Entity	% controlled at September 30, 2018	
Chemicals	Kronos	80	%
Component products	CompX	87	%
Real estate management and development	BMI and LandWell	63% - 77	%

Our control of Kronos includes 50% we hold directly and 30% held directly by NL. We own 83% of NL. Our control of CompX is through NL. We own 63% of BMI. Our control of LandWell includes the 27% we hold directly and 50% held by BMI.

	Three months ended September 30,		Nine months ended September 30,	
	2017	2018	2017	2018
	(unaudited)			
	(In millions)			
Net sales:				
Chemicals	$464.5	$410.3	$1,275.7	$1,312.5
Component products	26.9	30.0	86.9	90.8
Real estate management and development	5.1	14.9	21.0	28.1
Total net sales	$496.5	$455.2	$1,383.6	$1,431.4
Cost of sales:				
Chemicals	$309.9	$291.7	$883.7	$848.3
Component products	18.8	20.4	59.6	60.5
Real estate management and development	3.4	10.4	15.5	20.6
Total cost of sales	$332.1	$322.5	$958.8	$929.4
Gross margin:				
Chemicals	$154.6	$118.6	$392.0	$464.2
Component products	8.1	9.6	27.3	30.3
Real estate management and development	1.7	4.5	5.5	7.5
Total gross margin	$164.4	$132.7	$424.8	$502.0
Operating income:				
Chemicals	$98.4	$61.0	$234.7	$295.2
Component products	3.4	4.5	12.5	14.9
Real estate management and development	1.3	3.7	3.1	7.9
Total operating income	103.1	69.2	250.3	318.0
General corporate items:				
Securities earnings	7.5	19.3	21.6	36.1
Insurance recoveries	.1	.5	.2	.9
Gain on land sales	—	—	—	12.5
Other components of net periodic pension and OPEB expense	(4.5)	(3.7)	(12.9)	(11.2)
Litigation expense	—	—	—	(62.0)
Loss on prepayment of debt	(7.1)	—	(7.1)	—
General expenses, net	(7.2)	(14.4)	(26.4)	(43.6)
Interest expense	(15.0)	(14.0)	(44.2)	(45.4)
Income from continuing operations before income taxes	$76.9	$56.9	$181.5	$205.3

Segment results we report may differ from amounts separately reported by our various subsidiaries due to purchase accounting adjustments and related amortization or differences in the way we define operating income. Intersegment sales are not material.

Note 3—Business disposition — Waste Control Specialists LLC:

Pursuant to an agreement we entered into in December 2017, on January 26, 2018 we completed the sale of our Waste Management Segment to JFL-WCS Partners, LLC ("JFL Partners"), an entity sponsored by certain investment affiliates of J.F. Lehman & Company, for consideration consisting of the assumption of all of WCS' third-party indebtedness and other liabilities. Our Waste Management Segment, which operated in the low-level radioactive, hazardous, toxic and other waste disposal industry historically struggled to generate sufficient recurring disposal volumes to generate positive operating results or cash flows. We believe the sale will enable us to focus more effort on continuing to develop our remaining segments which we believe have greater opportunity for higher returns than our Waste Management segment.

In accordance with GAAP, the Waste Management Segment has been classified as discontinued operations in our Condensed Consolidated Balance Sheets and Condensed Consolidated Statements of Income for all periods presented. Also in accordance with GAAP, we have not reclassified our Condensed Consolidated Statement of Cash Flows to reflect the Waste Management Segment as discontinued operations. We recognized a pre-tax gain of approximately $58 million primarily in the first quarter of 2018 on the transaction ($39.3 million, or $.11 per diluted share, net of tax) because the carrying value of the liabilities of the business assumed by the purchaser exceeded the carrying value of the assets sold at the time of the sale in large part due to the previously-reported long-lived asset impairment of $170.6 million recognized in the second quarter of 2017, as discussed in the 2017 Annual Report. The net assets of the disposed Waste Management Segment at the time we completed the sale on January 26, 2018 were not materially different as compared to December 31, 2017. The income tax benefit associated with discontinued operations recognized in the second and third quarters of 2018 relates principally to a change in the amount of the deferred income tax asset valuation allowance recognized during 2018 allocated to discontinued operations under the intra-period guidance of ASC 740 associated with the business interest expense deduction limitation discussed in Note 13. Selected financial data for the operations of the disposed Waste Management Segment for periods prior to completing the sale is presented below. Current assets at December 31, 2017 consist principally of trade accounts receivable.

	December 31, 2017 (In millions)
ASSETS	
Current assets	$ 11.2
Restricted cash	27.2
Property and equipment, net	6.0
Other noncurrent assets	7.6
Total noncurrent assets	40.8
Total assets	$ 52.0
LIABILITIES	
Current portion of long-term debt	$ 3.0
Payable to Contran	36.1
Other current liabilities	8.2
Total current liabilities	47.3

Long-term debt	65.0
Deferred income taxes	(43.8)
Accrued noncurrent closure and post closure costs	31.7
Total noncurrent liabilities	52.9
Total liabilities	$ 100.2

	Three months ended September 30,		Nine months ended September 30,	
	2017	2018	2017	2018[1]
	(In millions)			
Net sales	$18.4	$ —	$60.4	$ 4.6
Operating income (loss)[2]	$4.0	$ —	(167.0)	(.4)
Termination fee	—	—	4.0	—
Other expense, net	(.5)	—	(8.2)	—
Interest expense, net	(1.2)	—	(3.6)	(.3)
Loss before taxes	2.3	—	(174.8)	(.7)
Income tax expense (benefit)	.6	—	(66.6)	(.1)
Net income (loss)	1.7	—	(108.2)	(.6)
Pre-tax gain on disposal	—	—	—	58.4
Income tax expense (benefit)	—	(.7)	—	19.1
After-tax gain on disposal	—	.7	—	39.3
Total	$1.7	$ .7	$(108.2)	$ 38.7
Net cash provided by operating activities			$15.7	$ 2.3
Net cash used in investing activities			$(2.9)	$ (.1)

(1) Includes results of the Waste Management Segment though January 26, 2018, the date of the sale.

(2) Operating results in the first nine months of 2017 includes a $170.6 million long-lived asset impairment.

In connection with the January 2018 sale, JFL Partners did not assume WCS' trade payable owed to Contran, which consisted primarily of intercorporate service fees charged to WCS by Contran which WCS did not pay to Contran for several years. Immediately prior to the closing of the sale of WCS, Contran transferred its associated receivable of $36.3 million from WCS to Valhi, in return for a deemed $36.3 million borrowing by Valhi under its revolving credit facility with Contran, see Note 8. Valhi subsequently contributed such receivable from WCS to WCS's equity, and the trade payable obligation of WCS was deemed paid in full.

Note 4—Accounts and other receivables, net:

	December 31, 2017	September 30, 2018
	(In millions)	
Trade accounts receivable:		
Kronos	$301.4	$ 318.5
CompX	10.5	13.4

BMI and LandWell	1.6	1.8
VAT and other receivables	20.7	27.5
Insurance recovery receivable – NL	—	15.0
Refundable income taxes	.5	2.7
Receivable from affiliates:		
Contran – trade items	1.0	.8
Contran – income taxes	19.4	—
LPC – trade items	8.9	—
Other – trade items	3.3	3.3
Allowance for doubtful accounts	(1.5)	(1.3)
Total	$365.8	$ 381.7

The insurance recovery receivable due to NL is discussed in Note 17.

Note 5—Inventories, net:

	December 31, 2017	September 30, 2018
	(In millions)	
Raw materials:		
Chemicals	$106.9	$ 106.1
Component products	2.7	3.0
Total raw materials	109.6	109.1
Work in process:		
Chemicals	20.8	26.6
Component products	9.8	10.9
Total in-process products	30.6	37.5
Finished products:		
Chemicals	192.2	249.6
Component products	2.8	3.3
Total finished products	195.0	252.9
Supplies (chemicals)	63.2	64.7
Total	$398.4	$ 464.2

Note 6—Marketable securities:

Our marketable securities consist of marketable equity and debt securities. Prior to 2018, any unrealized gains or losses on equity 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, 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 as a component of other income included in the securities transactions, net on our Condensed Consolidated Statements of Income. See Note 19.

	Market value	Cost basis	Unrealized losses, net
	(In millions)		
December 31, 2017:			
Current assets	$3.0	3.0	—
Noncurrent assets:			
The Amalgamated Sugar Company LLC	$250.0	250.0	—
Other	5.7	5.9	(.2)
Total	$255.7	255.9	(.2)
September 30, 2018:			
Current assets	$2.2	2.2	—
Noncurrent assets	$5.1	$5.4	$ (.3)

All of our marketable securities are accounted for as available-for-sale, which are carried at fair value using quoted market prices, primarily Level 1 inputs as defined by ASC Topic 820, Fair Value Measurements and Disclosures, except for our investment in The Amalgamated Sugar Company LLC (“Amalgamated”). Our other marketable securities, which consist of marketable equity and debt securities, are not material. See Note 18. Our investment in Amalgamated was measured using significant unobservable inputs, which are Level 3 inputs. Please refer to Note 6 in our 2017 Annual Report for a complete description of the valuation methodology used for our investment in Amalgamated.

On May 30, 2018, we entered into an agreement with Snake River Sugar Company, an Oregon agricultural cooperative corporation that controls Amalgamated ("Snake River"), in which we agreed to sell our interest in Amalgamated for consideration consisting of $12.5 million in cash and the deemed payment in full of our $250 million in loans we owe Snake River (see Note 8). The sale was completed on August 31, 2018 and as a result in the third quarter of 2018 we recognized a securities transaction gain of $12.5 million related to the sale and our $250 million in loans were deemed repaid in full.

Note 7—Other noncurrent assets:

	December 31, 2017	September 30, 2018
	(In millions)	
Other noncurrent assets:		
Land held for development	$126.6	$ 124.2
Restricted cash	9.9	9.0
Land contract receivables	—	7.9
IBNR receivables	6.8	7.0
Pension asset	4.2	6.1
Notes receivable - OPA	—	2.4
Other	26.6	13.4
Total	$174.1	$ 170.0

Land contract receivables classified as a noncurrent asset relate to our Real Estate Management and Development Segment. Such receivables relate to certain fees we collect from builders when the builder sells a home to a customer, as discussed in Note 19.

As disclosed in Note 18 to our 2017 Annual Report under an Owner Participation Agreement ("OPA") entered into by LandWell with the Redevelopment Agency of the City of Henderson, Nevada, if LandWell develops certain real property for commercial and residential purposes in a master planned community in Henderson, Nevada, the cost of certain public infrastructure may be reimbursed to us through tax increment. The maximum reimbursement under the OPA is $209 million, and is subject to, among other things, completing construction of approved qualifying public infrastructure, transferring title of such infrastructure to the City of Henderson, receiving approval from the Redevelopment Agency of the funds expended to be eligible for tax increment reimbursement and the existence of a sufficient property tax valuation base and property tax rates in order to generate tax increment reimbursement funds. We are entitled to receive 75% of the tax increment generated by the master planned community through 2036, subject to the qualifications and limitations indicated above. Public infrastructure costs previously incurred for which the Redevelopment Agency had provided its approval for tax increment reimbursement but we had not yet received such reimbursement through tax increment receipts aggregated $3.1 million at December 31, 2017. Such amount is evidenced by a promissory note issued to LandWell by the City of Henderson.

Prior to 2018, due to the significant uncertainty of the timing and amount of any of such potential tax increment reimbursements, we recognized any such tax increment reimbursements only when received. However, due to growth in the master planned community and the increase in tax increment funds to which we are entitled, we determined in the first quarter of 2018 we expected the tax increment reimbursements to be collected in the future would at least be sufficient to support recognizing the $3.1 million note payable issued by the City of Henderson to us. The note payable bears interest at 6% annually and the note expires in 2036. Any unpaid balances in 2036 are forfeited. See Note 13.

Note 8—Long-term debt:

	December 31, 2017	September 30, 2018
	(In millions)	
Valhi:		
Snake River Sugar Company	$250.0	$ —
Contran credit facility	284.3	314.3
Total Valhi debt	534.3	314.3
Subsidiary debt:		
Kronos:		
Senior Secured Notes	471.1	463.0
Tremont:		
Promissory note payable	13.1	10.9
BMI:		
Bank loan – Western Alliance Bank	18.8	18.0
LandWell:		
Note payable to the City of Henderson	2.5	2.3
Other	3.3	2.8
Total subsidiary debt	508.8	497.0
Total debt	1,043.1	811.3
Less current maturities	1.6	1.6
Total long-term debt	$1,041.5	$ 809.7

Valhi – Snake River Sugar Company – In connection with the sale of our ownership interest in Amalgamated on August 31, 2018, our $250 million outstanding debt obligations owed to Snake River Sugar Company were deemed paid in full. See Note 6.

Contran credit facility – In connection with the sale of WCS discussed in Note 3, immediately prior to the closing of the sale, Contran transferred its associated receivable of $36.3 million from WCS to Valhi, in return for a deemed $36.3 million borrowing by Valhi under its revolving credit facility with Contran. In addition, during the first nine months of 2018 we repaid $6.3 million under this facility.The average interest rate on the existing balance as of and for the nine months ended September 30, 2018 was 6.25% and 5.77%, respectively. At September 30, 2018, the equivalent of $45.7 million was available for borrowing under this facility.

Kronos – Senior Secured Notes - At September 30, 2018, the carrying value of Kronos' 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.

North American and European revolving credit facilities– During the first nine months of 2018, Kronos had no borrowings or repayments under its North American revolving credit facility and its European revolving credit facility. At September 30, 2018, approximately $106.2 million was available for additional borrowing under the North American Revolving credit facility. Kronos' 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 €90.0 million of the credit facility ($105.7 million) is available for borrowing availability at such date.

Tremont – Promissory note payable – In January 2018, and following Tremont's sale of certain land held for investment, discussed in Note 13, Tremont prepaid (without penalty) $2.2 million principal amount on the note as required under the terms of the note agreement.

Restrictions and other – Certain of the credit facilities with unrelated, third-party lenders described above require the respective borrowers to maintain minimum levels of equity, require the maintenance of certain financial ratios, limit dividends and additional indebtedness and contain other provisions and restrictive covenants customary in lending transactions of this type. We are in compliance with all of our debt covenants at September 30, 2018.

Note 9—Accounts payable and accrued liabilities:

	December 31, 2017	September 30, 2018
	(In millions)	
Accounts payable:		
Kronos	$107.9	$ 105.8
CompX	2.3	3.3
BMI and LandWell	3.7	3.8
NL	1.8	2.6
Other	.4	.4
Payable to affiliates:		
Contran – taxes	—	11.6
LPC – trade items	16.2	12.7
Litigation settlement	—	60.0
Employee benefits	36.3	38.5
Deferred income	28.3	23.3
Accrued sales discounts and rebates	14.3	25.4
Environmental remediation and related costs	6.8	19.0
Interest	5.5	1.4
Other	33.6	35.8
Total	$257.1	$ 343.6

The litigation settlement accrual is discussed in Note 17.

