
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

Form 10-Q

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

For the quarterly period ended January 31, 2018

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

For the transition period from _____ to _____.

Commission file number: 001-35577

KMG CHEMICALS, INC.

(Exact name of registrant as specified in its charter)

Texas
(State or other jurisdiction of incorporation or organization)

75-2640529
(I.R.S. Employer Identification No.)

300 Throckmorton Street,
Fort Worth, Texas
(Address of principal executive offices)

76102
(Zip Code)

(817)-761-6100
(Registrant's telephone number, including area code)

(Former name, former address and former fiscal year, if changed since last report)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input checked="" type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/> (Do not check if a smaller reporting company)	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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

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

As of March 5, 2018, there were 15,505,350 shares of the registrant's common stock outstanding.

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PART I — FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

KMG CHEMICALS, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED BALANCE SHEETS
(In thousands, except for share and per share amounts)

	January 31, 2018 <u>(Unaudited)</u>	July 31, 2017
Assets		
Current assets		
Cash and cash equivalents	\$ 21,966	\$ 20,708
Accounts receivable		
Trade, net of allowances of \$237 at January 31, 2018 and \$263 at July 31, 2017	54,339	51,168
Other	4,721	6,168
Inventories, net	49,534	46,482
Prepaid expenses and other	7,751	8,617
Total current assets	<u>138,311</u>	<u>133,143</u>
Property, plant and equipment, net	108,954	105,435
Goodwill	230,214	224,391
Intangible assets, net	307,528	320,401
Other assets, net	11,176	9,061
Total assets	<u>\$ 796,183</u>	<u>\$ 792,431</u>
Liabilities and stockholders' equity		
Current liabilities		
Accounts payable	\$ 32,496	\$ 29,570
Accrued liabilities	10,686	12,456
Employee incentive accrual	3,679	7,713
Current portion of long-term debt	—	3,167
Total current liabilities	<u>46,861</u>	<u>52,906</u>
Long-term debt, net	337,048	523,102
Deferred tax liabilities	22,852	37,944
Other long-term liabilities	5,350	4,763
Total liabilities	<u>412,111</u>	<u>618,715</u>
Commitments and contingencies		
Stockholders' equity		
Preferred stock, \$0.01 par value, 10,000,000 shares authorized, none issued	—	—
Common stock, \$0.01 par value, 40,000,000 shares authorized, 15,503,290 shares issued and outstanding at January 31, 2018 and 11,889,649 shares issued and outstanding at July 31, 2017	155	119
Additional paid-in capital	218,001	42,535
Accumulated other comprehensive loss	(5,222)	(9,712)
Retained earnings	171,138	140,774
Total stockholders' equity	<u>384,072</u>	<u>173,716</u>
Total liabilities and stockholders' equity	<u>\$ 796,183</u>	<u>\$ 792,431</u>

See accompanying notes to condensed consolidated financial statements.

KMG CHEMICALS, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF INCOME
(UNAUDITED)
(In thousands, except for per share amounts)

	Three Months Ended		Six Months Ended	
	January 31,		January 31,	
	2018	2017	2018	2017
Net sales	\$ 113,851	\$ 79,071	\$ 224,515	\$ 155,566
Cost of sales	64,597	47,869	128,780	94,681
Gross profit	49,254	31,202	95,735	60,885
Distribution expenses	8,680	9,770	18,122	18,872
Selling, general and administrative expenses	14,999	11,867	28,338	23,233
Amortization of intangible assets	3,885	525	7,396	1,060
Restructuring charges	(40)	—	69	—
Operating income	21,730	9,040	41,810	17,720
Other (expense) income				
Interest expense, net	(5,086)	(172)	(13,180)	(349)
Loss on the extinguishment of debt	(1,916)	—	(6,091)	—
Derivative fair value gain	3,024	—	3,873	—
Other, net	(596)	(285)	(777