Note 10—Other noncurrent liabilities:

	December 31, 2017	September 30, 2018
	(In millions)	
Reserve for uncertain tax positions	$16.5	$ 17.5
Litigation settlement	—	17.0
Deferred income	15.7	15.0
Employee benefits	8.4	8.1
Insurance claims and expenses	9.1	9.9
Deferred payment obligation	9.3	9.5
Accrued development costs	6.1	8.8
Other	8.5	9.1
Total	$73.6	$ 94.9

The litigation settlement accrual is discussed in Note 17.

Note 11 – Revenue Recognition

Chemicals and Component Products Segments - 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 No. 2014-09, Revenue from Contracts with Customers (Topic 606), see Note 19, we record revenue when we satisfy our performance obligations 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 being 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). In such arrangements shipping and handling are considered fulfillment activities, and accordingly, such costs are accrued when the related revenue is recognized.

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 we have not assessed whether a contract has a significant financing

component. We state sales net of price, early payment and distributor discounts as well as 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. 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.

Real Estate Management and Development Segment – Our sales involve providing utility services, among other things, to an industrial park located in Henderson, Nevada and we are responsible for the delivery of water to the city of Henderson and various other users through a water distribution system we own. These sales involve single performance obligations and we record revenue when we satisfy our performance obligations to our customers generally after the service is performed and our customers become obligated to pay us and such payment being probable of occurring. Revenue is recorded in an amount that reflects the net consideration we expect to receive in exchange for our services. Prices for our products are based on contracted rates and 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 we have not assessed whether a contract has a significant financing component.

Our revenues also are related to efforts to develop certain real estate in Henderson, Nevada, including approximately 2,100 acres zoned for residential/planned community purposes and approximately 400 acres zoned for commercial and light industrial use. Contracts for land sales are negotiated on an individual basis, involve single performance obligations, and generally require us to complete property development and improvements after title passes to the buyer and we have received all or a substantial portion of the selling price. We recognize land sales revenue associated with the residential/planned community over time using cost based input methods. Land sales associated with the residential/planned community have variable consideration components which are based on a percentage of the builder's ultimate selling price of residential housing unit to their customer (generally 3.5% of such sales price). The amount we recognize when a parcel is sold to a home builder is 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. By recognizing revenue over time using cost based input methods, revenues (including variable consideration) and profits are recognized in the same proportion of our progress towards completion of our contractual obligations, with our progress measured by costs incurred as a percentage of total costs estimated to be incurred relative to the parcels sold. Estimates of total costs expected to be incurred require significant management judgment, and the amount of revenue and profits that have been recognized to date are subject to revisions throughout the

development period. The impact on the amount of revenue recognized resulting from any future change in the estimate of total costs estimated to be incurred would be accounted for prospectively in accordance with GAAP. We also receive variable consideration of 1% tied to the builders ultimate selling price to their customers which is intended to recover our expenses for marketing the entire residential/planned community. Because we control and direct the marketing campaign we recognize both the revenues and expenses on a gross basis. We record estimated deferred revenue on the amount to which we are most-likely to be entitled and deferred revenue is recognized into revenue as the housing units are sold.

Disaggregation of sales–The following table disaggregates the net sales of our Chemicals Segment by place of manufacture (point of origin) and 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 millions)			
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
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

The following table disaggregates the net sales of our Component Products and Real Estate Management and Development Segments by major product line.

	Three months ended September 30,		Nine months ended September 30,	
	2017	2018	2017	2018
	(In millions)			
Component Products:				
Net sales:				
Security products	$22.8	$24.5	$74.9	$75.8
Marine components	4.1	5.5	12.0	15.0
Total	$26.9	$30.0	86.9	90.8
Real Estate Management and Development:				
Net sales:				
Land sales	$2.7	$13.4	14.8	23.0
Water delivery	1.8	.9	4.5	3.7
Utility and other	.6	.6	1.7	1.4
Total	$5.1	$14.9	$21.0	$28.1

Note 12—Employee benefit plans:

The components of our 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 millions)			
Service cost	$3.0	$2.9	$8.5	$8.8
Interest cost	4.1	3.8	11.8	11.8
Expected return on plan assets	(3.3)	(3.9)	(9.7)	(11.7)
Amortization of unrecognized prior service cost	—	.1	.2	.2
Recognized actuarial losses	3.9	3.7	11.2	11.4
Total	$7.7	$6.6	$22.0	$20.5

The components of our net periodic other postretirement benefit cost are presented in the table below.

	Three months ended September 30,		Nine months ended September 30,	
	2017	2018	2017	2018
	(In millions)			
Service cost	$—	$—	$ .1	$ .1
Interest cost	.1	.2	.3	.3
Amortization of prior service credit	(.3)	(.3)	(.8)	(.8)
Recognized actuarial gains	(.1)	—	(.2)	(.1)
Total	$(.3)	$(.1)	$ (.6)	$ (.5)

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 expense") in our Condensed Consolidated Statements of Income for all periods presented. See Note 19. We expect to contribute the equivalent of approximately $19.8 million and $1.0 million, respectively, to all of our defined benefit pension plans and other postretirement benefit plans during 2018.

Note 13—Other income, net:

	Nine months ended September 30,	
	2017	2018
	(In millions)	
Securities earnings:		
Dividends and interest	$21.5	$23.5
Securities transactions, net	.1	12.6
Total	21.6	36.1
Currency transactions, net	(8.0)	4.2
Insurance recoveries	.2	.9
Infrastructure reimbursement	.7	4.3
Gain on land sales	—	12.5
Other, net	1.2	1.8
Total	$15.7	$59.8

Securities transactions, net in the first nine months of 2018 includes a $12.5 million gain on the sale of our investment in The Amalgamated Sugar Company LLC, see Note 6.

Insurance recoveries reflect, in part, amounts NL received from certain of its former insurance carriers and relate to the recovery of prior lead pigment and asbestos litigation defense costs incurred by NL. See Note 17.

Infrastructure reimbursement costs relate principally to tax increment reimbursements of our Real Estate Management and Development Segment discussed in Note 7.

In the first quarter of 2018 we sold two parcels of land not used in our operating activities. We sold the first parcel for net proceeds of $18.9 million, and recognized a pre-tax gain on the sale of $11.9 million. We were required under our debt agreement with NERT to use a portion of the net proceeds received for the property to pay down our note balance and accordingly we made $2.2 million in principal payments on our debt, see Note 8. In addition, NL sold excess property with a nominal book value for proceeds of $.6 million.

Note 14—Income taxes:

	Three months ended September 30,		Nine months ended September 30,	
	2017	2018	2017	2018
	(In millions)			
Expected tax expense, at U.S. federal statutory income tax rate of 35% in 2017 and 21% in 2018	$26.9	$11.9	$63.5	$43.1
Incremental net tax on earnings and losses of non-U.S., U.S. and non-tax group companies	8.9	(160.3)	57.2	(151.3)
Non-U.S. tax rates	(3.5)	3.5	(8.2)	18.4
Valuation allowance	(7.8)	(2.0)	(170.4)	—
Adjustment to the reserve for uncertain tax positions, net	(7.7)	.3	(6.6)	2.2
Transition tax	—	(2.1)	—	(2.1)
Change in federal tax rate	—	59.7	—	59.7
Change in state tax rate	—	(3.4)	—	(3.4)
Canada – Germany APA	(3.2)	—	(3.2)	(1.4)
Nondeductible expenses	.8	.8	1.5	1.5
U.S. state income taxes and other, net	.3	.2	(1.3)	.1
Income tax expense (benefit)	$14.7	$(91.4)	$(67.5)	$(33.2)
Comprehensive provision for income taxes (benefit) allocable to:				
Income from continuing operations	$14.7	$(91.4)	$(67.5)	$(33.2)
Discontinued operations	.5	(.8)	(66.7)	19.0
Retained earnings – change in accounting principle	—	—	—	1.1
Other comprehensive income (loss):				
Currency translation	10.6	.7	28.7	(1.2)
Pension plans	1.6	1.4	4.7	4.4
OPEB plans	(.2)	(.1)	(.4)	(.3)
Marketable securities	(.5)	—	(1.0)	—
Interest rate swap	1.3	—	1.4	—
Total	$28.0	$(90.2)	$(100.8)	$(10.2)

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 (benefit) on earnings and losses on non-U.S. and non-tax group 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 Chemicals Segment's Canadian subsidiary and, beginning in 2018, the post-1986 undistributed earnings of our Chemicals Segment's European subsidiaries (such post-1986 undistributed earnings were subject to a permanent reinvestment plan until December 31, 2017), (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 Kronos' 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, (iv) deferred income taxes associated with our direct investment in Kronos and (v) current and deferred income taxes associated with distributions and earnings from our investment in LandWell and BMI.

Our Chemicals Segment has 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 Chemicals Segment's German and Belgian net deferred income tax assets at such date. During the first six months of 2017, Kronos 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

Chemicals Segment's 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 were required to revalue our net deferred tax liability 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 taxable temporary differences was based on our net deferred tax as of December 31, 2017. Such revaluation resulted in a provisional non-cash deferred income tax benefit of $77.1 million recognized as of December 31, 2017 in continuing operations, reducing our net deferred income tax liability. The amounts recorded as of December 31, 2017 as a result of the 2017 Tax Act represented estimates based on information currently available. We did not make any additional measurement-period adjustments to the provisional amounts recorded for this item during the first six months of 2018. During the third quarter of 2018, in conjunction with finalizing our federal income tax return we were able to obtain, prepare and analyze the necessary information to complete the accounting under ASC 740 related to the revaluation of our net deferred tax liability associated with our U.S. net

taxable temporary differences as of December 31, 2017, which resulted in a measurement period adjustment and recognition of a non-cash deferred income tax expense of $59.7 million, decreasing the provisional amount recognized at December 31, 2017. Such adjustment is almost entirely attributable to the re-measurement of our deferred income taxes with respect to the excess of the financial reporting carrying amount over the income tax basis of our direct investment in Kronos common stock discussed below. Accordingly, we have completed our analysis related to such revaluation as of September 30, 2018.

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 represent 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 approximately $4.5 million which has been 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 $2.1 million which amount is recorded as a measurement-period adjustment in continuing operations, 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 $10.6 million (noted above), the balance of our unpaid Transition Tax aggregates $63.5 million, which will be paid in quarterly installments over the remainder of the eight year period. Of such $63.5 million, $57.8 million is recorded as a noncurrent payable to affiliate (income taxes payable to Contran) classified as a noncurrent liability in our Condensed Consolidated Balance Sheet, and $5.7 million is included with our current payable to affiliate (income taxes payable to Contran) 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 $5.3 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 represent 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 $3.2 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 amount 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 six 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.

The 2017 Tax Act amended the rules limiting the deduction for business interest expense beginning in 2018. The limitation applies to all taxpayers and our annual deduction for business interest expense is limited to the sum of our business interest income and 30% of our adjusted taxable income as defined under the 2017 Tax Act. Any business interest expense not allowed as a deduction as a result of the limitation may be carryforward indefinitely and is treated as interest paid in the carryforward year subject to the respective year's limitation. We have determined that our interest expense for 2018 is limited under these provisions, in part because of the loss we recognized on the sale of WCS for income tax purposes. We have concluded that we are required to recognize a non-cash deferred income tax asset valuation allowance under the more-likely-than-not recognition criteria with respect to a portion of our

deferred tax asset attributable to the nondeductible amount of business interest expense carryforward. Consequently, our provision for income taxes in the first nine months of 2018 includes a non-cash deferred income tax expense of $3.0 million for the amount of such deferred income tax asset that we have determined does not meet the more-likely-than-not recognition criteria (the nondeductible portion of our business interest expense in the third quarter of 2018 is lower than the amount recognized in the second quarter of 2018 primarily due to the sale of our interest in Amalgamated during the third quarter which resulted in the recognition of a gain for tax purposes and related increase in our adjusted taxable income). In accordance with the ASC 740 guidance regarding intra-period allocation of income taxes, the full amount of non-cash deferred income tax expense is classified as part of the income taxes associated with the pre-tax gain we recognized for financial reporting purposes on the sale of WCS which is classified as part of discontinued operations as discussed in Note 3. Our estimate of the amount of such non-cash deferred income tax asset valuation allowance we are required to recognize, and the allocation of such valuation allowance between continuing and discontinued operations under the intra-period guidance of ASC 740, can change during the year due to, among other things, changes in our estimate of the amount of business interest expense, business interest income and adjusted taxable income for the current year.

We recognized a non-cash deferred income tax benefit of $3.4 million in the third quarter of 2018 related to a decrease in our effective state income tax rate; this decrease is a direct result of the sale of our interest in the Amalgamated Sugar Company LLC which will reduce the number of state jurisdictions in which we are required to file.

We recognize deferred income taxes with respect to the excess of the financial reporting carrying amount over the income tax basis of our direct investment in Kronos common stock because the exemption under GAAP to avoid such recognition of deferred income taxes is not available to us. At December 31, 2017, we had recognized a deferred income tax liability with respect to our direct investment in Kronos of $157.6 million. There is a maximum amount (or cap) of such deferred income taxes we are required to recognize with respect to our direct investment in Kronos. The maximum amount of such deferred income tax liability we would be required to have recognized (the cap) is $155.4 million (the cap was reduced as a result of the decrease in our effective state tax rate in the third quarter of 2018 discussed above). During the first nine months of 2018, we recognized a non-cash deferred income tax expense with respect to our direct investment in Kronos of $19.2 million for the increase in the deferred income taxes required to be recognized with respect to the excess of the financial reporting carrying amount over the income tax basis of our direct investment in Kronos common stock, to the extent such increase related to our equity in Kronos' net income during such period. We recognized a similar non-cash deferred income tax expense of $49.3 million in the first nine months of 2017. A portion of the net change with respect to the excess of the financial reporting carrying amount over the income tax basis of our direct investment in Kronos common stock during such periods related to our equity in Kronos' other comprehensive income (loss) items, and the amounts shown in the table above for income tax expense (benefit) allocated to other comprehensive income (loss) items includes amounts related to our equity in Kronos' other comprehensive income (loss) items. Due to uncertainties and complexities of the new legislation, we were still evaluating the impact of the one-time deemed repatriation of the post-1986 undistributed earnings of our non-U.S. subsidiaries up through December 31, 2017 as it relates to the income tax basis of our direct investment in Kronos at December 31, 2017 and June 30, 2018. Our deferred income tax liability with respect to our direct investment in Kronos and the deferred income taxes recognized at December 31, 2017 and June 30, 2018 represented our reasonable estimate and, in accordance with the guidance in SAB 118, such amounts were provisional and subject to adjustment as we obtain additional information and complete our analysis of the impact of the new legislation as it relates to the income tax basis of our direct investment in Kronos. We made no adjustments to the provisional amounts recorded at December 31, 2017 as it relates to the income tax basis of our direct investment in Kronos at such date in the first six months of 2018 because no new information was available. 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 an adjustment, which is treated as a measurement period adjustment, to the deferred income taxes we recognized at December 31, 2017 associated with our direct investment in Kronos common stock (before revaluation of our deferred tax liability related to the decrease in the corporate income tax rate). Such adjustment resulted in an investment basis adjustment under the income tax regulations which increased the income tax basis of our direct investment in Kronos attributable to the income recognition related to the deemed repatriation of the post-1986 undistributed earnings of our non-U.S. subsidiaries in 2017. Such adjustment resulted in a non-cash deferred tax measurement period adjustment decreasing the deferred income taxes we recognize with respect to the excess of the financial reporting carrying amount over the income tax basis of our direct investment in Kronos common stock. Including the impact of the non-cash deferred tax revaluation adjustment discussed above, we recognized a net non-cash deferred income tax benefit of $113 million in the third quarter of 2018 related to the incremental tax on Kronos. As of September 30, 2018, we have completed our analysis related to the impact of the new legislation as it related to the income tax basis of our direct investment in Kronos. Excluding the impact of such adjustment, our effective income tax rate from continuing operations in the third quarter and nine months ending September 30, 2018 was 38% and 38.9%, respectively.

We will complete our accounting for the taxes recognized under the Transition Tax provisions, deferred taxes recognized with respect to the undistributed earnings of our foreign subsidiaries and our policy decision as it relates to the new GILTI tax rules within the prescribed measurement period ending December 22, 2018, pursuant to the guidance under SAB 118 and if such estimates change, we will recognize an adjustment in the reporting period within the measurement period in which such adjustment is determined.

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 Kronos 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 Kronos would agree to execute and finalize such agreements.

- During the third quarter of 2017, Kronos' 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, Kronos' 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 Kronos' German and Canadian subsidiaries.

We believe we have adequate accruals for additional taxes and related interest expense which could ultimately result from tax examinations. We believe the ultimate disposition of tax examinations should not have a material adverse effect on our consolidated financial position, results of operations or liquidity. We currently estimate that our unrecognized tax benefits will decrease by approximately $1.8 million during the next twelve months primarily due to certain adjustments to our prior year returns and the expiration of certain statutes of limitations.

Note 15—Noncontrolling interest in subsidiaries:

	December 31, 2017	September 30, 2018
	(In millions)	
Noncontrolling interest in net assets:		
Kronos Worldwide	$204.9	$ 228.1
NL Industries	71.1	63.7
CompX International	17.8	19.2
BMI	26.0	28.0
LandWell	22.5	26.0
Total	$342.3	$ 365.0

	Nine months ended September 30,	
	2017	2018
	(In millions)	
Noncontrolling interest in net income (loss) of subsidiaries:		
Kronos Worldwide	$60.0	$35.3
NL Industries	11.4	(7.4)
CompX International	1.2	1.6
BMI	.3	1.1
LandWell	.5	2.1
Total	$73.4	$32.7

Note 16—Accumulated other comprehensive loss:

Changes in accumulated other comprehensive income (loss) attributable to Valhi stockholders for the three and nine months ended September 30, 2017 and 2018 are presented in the table below.

	Three months ended September 30,		Nine months ended September 30,	
	2017	2018	2017	2018
	(In millions)			
Accumulated other comprehensive income (loss), net of tax and noncontrolling interest:				
Marketable securities:				
Balance at beginning of period	$1.7	$1.6	$1.7	$1.7
Other comprehensive loss – unrealized losses arising during the period	—	—	—	(.1)
Balance at end of period	$1.7	$1.6	$1.7	$1.6
Interest rate swap:				
Balance at beginning of period	$(1.1)	$—	$(1.2)	$—
Other comprehensive income (loss):				
Unrealized losses arising during the year	(.7)	—	(1.2)	—
Less reclassification adjustment for amounts included in interest expense	1.8	—	2.4	—
Balance at end of period	$—	$—	$—	$—
Currency translation adjustment:				
Balance at beginning of period	$(73.8)	$(63.6)	$(88.5)	$(54.1)
Other comprehensive income (loss)	19.3	2.9	34.0	(6.6)
Balance at end of period	$(54.5)	$(60.7)	$(54.5)	$(60.7)
Defined benefit pension plans:				
Balance at beginning of period	$(134.4)	$(125.2)	$(137.0)	$(129.0)
Other comprehensive income— amortization of prior service cost and net losses included in net periodic pension cost	1.8	1.9	4.4	5.7
Balance at end of period	$(132.6)	$(123.3)	$(132.6)	$(123.3)
OPEB plans:				
Balance at beginning of period	$2.7	$2.0	$3.1	$2.4
Other comprehensive loss – amortization of prior service credit	(.2)	(.2)	(.6)	(.6)
Balance at end of period	$2.5	$1.8	$2.5	$1.8
Total accumulated other comprehensive income (loss):				
Balance at beginning of period	$(204.9)	$(185.2)	$(221.9)	$(179.0)
Other comprehensive income (loss)	22.0	4.6	39.0	(1.6)
Balance at end of period	$(182.9)	$(180.6)	$(182.9)	$(180.6)

See Note 12 for amounts related to our defined benefit pension plans and OPEB plans.

Note 17 – Commitments and contingencies:

Lead pigment litigation – NL

General

We are involved in various environmental, contractual, product liability, patent (or intellectual property), employment and other claims and disputes incidental to our current and former businesses. At least quarterly our management discusses and evaluates the status of any pending litigation or claim to which we are a party or which has been asserted against us. The factors considered in such evaluation include, among other things, the nature of such pending cases and claims, the status of such pending cases and claims, the advice of legal counsel and our experience in similar cases and claims (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.

Lead pigment litigation

Our former operations included the manufacture of lead pigments for use in paint and lead-based paint. We, other former manufacturers of lead pigments for use in paint and lead-based paint (together, the "former pigment manufacturers"), and the Lead Industries Association (LIA), which discontinued business operations in 2002, have been named as defendants in various legal proceedings seeking damages for personal injury, property damage and governmental expenditures allegedly caused by the use of lead-based paints. Certain of these actions have been filed by or on behalf of states, counties, cities or their public housing authorities and school districts, and certain others have been asserted as class actions. These lawsuits seek recovery under a variety of theories, including public and private nuisance, negligent product design, negligent failure to warn, strict liability, breach of warranty, conspiracy/concert of action, aiding and abetting, enterprise liability, market share or risk contribution liability, intentional tort, fraud and misrepresentation, violations of state consumer protection statutes, supplier negligence and similar claims.

The plaintiffs in these actions generally seek to impose on the defendants responsibility for lead paint abatement and health concerns associated with the use of lead-based paints, including damages for personal injury, contribution and/or indemnification for medical expenses, medical monitoring expenses and costs for educational programs. To the extent the plaintiffs seek compensatory or punitive damages in these actions, such damages are generally unspecified. In some cases, the damages are unspecified pursuant to the requirements of applicable state law. A number of cases are inactive or have been dismissed or withdrawn. Most of the remaining cases are in various pre-trial stages. Some are on appeal following dismissal or summary judgment rulings or a trial verdict in favor of either the defendants or the plaintiffs.

We believe that these actions are without merit, and we intend to continue to deny all allegations of wrongdoing and liability and to defend against all actions vigorously. Other than with respect to the Santa Clara case discussed below, we do not believe it is probable that we have incurred any liability with respect to all of the lead pigment litigation cases to which we are a party, and with respect to all such lead pigment litigation cases to which we are a party, other than with respect to the Santa Clara case discussed below, we believe liability to us that may result, if any, in this regard cannot be reasonably estimated, because:

- we have never settled any of the market share, intentional tort, fraud, nuisance, supplier negligence, breach of warranty, conspiracy, misrepresentation, aiding and abetting, enterprise liability, or statutory cases (subject to the final outcome of the Santa Clara case discussed below),
- no final, non-appealable adverse verdicts have ever been entered against NL (subject to the final outcome of the Santa Clara case discussed below), and
- we have never ultimately been found liable with respect to any such litigation matters, including over 100 cases over a twenty-year period for which we were previously a party and for which we have been dismissed without any finding of liability (subject to the final outcome of the Santa Clara case discussed below).

Accordingly, other than with respect to the Santa Clara case discussed below, we have not accrued any amounts for any of the pending lead pigment and lead-based paint litigation cases filed by or on behalf of states, counties, cities or their public housing authorities and school districts, or those asserted as class actions other than the Santa Clara case noted below. In addition, we have determined that liability to us which may result, if any, cannot be reasonably estimated at this time because there is no prior history of a loss of this nature on which an estimate could be made and there is no substantive information available upon which an estimate could be based.

In one of these lead pigment cases, in April 2000 we were served with a complaint in County of Santa Clara v. Atlantic Richfield Company, et al. (Superior Court of the State of California, County of Santa Clara, Case No. 1-00-CV-788657) brought by a number of California government entities against the former pigment manufacturers, the LIA and certain paint manufacturers. The County of Santa Clara sought to recover compensatory damages for funds the plaintiffs have expended or would in the future expend for medical treatment, educational expenses, abatement or other costs due to exposure to, or potential exposure to, lead paint, disgorgement of profit, and punitive damages. In July 2003, the trial judge granted defendants' motion to dismiss all remaining claims. Plaintiffs appealed and the intermediate appellate court reinstated public nuisance, negligence, strict liability, and fraud claims in March 2006. A fourth amended complaint was filed in March 2011 on behalf of The People of California by the County Attorneys of Alameda, Ventura, Solano, San Mateo, Los Angeles and Santa Clara, and the City Attorneys of San Francisco, San Diego and Oakland. That complaint alleged that the presence of lead paint created a public nuisance in each of the prosecuting jurisdictions and sought its abatement. In July and August 2013, the case was tried. In January 2014, the Judge issued a judgment finding us, The Sherwin Williams Company and ConAgra Grocery Products Company jointly and severally liable for the abatement of lead paint in pre-1980 homes, and ordered the defendants to pay an aggregate $1.15 billion to the people of the State of California to fund such abatement. The trial court's judgment also found that to the extent any abatement funds remained unspent after four years, such funds were to be returned to the defendants. In February 2014, we filed a motion for a new trial, and in March 2014 the trial court denied

the motion. Subsequently in March 2014, we filed a notice of appeal with the Sixth District Court of Appeal for the State of California. On November 14, 2017, the Sixth District Court of Appeal issued its opinion, upholding the trial court's judgment, except that it reversed the portion of the judgment requiring abatement of homes built between 1951 and 1980 which significantly reduced the number of homes subject to the abatement order. In addition, the appellate court ordered the case be remanded to the trial court to recalculate the amount of the abatement fund, to limit it to the amount necessary to cover the cost of investigating and remediating pre-1951 homes, and to hold an evidentiary hearing to appoint a suitable receiver. In addition, the appellate court found that we and the other defendants had the right to seek recovery from liable parties that contributed to a hazardous condition at a particular property. Subsequently, we and the other defendants filed a Petition with the California Supreme Court seeking its review of a number of issues. On February 14, 2018, the California Supreme Court denied such petition. In July 2018, we and the other defendants filed appeals with the U.S. Supreme Court, seeking its review of two federal issues in the trial court's original judgment. Review by the U.S. Supreme Court is discretionary, and in October 2018 the U.S. Supreme Court denied the petitions for the Court to hear such appeals.

Under such remand ordered by the appellate court, the trial court would, among other things, (i) recalculate the amount of the abatement fund, excluding remediation of homes built between 1951 and 1980, (ii) hold an evidentiary hearing to appoint a suitable receiver for the abatement fund and (iii) enter an order setting forth its rulings on these issues. We believe any party will have a right to appeal any of these new decisions to be made by the trial court from the remand of the case. Several uncertainties exist with respect to the new decisions to be made by the trial court from the remand of the case, including the following:

- The appellate court remanded the case back to the trial court to recalculate the total amount of the abatement, limiting the abatement to pre-1951 homes. In this regard, NL and the other defendants filed a brief with the trial court proposing a recalculated maximum abatement fund amount of no more than $409 million and plaintiffs filed a brief proposing an abatement fund amount of $730 million. In September 2018, following a case-management hearing regarding the recalculated abatement fund amount held in August 2018, the trial court issued an order setting the recalculated amount of the abatement fund at $409 million;
- The appellate court upheld NL's and the other defendants' right to seek contribution from other liable parties (e.g. property owners who have violated the applicable housing code) on a house-by-house basis. The method by which the trial court would undertake to determine such house-by-house responsibility, and the outcome of such a house-by-house determination, is not presently known;
- Participation in any abatement program by each homeowner is voluntary, and each homeowner would need to consent to allowing someone to come into the home to undertake any inspection and abatement, as well as consent to the nature, timing and extent of any abatement. The original trial court's judgment unrealistically assumed 100% participation by the affected homeowners. Actual participation rates are likely to be less than 100% (the ultimate extent of participation is not presently known);
- The remedy ordered by the trial court is an abatement fund. The trial court ordered that any funds unspent after four years are to be returned to the defendants (this provision of the trial court's original judgment was not overturned by the appellate court). As noted above, the actual number of homes which would participate in any abatement, and the nature, timing and extent of any such abatement, is not presently known; and
- We and the other two defendants are jointly and severally liable for the abatement, we do not believe any individual defendant would be 100% responsible for the cost of any abatement, and the allocation of the recalculated amount of the abatement fund ($409 million) among the three defendants has not yet been determined.

In May 2018, we and the plaintiffs entered into a settlement agreement pursuant to which, as supplemented, the plaintiffs would be paid an aggregate of $80 million, in return for which we would be dismissed from the case with

prejudice and all pending and future claims, causes of action, cross-complaints, actions or proceedings against us and our affiliates for indemnity, contribution, reimbursement or declaratory relief in respect to the case would be barred, discharged and enjoined as a matter of applicable law. Of such $80 million, $65 million would be paid by us and $15 million would be provided by one of our former insurance carriers that has previously placed such amount on deposit with the trial court in satisfaction of potential liability such former carrier might have with respect to the case under certain insurance policies we had with such former carrier. Of such $65 million which would be paid by us, $45 million would be paid upon approval of the terms of the settlement, and the remaining $20 million would be paid in five annual installments beginning four years from such approval ($6 million for the first installment, $5 million for the second installment and $3 million for each of the third, fourth and fifth installments). The settlement agreement is subject to a number of conditions including the trial court's approval of the terms of the settlement (which trial court approval includes a determination that such settlement agreement meets the standards for a "good faith" settlement under applicable California law). The other defendants filed motions with the trial court objecting to the terms of the settlement. In September 2018, the trial court denied approval of the settlement agreement, finding among other things that the settlement agreement did not meet the standards for a "good faith" settlement under applicable California law. Subsequently in October 2018, we filed an appeal of the trial court's denial of approval of the settlement agreement with the Sixth District Court of Appeal for the State of California, asserting among other things that in denying such approval the trial court made several legal errors in applying applicable California law to the terms of the settlement agreement. The appellate court has discretion whether to hear such appeal, and the time for the appellate court to determine if it will hear such appeal has not yet run. There can be no assurance that the appellate court will agree to hear such appeal, or if it agrees to hear such appeal, that it would rule

in favor of us and approve the settlement agreement. We continue to believe the settlement agreement satisfies the standards for a "good faith" settlement under applicable California law.

The Santa Clara case is unusual in that this is the second time that an adverse verdict in the lead pigment litigation has been entered against us (the first adverse verdict against us was ultimately overturned on appeal). Given the appellate court's November 2017 ruling, and the denial of an appeal by the California Supreme Court, we have concluded that the likelihood of a loss in this case has reached a standard of "probable" as contemplated by ASC 450. With all of the uncertainties that exist with respect to the new decisions to be made by the trial court from the remand of the case, as noted above, we had previously concluded that the amount of such loss could not be reasonably estimated (nor could a range of loss be reasonably estimated). However, the terms of the settlement agreement entered into by us and the plaintiffs in May 2018, as supplemented, provides evidence that the amount of the loss to us could be reasonably estimated (and provides evidence of the low end of a range of loss to us). For financial reporting purposes, we discounted the five payments aggregating $20 million to be paid in installments to their estimated net present value, using a discount rate of 3.0% per annun. Such net present value is $17 million, and we would begin to accrete such present value amount upon approval of the settlement agreement. Accordingly, in the second quarter of 2018 we recognized a net $62 million pre-tax charge with respect to this matter ($45 million for the amount to be paid by us upon approval of the terms of the settlement and $17 million for the net present value of the five payments aggregating $20 million to be paid by us in installments beginning four years from such approval), representing the net amount we would pay in full settlement of our liability under the terms of the proposed settlement agreement. For purposes of our condensed consolidated balance sheet, we have presented the aggregate $45 million that would be paid to the plaintiffs upon approval of the terms of the settlement and the $15 million that would be paid to the plaintiffs from the amount placed as deposit with the trial court by one of our former insurance carriers as a current liability, $17 million for the net present value of the five payments aggregating $20 million to be paid by us in installments beginning four years from such approval as a noncurrent liability and the $15 million portion of such aggregate $80 million undiscounted amount which would be funded from the amount placed on deposit with the trial court by one of our former insurance carriers as a current insurance recovery receivable. See Notes 2, 7 and 10.

Although, we and the plaintiffs believed the settlement met all requirements of applicable California law, the trial court denied our motive for approval of a good faith settlement, and there can be no assurance that the appellate court will reverse that decision and approve the terms of this or any other settlement agreement between us and the plaintiffs. If the appellate court does not reverse the trial court decision and approve the terms of this or any other settlement agreement between us and the plaintiffs, the proceedings in the trial court under the remand, as discussed above, would continue. In such event, NL's share of the recalculated amount of the abatement fund is not presently known, and other uncertainties exist with respect to the new decisions to be made by the trial court from the remand of the case, as discussed above. As with any legal proceeding, there is no assurance that any appeal would be successful, and it is reasonably possible, based on the outcome of the appeals process and the remand proceedings in the trial court, that NL may in the future incur some liability resulting in the recognition of an additional loss contingency accrual that could have a material adverse impact on our results of operations, financial position and liquidity.

New cases may continue to be filed against us. We cannot assure you that we will not incur liability in the future in respect of any of the pending or possible litigation in view of the inherent uncertainties involved in court and jury rulings. In the future, if new information regarding such matters becomes available to us (such as a final, non-appealable adverse verdict against us or otherwise ultimately being found liable with respect to such matters), at that time we would consider such information in evaluating any remaining cases then-pending against us as to whether it might then have become probable we have incurred liability with respect to these matters, and whether such liability, if any, could have become reasonably estimable. The resolution of any of these cases could result in the recognition of a loss contingency accrual that could have a material adverse impact on our net income for the interim or annual period during which such liability is recognized and a material adverse impact on our consolidated financial condition and liquidity.

Environmental matters and litigation

Our operations are governed by various environmental laws and regulations. Certain of our businesses are and have been engaged in the handling, manufacture or use of substances or compounds that may be considered toxic or hazardous within the meaning of applicable environmental laws and regulations. As with other companies engaged in similar businesses, certain of our past and current operations and products have the potential to cause environmental or other damage. We have implemented and continue to implement various policies and programs in an effort to minimize these risks. Our policy is to maintain compliance with applicable environmental laws and regulations at all of our plants and to strive to improve environmental performance. From time to time, we may be subject to environmental regulatory enforcement under U.S. and non-U.S. statutes, the resolution of which typically involves the establishment of compliance programs. It is possible that future developments, such as stricter requirements of environmental laws and enforcement policies, could adversely affect our production, handling, use, storage, transportation, sale or disposal of such substances. We believe that all of our facilities are in substantial compliance with applicable environmental laws.

Certain properties and facilities used in NL's former operations, including divested primary and secondary lead smelters and former mining locations, are the subject of civil litigation, administrative proceedings or investigations arising under federal and state environmental laws and common law. Additionally, in connection with past operating practices, we are currently involved as a defendant, potentially responsible party ("PRP") or both, pursuant to the Comprehensive Environmental Response, Compensation and Liability Act, as amended by the Superfund Amendments and Reauthorization Act ("CERCLA"), and similar state laws in various governmental and private actions associated with waste disposal sites, mining locations, and facilities that we or our predecessors, our subsidiaries or their predecessors currently or previously owned, operated or used, certain of which are on the United States Environmental Protection Agency's ("EPA") Superfund National Priorities List or similar state lists. These proceedings seek cleanup costs, damages for personal injury or property damage and/or damages for injury to natural resources. Certain of these proceedings involve claims for substantial amounts. Although we may be jointly and severally liable for these costs, in most cases we are only one of a number of PRPs who may also be jointly and severally liable, and among whom costs may be shared or allocated. In addition, we are occasionally named as a party in a number of personal injury lawsuits filed in various jurisdictions alleging claims related to environmental conditions alleged to have resulted from our operations.

Obligations associated with environmental remediation and related matters are difficult to assess and estimate for numerous reasons including the:

- complexity and differing interpretations of governmental regulations,
- number of PRPs and their ability or willingness to fund such allocation of costs,
- financial capabilities of the PRPs and the allocation of costs among them,
- solvency of other PRPs,
- multiplicity of possible solutions,
    - number of years of investigatory, remedial and monitoring activity required,
- uncertainty over the extent, if any, to which our former operations might have contributed to the conditions allegedly giving rise to such personal injury, property damage, natural resource and related claims, and
- number of years between former operations and notice of claims and lack of information and documents about the former operations.

In addition, the imposition of more stringent standards or requirements under environmental laws or regulations, new developments or changes regarding site cleanup costs or the allocation of costs among PRPs, solvency of other PRPs, the results of future testing and analysis undertaken with respect to certain sites or a determination that we are potentially responsible for the release of hazardous substances at other sites, could cause our expenditures to exceed our current estimates. We cannot assure you that actual costs will not exceed accrued amounts or the upper end of the range for sites for which estimates have been made, and we cannot assure you that costs will not be incurred for sites where no estimates presently can be made. Further, additional environmental and related matters may arise in the future. If we were to incur any future liability, this could have a material adverse effect on our consolidated financial statements, results of operations and liquidity.

We record liabilities related to environmental remediation and related matters (including costs associated with damages for personal injury or property damage and/or damages for injury to natural resources) when estimated future expenditures are probable and reasonably estimable. We adjust such accruals as further information becomes available to us or as circumstances change. Unless the amounts and timing of such estimated future expenditures are fixed and reasonably determinable, we generally do not discount estimated future expenditures to their present value due to the uncertainty of the timing of the payout. We recognize recoveries of costs from other parties, if any, as assets when their receipt is deemed probable. At December 31, 2017, we had not recognized any material receivables and at September 30, 2018, we have recognized $15.0 million of receivables for recoveries related to the California case discussed above.

We do not know and cannot estimate the exact time frame over which we will make payments for our accrued environmental and related costs. The timing of payments depends upon a number of factors, including but not limited to the timing of the actual remediation process; which in turn depends on factors outside of our control. At each balance sheet date, we estimate the amount of our accrued environmental and related costs which we expect to pay within the next twelve months, and we classify this estimate as a current liability. We classify the remaining accrued environmental costs as a noncurrent liability.

The table below presents a summary of the activity in our accrued environmental costs during the first nine months of 2018.

	Amount (In millions)
Balance at the beginning of the year	$ 117.5
Additions charged to expense, net	2.9
Payments, net	(3.7)
Balance at the end of period	$ 116.7
Amounts recognized in our Condensed Consolidated Balance Sheet at the end of the period:	
Current liabilities	$ 19.0
Noncurrent liabilities	97.7
Total	$ 116.7

NL – On a quarterly basis, NL evaluates the potential range of its liability for environmental remediation and related costs at sites where it has been named as a PRP or defendant. At September 30, 2018, NL had accrued approximately $111 million related to approximately 37 sites associated with remediation and related matters that it believes are at the present time and/or in their current phase reasonably estimable. The upper end of the range of reasonably possible costs to NL for remediation and related matters for which we believe it is possible to estimate costs is approximately $130 million, including the amount currently accrued.

NL believes that it is not reasonably possible to estimate the range of costs for certain sites. At September 30, 2018, there were approximately 5 sites for which NL is not currently able to estimate a range of costs. For these sites, generally the investigation is in the early stages, and NL is unable to determine whether or not NL actually had any association with the site, the nature of its responsibility, if any, for the contamination at the site and the extent of contamination at and cost to remediate the site. The timing and availability of information on these sites is dependent on events outside of our control, such as when the party alleging liability provides information to us. At certain of these previously inactive sites, NL has received general and special notices of liability from the EPA and/or state agencies alleging that NL, sometimes with other PRPs, are liable for past and future costs of remediating environmental contamination allegedly caused by former operations. These notifications may assert that NL, along with any other alleged PRPs, are liable for past and/or future clean-up costs. As further information becomes available to us for any of these sites which would allow us to estimate a range of costs, we would at that time adjust our accruals. Any such adjustment could result in the recognition of an accrual that would have a material effect on our consolidated financial statements, results of operations and liquidity.

Other – We have also accrued approximately $5.7 million at September 30, 2018 for other environmental cleanup matters.

Insurance coverage claims

We are involved in certain legal proceedings with a number of our former insurance carriers regarding the nature and extent of the carriers' obligations to us under insurance policies with respect to certain lead pigment and asbestos lawsuits. The issue of whether insurance coverage for defense costs or indemnity or both will be found to exist for our

lead pigment and asbestos litigation depends upon a variety of factors and we cannot assure you that such insurance coverage will be available.

We have agreements with certain of our former insurance carriers pursuant to which the carriers reimburse us for a portion of our future lead pigment litigation defense costs, and one such carrier reimburses us for a portion of our future asbestos litigation defense costs. We are not able to determine how much we will ultimately recover from these carriers for defense costs incurred by us because of certain issues that arise regarding which defense costs qualify for reimbursement. While we continue to seek additional insurance recoveries, we do not know if we will be successful in obtaining reimbursement for either defense costs or indemnity. Accordingly, we recognize insurance recoveries in income only when receipt of the recovery is probable and we are able to reasonably estimate the amount of the recovery.

For additional discussion of certain litigation involving NL and certain of its former insurance carriers, please refer to our 2017 Annual Report.

Other litigation

NL—— NL has been named as a defendant in various lawsuits in several jurisdictions, alleging personal injuries as a result of occupational exposure primarily to products manufactured by our former operations containing asbestos, silica and/or mixed dust. In addition, some plaintiffs allege exposure to asbestos from working in various facilities previously owned and/or operated by NL. There are 109 of these types of cases pending, involving a total of approximately 582 plaintiffs. In addition, the claims of approximately 8,676 plaintiffs have been administratively dismissed or placed on the inactive docket in Ohio courts. We do not expect these claims will be re-opened unless the plaintiffs meet the courts' medical criteria for asbestos-related claims. We have not accrued any amounts for this litigation because of the uncertainty of liability and inability to reasonably estimate the liability, if any. To date, we have not been adjudicated liable in any of these matters. Based on information available to us, including:

- facts concerning historical operations,
- the rate of new claims,
- the number of claims from which we have been dismissed, and
- our prior experience in the defense of these matters,

we believe that the range of reasonably possible outcomes of these matters will be consistent with our historical costs (which are not material). Furthermore, we do not expect any reasonably possible outcome would involve amounts material to our consolidated financial position, results of operations or liquidity. We have sought and will continue to vigorously seek, dismissal and/or a finding of no liability from each claim. In addition, from time to time, we have received notices regarding asbestos or silica claims purporting to be brought against former subsidiaries, including notices provided to insurers with which we have entered into settlements extinguishing certain insurance policies. These insurers may seek indemnification from us.

Kronos— In March 2013, Kronos was 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, Kronos paid an immaterial amount in full settlement of this matter, and in August 2018 the Court issued a final approval of the settlement.

Other—In addition to the litigation described above, we and our affiliates are involved in various other environmental, contractual, product liability, patent (or intellectual property), employment and other claims and disputes incidental to our present and former businesses. In certain cases, we have insurance coverage for these items, although we do not expect any additional material insurance coverage for our environmental claims. We currently believe that the disposition of all of these various other claims and disputes (including asbestos-related claims), individually or in the aggregate, should not have a material adverse effect on our consolidated financial position, results of operations or liquidity beyond the accruals already provided.

Note 18—Fair value measurements and financial instruments:

The following table summarizes the valuation of our marketable securities, financial instruments and other items recorded on a fair value basis as of:

	Fair Value Measurements			
	Total	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
	(In millions)			
Asset				
December 31, 2017:				
Marketable securities:				
Current	$3.0	$ —	$ 3.0	$ —
Noncurrent	255.7	1.3	4.4	250.0
September 30, 2018:				
Marketable securities:				
Current	$2.2	$ —	$ 2.2	$ —
Noncurrent	5.1	1.7	3.4	—

See Note 6 for information on how we determine fair value of our noncurrent marketable securities.

Certain of our sales generated by Chemicals Segment's non-U.S. operations are denominated in U.S. dollars. Our Chemicals Segment periodically uses 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 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. 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 (loss) 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 transactions. 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, Kronos had no currency forward contracts outstanding.

Interest rate swap contract - See the 2017 Annual Report for a discussion of the interest rate swap Kronos 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	
	Carrying amount	Fair value	Carrying amount	Fair value
	(In millions)			
Cash, cash equivalents and restricted cash equivalents	$461.7	$461.7	$596.1	$596.1
Deferred payment obligation	9.3	9.3	9.5	9.5
Long-term debt (excluding capitalized leases):				
Kronos Senior Notes	471.1	495.1	463.0	455.1
Snake River Sugar Company fixed rate loans	250.0	250.0	—	—
Valhi credit facility with Contran	284.3	284.3	314.3	314.3
Tremont promissory note payable	13.1	13.1	10.9	10.9
BMI bank note payable	18.8	19.7	18.0	18.8
LandWell note payable to the City of Henderson	2.5	2.5	2.3	2.3

At September 30, 2018, the estimated market price of Kronos' Senior Notes was €969 per €1,000 principal amount. The fair value of Kronos' Senior Notes was based on quoted market prices; however, these quoted market prices represent Level 2 inputs because the markets in which the term loan trades were not active. The fair value of our fixed-rate nonrecourse loans from Snake River Sugar Company was based upon the $250 million redemption price of our investment in Amalgamated, which collateralized the

nonrecourse loans (this is a Level 3 input). The fair value of variable interest rate debt and other fixed-rate debt, which represents Level 2 inputs, is deemed to approximate carrying values. See Note 8. Due to their near-term maturities, the carrying amounts of accounts receivable and accounts payable are considered equivalent to fair value. See Notes 4 and 9.

Note 19—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 of our Chemicals and Component Products Segments 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 will record sales of our Chemicals and Component Products Segments 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 as it relates to sales of our Chemicals and Component Products Segments, and we believe adoption of this standard will have a minimal effect on our revenues of our Chemicals and Component Products Segments on an ongoing basis. See Note 11.

Revenues from our Real Estate Management and Development Segment are generally under long-term contracts. We collect certain fees from builders when the builder sells a home to a customer which we previously recognized when received and now beginning on January 1, 2018 we recognize these fees as revenue at the time we sell the parcels to the builder versus our previous practice which did not recognize revenue until the homes were sold. Accordingly, upon adoption of ASU 2014-09, such fees we collect from builders when the builder sells a home to a customer are now estimated at the time we sell a parcel to a builder, and such fees are part of the revenue we recognize over time using cost based input methods for our retail land sales in the case of the home participation fee or over the time the homes in the parcel are sold in the case of the marketing fee. Under the transition requirements for adopting this ASU, we recognized the cumulative amount of such revenue that we would have recognized through December 31, 2017, had we recognized such builder fees under this new accounting method ($6.1 million, or $2.7 million, net of applicable income taxes and noncontrolling interest), as a direct increase in our retained earnings as of January 1, 2018. A portion of such builder fees are expected to be collected more than twelve months from the balance sheet date, and such amounts are classified as a noncurrent asset (Land contract receivables), see Note 7. In addition to recognizing such $6.1 million receivable, we recognized a contract asset of $8.8 million and an offsetting liability for deferred revenue of $8.8 million upon the adoption of this ASU for the estimated amount of such builder fees which we expect to receive from future home sales by the builders, which builder fees are not yet recognizable as revenue (and a portion of such contract asset is also classified as a noncurrent receivable along with an equal amount of noncurrent deferred revenue). Had we recognized revenue in 2018 on the same basis we did in 2017, our land sales revenue would have been higher by $.5 million and lower by $.7 million in the third quarter and first nine months of 2018, respectively.

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 portfolio of marketable equity securities was not material.

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 2017-06 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 previously classified as part of cost of sales and selling, general and administrative expenses, respectively, for the third quarter 2017 and $8.0 million and $4.9 million for the first nine months of 2017, to "Other components of net periodic pension and OPEB cost" in our Condensed Consolidated Statement of Income. See Note 12.

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-of-use 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 primarily a holding company. We operate through our wholly-owned and majority-owned subsidiaries, including NL Industries, Inc., Kronos Worldwide, Inc., CompX International Inc., Tremont LLC, Basic Management, Inc. ("BMI") and the LandWell Company ("LandWell"). Kronos (NYSE: KRO), NL (NYSE: NL) and CompX (NYSE American: CIX) each file periodic reports with the SEC.

On January 26, 2018 we completed the sale of our Waste Management Segment to JFL-WCS Partners, LLC ("JFL Partners"), an entity sponsored by certain investment affiliates of J.F. Lehman & Company, for consideration consisting of the assumption of all of WCS' third-party indebtedness and other liabilities. Accordingly the results of operations of our Waste Management Segment is reflected as discontinued operations in our Consolidated Statements of Operations for all periods presented. We recognized a pre-tax gain of approximately $58 million on the transaction in the first quarter of 2018 because the carrying value of the liabilities of the business assumed by the purchaser exceeded the carrying value of the assets sold at the time of sale in large part due to a long-lived asset impairment of $170.6 million recognized with respect to the Waste Management Segment in the second quarter of 2017. Such pre-tax gain is classified as part of discontinued operations. Our Waste Management Segment, which operated in the low-level radioactive, hazardous, toxic and other waste disposal industry historically struggled to generate sufficient recurring disposal volumes to generate positive operating results or cash flows. We believe the sale will enable us to focus more effort on continuing to develop our remaining segments which we believe have greater opportunity for higher returns. See Note 3 to our Condensed Consolidated Financial Statements.

We have three consolidated reportable operating segments:

- Chemicals—Our chemicals segment is operated through our majority control of Kronos. Kronos is a leading global producer and marketer of value-added titanium dioxide pigments ("TiO_2"). TiO_2 is used to impart whiteness, brightness, opacity and durability to a wide variety of products, including paints, plastics, paper, fibers and ceramics. Additionally, TiO_2 is a critical component of everyday applications, such as coatings, plastics and paper, as well as many specialty products such as inks, foods and cosmetics.
- Component Products—We operate in the component products industry through our majority control of CompX. CompX is a leading manufacturer of security products used in the recreational transportation, postal, office and institutional furniture, cabinetry, tool storage, healthcare and a variety of other industries. CompX is also a leading manufacturer of stainless steel exhaust systems, gauges, throttle controls and trim tabs for the recreational marine industry.
- Real Estate Management and Development—We operate in real estate management and development through our majority control of BMI and LandWell. BMI provides utility services to certain industrial and municipal customers and owns real property in Henderson, Nevada. LandWell is engaged in efforts to develop certain land holdings for commercial, industrial and residential purposes in Henderson, Nevada.

General

This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended. Statements in this Quarterly Report that are not historical facts are forward-looking in nature and represent 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 that the expectations reflected in such 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 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 include, 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 certain of our businesses (such as Kronos' TiO_2 operations);
- Customer and producer inventory levels;

- Unexpected or earlier-than-expected industry capacity expansion (such as the TiO_2 industry);
- Changes in raw material and other operating costs (such as ore, zinc, brass, aluminum, steel and energy costs) and our ability to pass those costs on to our customers or offset them with reductions in other operating 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, among other things, TiO_2 and component products);
- Competitive products and prices and substitute products, including increased competition from low-cost manufacturing sources (such as China);
- Possible disruption of our business or increases in the cost of doing business resulting from terrorist activities or global conflicts;
- Customer and competitor strategies;
- Potential difficulties in integrating future acquisitions;
- Potential difficulties in upgrading or implementing new accounting and manufacturing software systems (such as the Chemicals Segment's new enterprise resource planning system);
- Potential consolidation of our competitors;
- Potential consolidation of our customers;
- The impact of pricing and production decisions;
- Competitive technology positions;
- The introduction of trade barriers;
- The ability of our subsidiaries to pay us dividends;
- The impact of current or future government regulations (including employee healthcare benefit related regulations);
- Uncertainties associated with new product development and the development of new product features;
- 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);
- Decisions to sell operating assets other than in the ordinary course of business;
- The timing and amounts of insurance recoveries;
- Our ability to renew, amend, refinance or establish 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 ultimate ability to utilize income tax attributes, the benefits of which may or may not presently 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, or new developments regarding environmental remediation at sites related to our former operations);
- Government laws and regulations and possible changes therein (such as changes in government regulations which might impose various obligations on former manufacturers of lead pigment and lead-based paint, including NL, with respect to asserted health concerns associated with the use of such products);
- The ultimate resolution of pending litigation (such as NL's lead pigment litigation, environmental and other litigation and Kronos' class action litigation);
- Our ability to comply with covenants contained in our revolving bank credit facilities;
- Our ability to complete and comply with the conditions of our licenses and permits;

- Changes in real estate values and construction costs in Henderson, Nevada;
- Water levels in Lake Mead; and
- Possible future litigation.

Should one or more of these risks materialize (or the consequences of such development worsen), or should the underlying assumptions prove incorrect, actual results could differ materially from those currently 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.

Operations Overview

Quarter Ended September 30, 2018 Compared to the Quarter Ended September 30, 2017 —

We reported net income from continuing operations attributable to Valhi stockholders of $142.8 million or $.42 per diluted share in the third quarter of 2018 compared to $44.2 million or $.13 per diluted share in the third quarter of 2017. As discussed more fully below, our net income from continuing operations attributable to Valhi stockholders increased from 2017 to 2018 primarily due to the net effects of:

- the third quarter 2018 recognition of an aggregate income tax benefit of $113 million related to a change in the deferred income tax liability related to our investment in Kronos as a result of the 2017 Tax Act;
- an aggregate charge of $7.1 million recognized in the third quarter of 2017 related to a loss on prepayment of debt;
- lower operating income from our Chemicals Segment in 2018 compared to 2017;
- a securities transaction gain of $12.5 million recognized in the third quarter of 2018 related to the sale of our interest in The Amalgamated Sugar Company LLC ("Amalgamated");
- the third quarter 2017 recognition of an aggregate income tax benefit of $11.3 million related to the execution and finalization of an Advance Pricing Agreement between Canada and Germany associated with our Chemicals Segment; and
- a non-cash deferred income tax benefit of $7.8 million in 2017 as a result of a decrease in our deferred income tax asset valuation allowance related to our Chemicals Segment's German and Belgian operations.

Our diluted net income from continuing operations per share in 2018 includes:

- a non-cash deferred income tax benefit of $.33 per diluted share related to a change in the deferred income tax liability related to our investment in Kronos as a result of the 2017 Tax Act; and
- a gain of $.03 per diluted share related to a securities transaction gain recognized in the third quarter related to the sale of our interest in Amalgamated Sugar Company LLC.

Our diluted net income from continuing operations per share in 2017 includes:

- a non-cash deferred income tax benefit of $.02 per diluted share related to the execution and finalization of an Advance Pricing Agreement between Canada and Germany associated with our Chemicals Segment;
- a non-cash deferred income tax benefit of $.01 per diluted share as a result of a decrease in our deferred income tax asset valuation allowance related to our Chemicals Segment's German and Belgian operations; and
- an aggregate charge of $.01 per diluted share recognized in the third quarter related to the loss on prepayment of debt.

Nine Months Ended September 30, 2018 Compared to the Nine Months Ended September 30, 2017 —

We reported net income from continuing operations attributable to Valhi stockholders of $205.8 million or $.60 per diluted share in the first nine months of 2018 compared to $175.6 million or $.51 per diluted share in the first nine months of 2017. As discussed more fully below, our net income from continuing operations attributable to Valhi stockholders increased from 2017 to 2018 primarily due to the net effects of:

- the third quarter 2018 recognition of an aggregate income tax benefit of $113 million related to a change in the deferred income tax liability related to our investment in Kronos as a result of the 2017 Tax Act;

- a non-cash deferred income tax benefit of $170.4 million in 2017 as a result of a decrease in our deferred income tax asset valuation allowance related to our Chemicals Segment's German and Belgian operations;
- a pre-tax litigation settlement expense of $62.0 million recognized in the second quarter of 2018;
- higher operating income from our Chemicals Segment in 2018 compared to 2017;
- a securities transaction gain of $12.5 million recognized in the third quarter of 2018 related to the sale of our interest in Amalgamated;
- recognition of a gain on sale of land of $12.5 million in the first quarter of 2018;
- the third quarter 2017 recognition of an aggregate income tax benefit of $11.3 million related to the execution and finalization of an Advance Pricing Agreement between Canada and Germany associated with our Chemicals Segment; and
- an aggregate charge of $7.1 million recognized in the third quarter of 2017 related to the loss on prepayment of debt.

Our diluted net income per share in 2018 includes:

- a non-cash deferred income tax benefit of $.33 per diluted share in the third quarter related to a change in the deferred income tax liability related to our investment in Kronos as a result of the 2017 Tax Act;
- a gain of $.03 per diluted share related to a securities transaction gain recognized in the third quarter related to the sale of our interest in Amalgamated Sugar Company LLC;
- a gain of $.03 per diluted share related to the sale of land not used in our operations; and
- a charge of $.12 per diluted share related to the litigation settlement expense recognized in the second quarter.

Our diluted net income from continuing operations per share in 2017 includes:

- a non-cash deferred income tax benefit of $.29 per diluted share as a result of a decrease in our deferred income tax asset valuation allowance related to our Chemicals Segment's German and Belgian operations;
- a non-cash deferred income tax benefit of $.02 per diluted share related to the execution and finalization of an Advance Pricing Agreement between Canada and Germany associated with our Chemicals Segment; and
- an aggregate charge of $.01 per diluted share recognized in the third quarter related to the loss on prepayment of debt; and

Current Forecast for 2018—

We currently expect our consolidated operating income for 2018 will be slightly higher as compared to 2017 primarily due to the net effects of:

- higher operating income from our Real Estate Management and Development Segment in 2018 as we anticipate increased land development activities;
- higher operating income from our Component Products Segment in 2018, principally as a result of expected higher sales in 2018; and
- slightly lower operating income from our Chemicals Segment as a result of higher operation costs and lower sales volumes in 2018 compared to 2017.

However, we currently expect to report lower net income from continuing operations attributable to Valhi stockholders for 2018 as compared to 2017, primarily because the favorable impact of slightly higher expected operating income in 2018 and the aggregate income tax benefit recognized in the third quarter of 2018 related to our investment in Kronos would be more than offset by the litigation settlement expense recognized in the second quarter of 2018 and the aggregate net income tax benefit we recognized in 2017 (mostly in the second, third and fourth quarters of 2017, as discussed in the 2017 Annual Report).

Segment Operating Results—2017 Compared to 2018 –

Chemicals –

We consider TiO_2 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 TiO_2 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 TiO_2 in any interim or annual period may not change in the same proportion as the change in GDP, in part due to relative changes in the TiO_2 inventory levels of our customers. We believe that our customers' inventory levels are influenced in part by their expectations for future changes in market TiO_2 selling prices as well as their expectations for future availability of product. Although certain of our TiO_2 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:

- our TiO_2 sales and production volumes,
- TiO_2 selling prices,
- 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, the Norwegian krone and the Canadian dollar).

Our Chemicals Segment's key performance indicators are our TiO_2 average selling prices, our level of TiO_2 sales and production volumes, and the cost of our third-party feedstock ore. TiO_2 selling prices generally follow industry trends and prices will increase or decrease generally as a result of competitive market pressures.

	Three months ended September 30,			Nine months ended September 30,		
	2017	2018	% Change	2017	2018	% Change
Net sales	$464.5	$410.3	(12)%	$1,275.7	$1,312.5	3 %
Cost of sales	309.9	291.7	(6)	883.7	848.3	(4)
Gross margin	$154.6	$118.6	(23)	$392.0	$464.2	18
Operating income	$98.4	$61.0	(38)	$234.7	$295.2	26
Percent of net sales:						
Cost of sales	67 %	71 %		69 %	65	
Gross margin	33	29		31	35	
Operating income	21	15		18	22	
TiO_2 operating statistics:						
Sales volumes*	150	123	(19)	450	385	(15)%
Production volumes*	141	131	(7)	427	400	(6)
Percent change in net sales:						
TiO_2 product pricing			9 %			18 %
TiO_2 sales volumes			(19)			(15)
TiO_2 product mix			(2)			(4)

Changes in currency exchange rates	—		4	
Total	(12	)%	3	%

*Thousands of metric tons

Industry conditions and 2018 overview – Due to the successful implementation of previously-announced price increases, average selling prices rose throughout 2017 and the first six months of 2018. Our Chemicals Segment's average TiO_2 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 Chemicals Segment's average selling prices declined during the third quarter of 2018. Our Chemicals Segment's 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. Our Chemicals

Segment 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 Chemicals Segment's 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 Chemicals Segment's 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 Utilization 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 Chemicals Segment's 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).

Net sales – Our Chemicals Segment's 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 Chemicals Segment's 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 TiO_2 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.

Our Chemicals Segment's 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 Chemicals Segment's 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 TiO_2 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—Our Chemicals Segment's cost of sales decreased 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 TiO_2 production volumes, higher raw materials and other production costs of approximately $40 million and currency fluctuations (primarily the euro). The decrease in TiO_2 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 Chemicals Segment's 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.

Our Chemicals Segment's cost of sales decreased 4% 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 TiO_2 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 TiO_2 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 Chemicals Segment's 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.

Operating Income—Our Chemicals Segment's operating income decreased 38% in the third quarter of 2018 compared to the third quarter of 2017, and operating income as a percentage of net sales decreased to 15% in 2018 from 21% in 2017. This decrease was driven by the decrease in gross margin for the quarter, discussed above. Our Chemicals Segment's operating income increased 26% in the first nine months of 2018 compared to the first nine months of 2017, and operating income as a percentage of net sales increased to 22% in 2018 from 18% in 2017. The increase was driven by the increase in gross margin for the first nine months of 2018, discussed above. We estimate that changes in currency exchange rates increased income from operations by approximately $7 million in the third quarter of 2018 and $26 million in the first nine months of 2018 as compared to the same periods in 2017, as discussed below. Our Chemicals Segment's operating income was also effected by increased higher general and administrative costs related to the implementation of a new accounting and manufacturing software system and higher sales support.

Our Chemicals Segment's operating income is net of amortization of purchase accounting adjustments made in conjunction with our acquisitions of interests in NL and Kronos. As a result, we recognize additional depreciation expense above the amounts Kronos reports separately, substantially all of which is included within cost of sales. We recognized additional depreciation expense of $1.7 million in the first nine months of 2018 and $1.6 million in the same period of 2017, which reduced our reported Chemicals Segment's operating income as compared to amounts reported by Kronos.

Currency Exchange Rates—— Our Chemicals Segment has substantial operations and assets located outside the United States (primarily in Germany, Belgium, Norway and Canada). The majority of our Chemicals Segment's 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 worldwide, primarily titanium-containing feedstocks, are purchased primarily in U.S. dollars, while labor and other production costs are purchased 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 18 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 Chemicals Segment's sales and operating income for the periods indicated.

Impact of changes in currency exchange rates

Three months ended September 30, 2018 vs September 30, 2017

	Transaction gains/(losses) recognized			Translation gains – impact of rate changes	Total currency impact 2018 vs 2017
	2017	2018	Change		
	(In millions)				
Impact on:					
Net sales	$ -	$ -	$ -	$ -	$ -
Operating income	(4)	(1)	3	4	7

Changes in currency exchange rates (primarily the euro) had a nominal effect on our Chemicals Segment's 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

	Transaction gains/(losses) recognized			Less: translation gains – impact of rate changes	Total currency impact 2018 vs 2017
	2017	2018	Change		
	(In millions)				
Impact on:					
Net sales	$ -	$ -	$ -	$ 53	$ 53
Operating income	(8)	4	12	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 euro-denominated 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 Chemicals Segment's Canadian and Norwegian operations are denominated in the U.S. dollar.

The $26 million increase in operating income 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 Chemicals Segment's 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 Chemicals Segment's 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 Chemicals Segment's cost of sales per metric ton of TiO_2 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.

Our Chemicals Segment 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 TiO_2 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 Chemicals Segment's 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 Chemicals Segment's operating income 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).

Due to the constraints of high capital costs and extended lead time associated with adding significant new TiO_2 production capacity, especially for premium grades of TiO_2 products produced from the chloride process, we believe increased and sustained profit margins will be necessary to financially justify major expansions of western producers' TiO_2 production capacity required to meet expected future growth in demand. Any such major expansion of TiO_2 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.

Component Products –

Our Component Products Segment's product offerings consist of a significantly large number of products that have a wide variation in selling price and manufacturing cost, which results in certain practical limitations on our ability to quantify the impact of changes in individual product sales quantities and selling prices on our net sales, cost of sales and gross margin. In addition, small variations in period-to-period net sales, cost of sales and gross margin can result from changes in the relative mix of our products sold. The key performance indicator for our Component Products Segment is operating income margins.

	Three months ended September 30,			Nine months ended September 30,		
	2017	2018	% Change	2017	2018	% Change
Net sales	$26.9	$30.0	11 %	$86.9	$90.8	4 %
Cost of sales	18.8	20.4	9	59.6	60.5	2
Gross margin	$8.1	$9.6	17	$27.3	$30.3	11
Operating income	$3.4	$4.5	34	$12.5	$14.9	19

Percent of net sales:				
Cost of sales	70 %	68 %	69 %	67 %
Gross margin	30	32	32	33
Operating income	13	15	14	16

Net Sales — Our Component Products Segment's increased $3.0 million in the third quarter of 2018 compared to the same period in 2017 due to higher sales of security products across the majority of our markets including transportation, government security, office furniture and distribution as well as continued strong growth in sales of marine components to various marine and industrial markets. Net sales increased $3.9 million in the first nine months of 2018 compared to the same period in 2017 due to the higher marine components sales volumes, and to a lesser extent security products sales across the majority of our markets, particularly transportation, office furniture and distribution. Relative changes in selling prices did not have a material impact on net sales comparisons.

Costs of Sales and Gross Margin — Our Component Products Segment's cost of sales as a percentage of sales decreased 1.5% in the third quarter of 2018 compared to the same period in 2017 primarily due to improved coverage of fixed costs over increased production volumes. As a result, gross profit increased over the same period. As a percentage of net sales, Component Products Segment's cost of goods sold for the first nine months of 2018 decreased 1.9% compared to the same period in 2017 due to favorable changes in customer and product mix in security products as well as improved manufacturing efficiencies and fixed cost leverage facilitated by higher production volumes for each of our business segments. Gross margin for the third quarter and first nine months of 2018 increased over the same periods in the prior year due to the aforementioned factors.

Operating Income — Our Component Products Segment's operating income as a percentage of net sales for the third quarter and first nine months of 2018 increased compared to the same periods of 2017 and was primarily impacted by the factors impacting cost of goods sold, gross margin and operating costs discussed above.

Outlook—Due to the strong third quarter, year-to-date sales of our Component Products Segment's security products now exceed the comparable year-to-date period, while sales of marine components continue to significantly outpace year-to-date 2017 due to the significant traction achieved through new product offerings, primarily to the recreational boat markets. We believe full year sales of our security products and marine components, as well as the related operating earnings, will also surpass prior year. Our Component Products Segment monitors changes in economic conditions and sales order rates and will respond to fluctuations in customer demand through continuous evaluation of staffing levels and consistent execution of our lean manufacturing and cost improvement initiatives. Additionally, our Component Products Segment continues to seek opportunities to gain market share in markets we currently serve, to expand into new markets and to develop new product features in order to mitigate the impact of changes in demand as well as broaden our sales base.

Real Estate Management and Development –

	Three months ended September 30,		Nine months ended September 30,	
	2017	2018	2017	2018
	(In millions)			
Net sales	$5.1	$14.9	$21.0	$28.1
Cost of sales	3.4	10.4	15.5	20.6
Gross margin	$1.7	$4.5	$5.5	$7.5
Operating income	$1.3	$3.7	$3.1	$7.9

General—Our Real Estate Management and Development Segment consists of BMI and LandWell. BMI provides utility services, among other things, to an industrial park located in Henderson, Nevada, and is responsible for the delivery of water to the city of Henderson and various other users through a water distribution system owned by BMI. LandWell is actively engaged in efforts to develop certain real estate in Henderson, Nevada including approximately 2,100 acres zoned for residential/planned community purposes and approximately 400 acres zoned for commercial and light industrial use.

Beginning in December 2013 and through the third quarter of 2018, LandWell has closed or entered into escrow on approximately 520 acres of the residential/planned community and approximately 65 acres zoned for commercial and light industrial use. Contracts for land sales are negotiated on an individual basis and sales terms and prices will vary based on such factors as location (including location within a planned community), expected development work, and individual buyer needs. Although land may be under contract, we do not recognize revenue until we have satisfied the criteria for revenue recognition set forth in ASC Topic 606. In some instances, we will receive cash proceeds at the time the contract closes and record deferred revenue for some or all of the cash amount received, with such deferred

revenue being recognized in subsequent periods. Because land held for development was initially recognized at estimated fair value at the acquisition date as required by ASC Topic 805, we do not expect to recognize significant operating income on land sales for the land currently under contract. We expect the development work to continue for 10 to 15 years on the rest of the land held for development, especially the remainder of the residential/planned community.

Net Sales and Operating Income— A substantial portion of the net sales from our Real Estate Management and Development Segment consists of revenues from land sales. We recognized $13.4 million and $23.0 million in revenues on land sales during the third quarter and first nine months of 2018, respectively, compared to $2.7 million and $14.8 million in the same periods of 2017. As noted above we recognize revenue in our residential/planned community over time using cost based input methods (previously known as percentage completion method) and a large majority of the revenue we recognized in 2017 and 2018 was under this method of revenue recognition. The contracts on these sales (both within the planned community and otherwise) include approximately 480 acres of the residential planned community and certain other acreage which closed in December 2013 and through the third quarter of 2018. Cost of sales related to land sales revenues was $9.1 million and $16.5 million in the third quarter and first nine months of 2018, respectively, compared to $1.8 million and $11.1 million in the same periods of 2017. Land sales revenues were higher in both periods of 2018 as compared to 2017 primarily due to higher infrastructure development spending in 2018 and the relatively higher percentage completion of land sales in existing development phases during the period. Land infrastructure development spending increased in third quarter of 2018 as we balanced development requirements with home builder outputs during the periods along with developing new phases of our master planned community. Operating income in the first nine months of 2018 also includes $3.1 million of

income in the first quarter related to the recognition of tax increment reimbursement note receivables which we now believe we can recognize, as discussed in Note 7 to our Condensed Consolidated Financial Statements.

The remainder of net sales and cost of sales related to this segment primarily relates to water delivery fees and expenses. We deliver water to several customers under long-term contracts.

Outlook—We are actively pursuing opportunities to maximize cash proceeds from the sale of our land held for development. In the near term, we are focused on developing and selling land we manage, primarily to residential builders, for the approximately 2,100 acres zoned for residential/planned community in Henderson, Nevada. We expect the development work for the first phase of the residential/planned community to continue over the next several years, including those parcels currently under contract for which the development work is expected to be completed in 2019. We do not expect to recognize significant amounts of operating income related to these sales for the parcels currently under contract because our basis in the land value is the December 2013 acquisition date fair value; however, we do expect to generate cash proceeds from these sales in excess of our acquisition costs, which proceeds are expected to be used, in part, to fund ongoing development work for the remainder of these properties. Beginning in the fourth quarter of 2017, we began sales of parcels that have a lower book value than the parcels previously sold; as a result we would expect to recognize more land sales related operating income in 2018 than in 2017. In addition, we expect land development spending to accelerate in the fourth quarter of 2018 as home builder output at the end of the third quarter of 2018 more closely tracked to our development efforts. As noted above land sales revenue is largely driven by the amount of land development spending.

General Corporate Items, Interest Expense, Income Taxes and Noncontrolling Interest—2018 Compared to 2017

Securities Earnings—A significant portion of our interest and dividend income in both 2017 and 2018 relates to the distributions we received from Amalgamated. We recognized dividend income from the Amalgamated of $6.3 million and $19.0 million in the third quarter and first nine months of 2017, respectively and $4.2 million and $16.9 million in the third quarter and first nine months of 2018, respectively. On August 31, 2018 we sold our interest in Amalgamated for consideration consisting of $12.5 million in cash and the deemed payment in full of our $250 million in loans we owed Snake River. We recognized a $12.5 million securities gain on this transaction. See Note 6 to our Condensed Consolidated Financial Statements.

Gain on Land Sales—In the first quarter of 2018 we sold two parcels of land not used in our operating activities. See Note 13 to our Condensed Consolidated Financial Statements.

Insurance Recoveries—Insurance recoveries relate to amounts NL received from certain of its former insurance carriers, and relate principally to the recovery of prior lead pigment and asbestos litigation defense costs incurred by NL. We have agreements with four former insurance carriers pursuant to which the carriers reimburse us for a portion of our future lead pigment litigation defense costs, and one such carrier reimburses us for a portion of our future asbestos litigation defense costs. We are not able to determine how much we will ultimately recover from these carriers for defense costs incurred by us because of certain issues that arise regarding which defense costs qualify for reimbursement. While we continue to seek additional insurance recoveries for lead pigment and asbestos litigation matters, we do not know the extent to which we will be successful in obtaining additional reimbursement for either defense costs or indemnity. Any additional insurance recoveries would be recognized when the receipt is probable and the amount is determinable. Substantially all of the insurance recoveries recognized in 2017 and 2018 relate to reimbursement of ongoing litigation defense costs. See Note 17 to our Condensed Consolidated Financial Statements.

Litigation settlement expense–We recognized a pre-tax $62.0 million litigation settlement expense charge in the second quarter of 2018 related to the lead pigment litigation in California; see Note 17 to our Condensed Consolidated Financial Statements.

Other components of net periodic pension and OPEB expense–We recognized other components of net periodic pension and OPEB expense of $3.7 million and $11.2 million in the third quarter and first nine months of 2018 compared to $4.5 million and $12.9 million in the same periods of 2017. The expense declined in both periods primarily due to pension costs as a result of actuarial amortizations and expected returns on plan assets.

Other General Corporate Items—Corporate expenses were 101% higher in the third quarter of 2018 compared to the third quarter of 2017, due primarily to higher administrative costs in 2018, offset in part by lower environmental remediation and related costs in 2018. Corporate expenses were 65% higher in the first nine months of 2018 compared to the same period in 2017, due primarily to higher administrative costs, litigation fees and related costs and environmental remediation and related costs in 2018 compared to 2017. Included in corporate expense are:

- litigation and related costs at NL of $1.1 million in the third quarter of 2018 compared to $.9 million in third quarter of 2017 and $5.1 million in the first nine months of 2018 compared to $2.8 million in the first nine months of 2017; and
- net environmental remediation and related benefit of $1.6 million in the third quarter of 2018 compared to expense of $.2 million in the third quarter of 2017 and expense of $2.9 million in the first nine months of 2018 compared to $3.4 million in the first nine months of 2017.

Overall, we currently expect that our net general corporate expenses in 2018 will be higher than in 2017 primarily due to higher expected administrative, litigation fees and related costs, and environmental remediation and related costs.

The level of our litigation and related expenses varies from period to period depending upon, among other things, the number of cases in which we are currently involved, the nature of such cases and the current stage of such cases (e.g. discovery, pre-trial motions, trial or appeal, if applicable). See Note 17 to our Condensed Consolidated Financial Statements. If our current expectations regarding the number of cases in which we expect to be involved during 2018, or the nature of such cases, were to change our corporate expenses could be higher than we currently estimate.

Obligations for environmental remediation and related costs are difficult to assess and estimate, and it is possible that actual costs for environmental remediation and related costs will exceed accrued amounts or that costs will be incurred in the future for sites in which we cannot currently estimate the liability. If these events occur in 2018, our corporate expense could be higher than we currently estimate. In addition, we adjust our accruals for environmental remediation and related costs as further information becomes available to us or as circumstances change. Such further information or changed circumstances could result in an increase or reduction in our accrued environmental remediation and related costs. See Note 17 to our Condensed Consolidated Financial Statements.

Interest Expense— Interest expense decreased to $14.0 million in the third quarter of 2018 from $15.0 million in the third quarter of 2017 primarily due to the net effects of lower average debt levels in the third quarter of 2018 as a result of the deemed repayment of the Snake River Sugar Company debt at the end of August and higher average interest rates on variable-rate indebtedness. Interest expense increased to $45.4 million in the first nine months of 2018 from $44.2 million in the same period of 2017 primarily due to the net effects of higher average debt levels in 2018 and higher average interest rates on variable-rate indebtedness.

We expect interest expense will be lower in 2018 as compared to 2017 due to lower average debt levels offset somewhat by higher average interest rates on variable-rate indebtedness.

Provision for Income Taxes (Benefit)—We recognized an income tax benefit of $91.4 million in the third quarter of 2018 compared to income tax expense of $14.7 million in the third quarter of 2017 and an income tax benefit of $33.2 million in the first nine months of 2018 compared to an income tax benefit of $67.5 million in the first nine months of 2017. The difference is primarily due to the third quarter 2018 recognition of a change in the deferred income tax liability related to our investment in Kronos as a result of the 2017 Tax Act and the effect of the reversal of our deferred income tax asset valuation allowance associated with our Chemicals Segment's German and Belgian operations 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 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 14 to our Condensed Consolidated Financial Statements for a tabular reconciliation of our statutory income tax provision to our actual tax provision.

Our Chemicals Segment has 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 Chemicals Segment's German and Belgian net deferred income tax assets at such date. During the first six months of 2017, Kronos 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 Chemicals Segment's 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 were required to revalue our net deferred tax liability 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 taxable temporary differences was based on our net deferred tax as of December 31, 2017. Such revaluation resulted in a provisional non-cash deferred income tax benefit of $77.1 million recognized as of December 31, 2017 in continuing operations, reducing our net deferred income tax liability. The amounts recorded as of December 31, 2017 as a result of the 2017 Tax Act represented estimates based on information currently available. We did not make any additional measurement-period adjustments to the provisional amounts recorded for this item during the first six months of 2018 because we are still waiting on additional guidance that may impact the income tax effects of the new legislation recognized at December 31, 2017. During the third quarter of 2018, in conjunction with finalizing our federal income tax return we were able to obtain, prepare and analyze the necessary information to complete the accounting under ASC 740 related to the revaluation of our net deferred tax liability associated with our U.S. net taxable temporary differences as of December 31, 2017, which resulted in a measurement period adjustment and recognition of a non-cash deferred income tax expense of $59.7 million, decreasing the provisional amount recognized at December 31, 2017. Such adjustment is almost entirely attributable to the re-measurement of our deferred income taxes with respect to the excess of the financial reporting carrying amount over the income tax basis of our direct investment in Kronos common stock discussed below. Accordingly, we have completed our analysis related to such revaluation as of September 30, 2018.

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 represent 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 approximately $4.5 million which has been 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 $2.1 million which amount is recorded as a measurement-period adjustment in continuing operations, 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 $10.6 million (noted above), the balance of our unpaid Transition Tax aggregates $63.5 million, which will be paid in quarterly installments over the remainder of the eight year period. Of such $63.5 million, $57.8 million is recorded as a noncurrent payable to affiliate (income taxes payable to Contran) classified as a noncurrent liability in our Condensed Consolidated Balance Sheet, and $5.7 million is included with our current payable to affiliate (income taxes payable to Contran) 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 $5.3 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 represent 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 $3.2 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 amount 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 six 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.

We recognized a non-cash deferred income tax benefit of $3.4 million in the third quarter of 2018 related to a decrease in our effective state income tax rate; this decrease is a direct result of the sale of our interest in the Amalgamated Sugar Company LLC which will reduce the number of state jurisdictions in which we are required to file.

We recognize deferred income taxes with respect to the excess of the financial reporting carrying amount over the income tax basis of our direct investment in Kronos common stock because the exemption under GAAP to avoid such recognition of deferred income taxes is not available to us. At December 31, 2017, we had recognized a deferred income tax liability with respect to our direct investment in Kronos of $157.6 million. There is a maximum amount (or cap) of such deferred income taxes we are required to recognize with respect to our direct investment in Kronos. The maximum amount of such deferred income tax liability we would be required to have recognized (the cap) is $155.4 million (the cap was reduced as a result of the decrease in our effective state tax rate in the third quarter of 2018 discussed above). During the first nine months of 2018, we recognized a non-cash deferred income tax expense with respect to our direct investment in Kronos of $19.2 million for the increase in the deferred income taxes required to be recognized with respect to the excess of the financial reporting carrying amount over the income tax basis of our direct investment in Kronos common stock, to the extent such increase related to our equity in Kronos' net income during such period. We recognized a similar non-cash deferred income tax expense of $49.3 million in the first nine months of 2017. A portion of the net change with respect to the excess of the financial reporting carrying amount over the income tax basis of our direct investment in Kronos common

stock during such periods related to our equity in Kronos' other comprehensive income (loss) items, and the amounts shown in the table in Note 14 to our Consolidated Financial Statements for income tax expense (benefit) allocated to other comprehensive income (loss) items includes amounts related to our equity in Kronos' other comprehensive income (loss) items. Due to uncertainties and complexities of the new legislation, we were still evaluating the impact of the one-time deemed repatriation of the post-1986 undistributed earnings of our non-U.S. subsidiaries up through December 31, 2017 as it relates to the income tax basis of our direct investment in Kronos at December 31, 2017 and June 30, 2018. Our deferred income tax liability with respect to our direct investment in Kronos and the deferred income taxes recognized at December 31, 2017 and June 30, 2018 represented our reasonable estimate and, in accordance with the guidance in SAB 118, such amounts were provisional and subject to adjustment as we obtain additional information and complete our analysis of the impact of the new legislation as it relates to the income tax basis of our direct investment in Kronos. We made no adjustments to the provisional amounts recorded at December 31, 2017 as it relates to the income tax basis of our direct investment in Kronos at such date in the first six months of 2018 because no new information was available. 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 an adjustment, which is treated as a measurement period adjustment, to the deferred income taxes we recognized at December 31, 2017 associated with our direct investment in Kronos common stock (before revaluation of our deferred tax liability related to the decrease in the corporate income tax rate). Such adjustment resulted in an investment basis adjustment under the income tax regulations which increased the income tax basis of our direct investment in Kronos attributable to the income recognition related to the deemed repatriation of the post-1986 undistributed earnings of our non-U.S. subsidiaries in 2017. Such adjustment resulted in a non-cash deferred tax measurement period adjustment decreasing the deferred income taxes we recognize with respect to the excess of the financial reporting carrying amount over the income tax basis of our direct investment in Kronos common stock. Including the impact of the non-cash deferred tax revaluation adjustment discussed above, we recognized a net non-cash deferred income tax benefit of $113 million in the third quarter of 2018 related to the incremental tax on Kronos. As of September 30, 2018, we have completed our analysis related to the impact of the new legislation as it related to the income tax basis of our direct investment in Kronos. Excluding the impact of such adjustments, our effective income tax rate from continuing operations in the third quarter and nine months ending September 30, 2018 was 38% and 38.9%, respectively.

Discontinued Operations—On January 26, 2018, we completed the sale of the Waste Management Segment to JFL-WCS Partners, LLC, an entity sponsored by certain investment affiliates of J.F. Lehman & Company, for consideration consisting of the assumption of all of the Waste Management Segment's third-party indebtedness and other liabilities. We recognized a pre-tax gain of approximately $58 million on the transaction in the first quarter of 2018 because the carrying value of the liabilities of the business assumed by the purchaser exceeded the carrying value of the assets sold in large part due to the long-lived asset impairment of $170.6 million recognized in the second quarter of 2017 with respect to our Waste Management Segment. Such pre-tax gain is classified as part of discontinued operations. See Note 3 to our Consolidated Financial Statements for additional information.

Noncontrolling Interest in Net Income (Loss) of Subsidiaries—Noncontrolling interest in operations of subsidiaries decreased from 2017 to 2018 primarily due to decreased earnings at Kronos.

LIQUIDITY AND CAPITAL RESOURCES

Consolidated Cash Flows

Operating Activities—

Trends in cash flows from operating activities (excluding the impact of significant asset dispositions and relative changes in assets and liabilities) are generally similar to trends in our operating income. 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 flows from operating activities decreased to $191.5 million in the first nine months of 2018 from $204.3 million in the first nine months of 2017. This $12.8 million decrease in cash provided by operations was primarily due to the net effect of the following items:

- consolidated operating income of $318.0 million in the first nine months of 2018, an improvement of $67.7 million compared to an operating income of $250.3 million in the first nine months of 2017;
- lower net cash paid for income taxes in 2018 of $5.4 million resulting from timing of tax payments;
- higher net distributions from our TiO_2 manufacturing joint venture in 2018 of $1.7 million, primarily due to the timing of the joint venture's working capital;

- a $62.7 million increase in the amount of net cash used in relative changes in receivables, inventories, payables and accrued liabilities in the first nine months of 2018; and
- a $13.4 million decrease in cash provided by WCS in 2018 as a result of the sale of WCS assets in Janaury.

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

- Kronos' average days decrease sales outstanding ("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.
- Kronos' average days sales in inventory ("DSI"), increased from December 31, 2017 to September 30, 2018 primarily due to higher inventory volumes.
- CompX's average DSO increased from December 31, 2017 to September 30, 2018 primarily as a result of relative changes in the timing of collections.
- CompX's average DSI decreased from December 31, 2017 to September 30, 2018 primarily as a result of the seasonal increase in sales during the third quarter 2018 as compared to the fourth quarter of 2017.

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

	December 31, 2016	September 30, 2017	December 31, 2017	September 30, 2018
Kronos:				
Days sales outstanding	65 days	66 days	63 days	74 days
Days sales in inventory	71 days	47 days	62 days	77 days
CompX:				
Days sales outstanding	36 days	40 days	38 days	40 days
Days sales in inventory	79 days	74 days	79 days	76 days

We do not have complete access to the cash flows of our majority-owned subsidiaries, due in part to limitations contained in certain credit agreements of our subsidiaries and because we do not own 100% of these subsidiaries. A detail of our consolidated cash flows from operating activities is presented in the table below. Intercompany dividends have been eliminated.

	Nine months ended September 30,	
	2017	2018
	(In millions)	
Cash provided by (used in) operating activities:		
Valhi exclusive of its subsidiaries	$1.7	$37.1
Kronos	218.1	198.9
NL exclusive of its subsidiaries	7.0	9.6
CompX	8.9	12.8
BMI	1.7	(.9)
LandWell	(3.9)	1.4

WCS	15.7	2.3
Tremont exclusive of its subsidiaries	(1.3)	1.2
Eliminations	(43.6)	(70.9)
Total	$204.3	$191.5

Investing Activities –

We spent $39.1 million in capital expenditures during the first nine months of 2018 including:

- $35.4 million in our Chemicals Segment;
- $2.1 million in our Component Products Segment;
- $1.5 million in our Real Estate Management and Development Segment; and
- $.1 million in our former Waste Management Segment prior to its sale.

We received cash proceeds from the sale of land not used in our operations of $19.5 million in the first quarter of 2018. We received $12.5 million as part of the sale of our investment in Amalgamated in the third quarter of 2018.

Financing Activities—

During the nine months ended September 30, 2018, we:

- repaid $6.3 million under our promissory note payable to Contran;
- repaid $2.2 million under Tremont's promissory note payable; and
- paid quarterly dividends to Valhi stockholders aggregating $.06 per share ($20.4 million).

During the first quarter of 2018, we had a deemed borrowing on the Contran facility of $36.3 million. During the third quarter of 2018 we had a deemed repayment of our $250 million Snake River Sugar Company debt in conjunction with the sale of our interest in Amalgamated noted above. The declaration and payment of future dividends, and the amount thereof, is discretionary and is dependent upon these and other factors deemed relevant by our Board of Directors. The amount and timing of past dividends is not necessarily indicative of the amount or timing of any future dividends which might be paid. There are currently no contractual restrictions on the amount of dividends which we may pay. Distributions to noncontrolling interest in subsidiaries in the first nine months of 2018 are comprised of CompX dividends paid to shareholders other than NL and Kronos dividends paid to shareholders other than us and NL.

Outstanding Debt Obligations

At September 30, 2018, our consolidated indebtedness attributable to continuing operations was comprised of:

- Valhi's $314.3 million outstanding on its $360 million credit facility with Contran which is due no earlier than December 31, 2019;
- €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;
- Tremont's promissory note payable ($10.9 million outstanding) due in December 2023;
- $18.8 million on BMI's bank loan ($18.0 million carrying amount, net of unamortized debt issuance costs), due through June 2032;
- $2.3 million on LandWell's note payable to the City of Henderson due in October 2020; and
- approximately $2.8 million of other indebtedness, primarily capital lease obligations.

Certain of our credit facilities require the respective borrowers to maintain a number of covenants and restrictions which, among other things, restrict our ability to incur additional debt, incur liens, pay dividends 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. Kronos' North American and European revolvers contain a number of covenants and restrictions which, among other things, restrict its ability to incur additional debt, incur liens, pay dividends or merge or consolidate with, or sell or transfer substantially all of its assets to, another entity, and contains other provisions and restrictive covenants customary in lending transactions of this type. Kronos' 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 9 to 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; however, if future operating results differ materially from our expectations we may be unable to maintain compliance.

Future Cash Requirements

Liquidity –

Our primary source of liquidity on an ongoing basis is our cash flows from operating activities and borrowings under various lines of credit and notes. We generally use these amounts to (i) fund capital expenditures, (ii) repay short-term indebtedness incurred primarily for working capital purposes and (iii) provide for the payment of dividends (including dividends paid to us by our

subsidiaries) or treasury stock purchases. From time-to-time we will incur indebtedness, generally to (i) fund short-term working capital needs, (ii) refinance existing indebtedness, (iii) make investments in marketable and other securities (including the acquisition of securities issued by our subsidiaries and affiliates) or (iv) fund major capital expenditures or the acquisition of other assets outside the ordinary course of business. Occasionally we sell assets outside the ordinary course of business, and we generally use the proceeds to (i) repay existing indebtedness (including indebtedness which may have been collateralized by the assets sold), (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.

We routinely compare our liquidity requirements and alternative uses of capital against the estimated future cash flows we expect to receive from our subsidiaries, and the estimated sales value of those units. As a result of this process, we have in the past sought, and may in the future seek, to raise additional capital, refinance or restructure indebtedness, repurchase indebtedness in the market or otherwise, modify our dividend policies, consider the sale of our interests in our subsidiaries, affiliates, business units, marketable securities or other assets, or take a combination of these and other steps, to increase liquidity, reduce indebtedness and fund future activities. Such activities have in the past and may in the future involve related companies. From time to time, we and our subsidiaries may enter into intercompany loans as a cash management tool. Such notes are structured as revolving demand notes and pay and receive interest on terms we believe are generally more favorable than current debt and investment market rates. The companies that borrow under these notes have sufficient liquidity to repay the notes. All of these notes and related interest expense and income are eliminated in our Condensed Consolidated Financial Statements.

We periodically evaluate acquisitions of interests in or combinations with companies (including our affiliates) that may or may not be engaged in businesses related to our current businesses. We intend to consider such acquisition activities in the future and, in connection with this activity, may consider issuing additional equity securities and increasing indebtedness. From time to time, we also evaluate the restructuring of ownership interests among our respective subsidiaries and related companies.

We believe we will be able to comply with the financial covenants contained in our credit facilities through their maturities; however, if future operating results differ materially from our expectations we may be unable to maintain compliance. Based upon our expectations of our operating performance, and the anticipated demands on our cash resources, we expect to have sufficient liquidity to meet our short-term (defined as the twelve-month period ending September 30, 2019) and long-term obligations (defined as the five-year period ending September 30, 2023). If actual developments differ from our expectations, our liquidity could be adversely affected.

At September 30, 2018, we had credit available under existing facilities of $257.6 million, which was comprised of:

- $105.7 [(1)] million under Kronos' European revolving credit facility;
- $106.2 million under Kronos' North American revolving credit facility; and
- $45.7 [(2)] million under Valhi's Contran credit facility.

(1) Based on Kronos' EBITDA over the last twelve months ended September 30, 2018, the full €90.0 million amount is available for borrowing at such date.

(2) Amounts available under this facility are at the sole discretion of Contran.

At September 30, 2018, we had an aggregate of $603.4 million of restricted and unrestricted cash, cash equivalents and marketable securities, including $205.5 million held by our 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. A detail by entity is presented in the table below.

	Total	Amount held outside U.S.
	(In millions)	
Kronos	$433.4	$ 205.4
CompX	43.8	
NL exclusive of its subsidiaries	84.6	.1
Tremont exclusive of its subsidiaries	9.0	
LandWell	15.3	
BMI	17.2	
Valhi exclusive of its subsidiaries	.1	
Total restricted and unrestricted cash, cash equivalents and marketable securities	$603.4	205.5

Capital Expenditures and Other –

We currently expect our aggregate capital expenditures for 2018 will be approximately $77 million as follows:

- $65 million by our Chemicals Segment, including approximately $26 million in the area of environmental compliance, protection and improvement;
- $4 million by our Component Products Segment; and
- $8 million by our Real Estate Management and Development Segment.

Our Waste Management Segment spent approximately $.1 million in capitalized expenditures in 2018 prior to the sale in January. In addition, LandWell expects to spend approximately $15 million on land development costs during 2018 (which are included in the determination of cash provided by operating activities).

Capital spending for 2018 is expected to be funded primarily through cash generated from operations and borrowing under existing credit facilities. Planned capital expenditures in 2018 at Kronos and CompX will primarily be to maintain and improve the cost-effectiveness of our facilities. In addition, Kronos' capital expenditures in the area of environmental compliance, protection and improvement include expenditures which are primarily focused on increased operating efficiency but also result in improved environmental protection, such as lower emissions from our manufacturing plants.

Repurchases of Common Stock –

We, Kronos and CompX have programs to repurchase common stock from time to time as market conditions permit. These stock repurchase programs do not include specific price targets or timetables and may be suspended at any time. Depending on market conditions, these programs may be terminated prior to completion. Cash on hand will be used to acquire the shares and repurchased shares will be added to treasury shares and cancelled.

At September 30, 2018, Valhi had approximately 4.0 million shares of our common stock available to repurchase under the authorizations made by our board of directors.

Kronos' board of directors authorized the repurchase of up to 2.0 million shares of its common stock in open market transactions, including block purchases, or in privately-negotiated transactions at unspecified prices and over an unspecified period of time. Kronos may repurchase its common stock from time to time as market conditions permit. At September 30, 2018, approximately 1.95 million shares are available for repurchase.

CompX's board of directors authorized the repurchase of its Class A common stock in open market transactions, including block purchases, or in privately-negotiated transactions at unspecified prices and over an unspecified period of time. At September 30, 2018, approximately 678,000 shares were available for purchase under these authorizations.

Dividends –

Because our operations are conducted primarily through subsidiaries and affiliates, our long-term ability to meet parent company level corporate obligations is largely dependent on the receipt of dividends or other distributions from our subsidiaries and affiliates. Kronos paid a regular dividend of $.15 per share in each quarter of 2017 for which we received $34.8 million. In the first quarter of 2018 Kronos announced it was increasing its regular dividend to $.17 per share. If Kronos were to pay its $.17 per share in each quarter of 2018 based on the 58.0 million shares we held of Kronos common stock at September 30, 2018, we would receive aggregate annual regular dividends from Kronos of $39.4 million. NL has not paid a dividend since prior to 2015 and we do not know if we will receive any cash dividends from NL during 2018. BMI and LandWell do pay cash dividends from time to time, but the timing and amount of such dividends are uncertain. In this regard, we received aggregate dividends from BMI and LandWell of $5.8 million in 2017. We do not know if we will receive additional distributions from BMI and LandWell during 2018. All of our ownership interest in CompX is held through our ownership in NL; as such we do not receive any dividends from CompX. Instead any dividend paid by CompX is paid to NL.

Our subsidiaries have various credit agreements with unrelated third-party lenders which contain customary limitations on the payment of dividends, typically a percentage of net income or cash flow; however, these restrictions in the past have not significantly impacted their ability to pay dividends.

Investment in our Subsidiaries and Affiliates and Other Acquisitions –

We have in the past, and may in the future, purchase the securities of our subsidiaries and affiliates or third parties in market or privately-negotiated transactions. We base our purchase decision on a variety of factors, including an analysis of the optimal use of our capital, taking into account the market value of the securities and the relative value of expected returns on alternative investments. In connection with these activities, we may consider issuing additional equity securities or increasing our indebtedness. We may also evaluate the restructuring of ownership interests of our businesses among our subsidiaries and related companies.

We generally do not guarantee any indebtedness or other obligations of our subsidiaries or affiliates. Our subsidiaries are not required to pay us dividends. If one or more of our subsidiaries were unable to maintain its current level of dividends, either due to restrictions contained in a credit agreement or to satisfy its liabilities or otherwise, our ability to service our liabilities or to pay dividends on our common stock could be adversely impacted. If this were to occur, we might consider reducing or eliminating our dividends or selling interests in subsidiaries or other assets. If we were required to liquidate assets to generate funds to satisfy our liabilities, we might be required to sell at what we believe would be less than what we believe is the long-term value of such assets.

Prior to its sale in January 2018, WCS' primary source of liquidity consisted of intercompany borrowings from one of our wholly-owned subsidiaries under the terms of a revolving credit facility. We eliminated these intercompany borrowings in our Condensed Consolidated Financial Statements. WCS borrowed substantial amounts from us over the years. Effective with the sale in January 2018, the outstanding balance under this facility of $35.7 million was contributed to equity and the intercompany note was terminated.

In November 2016, we entered into a $50 million revolving credit facility with a subsidiary of NL secured with approximately 35.2 million shares of the common stock of Kronos Worldwide, Inc. held by NL's subsidiary as collateral. Outstanding borrowings under the credit facility bear interest at the prime rate plus 1.875% per annum, payable quarterly, with all amounts due on December 31, 2023. The maximum principal amount which may be outstanding from time-to-time under the credit facility is limited to 50% of the amount of the most recent closing price of the Kronos stock. The credit facility contains a number of covenants and restrictions which, among other things, restrict NL's subsidiary's ability to incur additional debt, incur liens, and merge or consolidated with, or sell or transfer substantially all of NL's subsidiary's assets to, another entity, and require NL's subsidiary to maintain a minimum specified level of consolidated net worth. Upon an event of default (as defined in the credit facility), Valhi will be entitled to terminate its commitment to make further loans to NL's subsidiary, declare the outstanding loans (with interest) immediately due and payable, and exercise its rights with respect to the collateral under the Loan Documents. Such collateral rights include, upon certain insolvency events with respect to NL's subsidiary or NL, the right to purchase all of the Kronos common stock at a purchase price equal to the aggregate market value, less amounts owing to Valhi under the Loan Documents, and up to 50% of such purchase price may be paid by Valhi in the form of an unsecured promissory note bearing interest at the prime rate plus 2.75% per annum, payable quarterly, with all amounts due no later than five years from the date of purchase, with the remainder of such purchase price payable in cash at the date of purchase. We also eliminate any such intercompany borrowings in our Condensed Consolidated Financial Statements. During 2016 NL's subsidiary borrowed $.5 million under this facility, no additional amounts have been borrowed, and $.5 million is outstanding under this facility at September 30, 2018.

We have an unsecured revolving demand promissory note with Kronos which, as amended, provides for borrowings from Kronos of up to $60 million. We also eliminate any such intercompany borrowings in our Condensed Consolidated Financial Statements. The facility, as amended, is due on demand, but in any event no earlier than December 31, 2019. We had gross borrowings of $2.6 million and gross repayments of $16.2 million during the first nine months of 2018, and no amount was

outstanding under this facility at September 30, 2018. We could borrow an additional $60 million under our current intercompany facility with Kronos at September 30, 2018. Kronos' obligation to loan us money under this note is at Kronos' discretion.

We also have an unsecured revolving demand promissory note with CompX which, as amended, provides for borrowings from CompX of up to $40 million. We also eliminate these intercompany borrowings in our Condensed Consolidated Financial Statements. The facility, as amended, is due on demand, but in any event no earlier than December 31, 2019. We had gross borrowings of $39.0 million and gross repayments of $44.2 million during the first nine months of 2018, and a total outstanding balance of $33.0 million at September 30, 2018. We could borrow an additional $7.0 million under our current intercompany facility with CompX at September 30, 2018. CompX's obligation to loan us money under this note is at CompX's discretion.

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

There have been no material changes in our contractual obligations since we filed our 2017 Annual Report and we refer you to that report for a complete description of these commitments.

We are subject to certain commitments and contingencies, as more fully described in Notes 14 and 18 to our 2017 Annual Report, or in Notes 14 and 17 to our Condensed Consolidated Financial Statements and in Part II, Item 1 of this Quarterly Report, including:

- certain income tax contingencies in various U.S. and non-U.S. jurisdictions;
- certain environmental remediation matters involving NL, and BMI;
- certain litigation related to NL's former involvement in the manufacture of lead pigment and lead-based paint; and
- certain other litigation to which we are a party.

In addition to such legal proceedings various legislation and administrative regulations have, from time to time, been proposed that seek to (i) impose various obligations on present and former manufacturers of lead pigment and lead-based paint (including NL) with respect to asserted health concerns associated with the use of such products and (ii) effectively overturn court decisions in which NL and other pigment manufacturers have been successful. Examples of such proposed legislation include bills which would permit civil liability for damages on the basis of market share, rather than requiring plaintiffs to prove that the defendant's product caused the alleged damage, and bills which would revive actions barred by the statute of limitations. While no legislation or regulations have been enacted to date that are expected to have a material adverse effect on our consolidated financial position, results of operations or liquidity, enactment of such legislation could have such an effect.

Recent Accounting Pronouncements

See Note 19 to our Condensed Consolidated Financial Statements.

Critical Accounting Policies

There have been no changes in the first nine months of 2018 with respect to our critical accounting policies presented in Management's Discussion and Analysis of Financial Condition and Results of Operation in our 2017 Annual Report.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to market risk, including currency exchange rates, interest rates and security prices, and raw material prices. There have been no material changes in these market risks since we filed our 2017 Annual Report, and refer you to Part I, Item 7A.—"Quantitative and Qualitative Disclosure About Market Risk" in our 2017 Annual Report. See also Note 18 to our Condensed Consolidated Financial Statements.

We have substantial operations located outside the United States for which the functional currency is not the U.S. dollar. As a result, our assets and liabilities, results of operations and cash flows will fluctuate based upon changes in currency exchange rates.

We periodically use currency forward contracts to manage a nominal portion of currency exchange rate market risk associated with trade receivables, or similar exchange rate risk associated with future sales, denominated in a currency other than the holder's functional currency. These contracts generally relate to our Chemicals Segment's operations. 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. Some of the currency forward contracts we enter into meet the criteria for hedge accounting under GAAP and are designated as cash flow hedges. For these currency forward contracts, gains and losses representing the effective portion of our hedges are deferred as a component of accumulated other comprehensive income, and are subsequently recognized in earnings at the time the hedged item affects earnings. For the currency forward contracts we enter into which do not meet the criteria for hedge accounting, we mark-to-market the estimated fair value of such contracts at each balance sheet date, with any resulting gain or loss recognized in income currently as part of net currency transactions.

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 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, Chief Financial Officer and Chief Accounting 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 were effective as of the date of such evaluation.

Management's report on 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 receipts and expenditures are being made only in accordance with authorizations of management and directors and
- Provide reasonable assurance regarding prevention or timely detection of an unauthorized acquisition, use or disposition of assets that could have a material effect on our 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 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 equity method investees did include controls over the recording of amounts related to our investment that are recorded in the 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, our Chemicals Segment 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.

In addition to the matters discussed below, refer to Note 17 to our Condensed Consolidated Financial Statements and our 2017 Annual Report.

Big River Mine Tailings Superfund Site. In October 2018, NL and the United States entered into a consent decree for Operable Unit 1 (OU1). The consent decree was filed with the court and released for public comment in October 2018. After it has responded to any comments, the United States will file a motion seeking judicial approval of the settlement. If approved, the consent decree will resolve NL's liability for OU1.

Refined Metals Corporation v. NL Industries, Inc. (United States District Court for the Southern District of Indiana, Case 1:17-cv-2565). In September 2018, the court dismissed the case, holding that all federal claims brought against NL were barred by the statute of limitations and finding that the court lacked jurisdiction to consider the state law claims. In October 2018, Refined Metals filed an appeal with the federal court of appeals. NL will continue to deny liability and will vigorously defend against all claims in the court of appeals.

In November 2018, NL was served with two complaints filed by county governments in Pennsylvania. Each county alleges that NL and several other defendants created a public nuisance by selling and promoting lead-containing paints and pigments in the counties. The plaintiffs seek abatement and declaratory relief. We believe these lawsuits are inconsistent with Pennsylvania law and without merit, and we intend to defend ourselves vigorously.

Item 1A. Risk Factors.

For a discussion of the risk factors related to our businesses, please 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 first nine months of 2018.

Item 6. Exhibits.

Item No.	Exhibit Index
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.

VALHI, INC.
(Registrant)

Date November 8, 2018 /s/ Gregory M. Swalwell
Gregory M. Swalwell

(Executive Vice President, Chief Financial Officer and Chief Accounting Officer)

Date November 8, 2018 /s/ Amy Allbach Samford
Amy Allbach Samford

(Vice President and Controller)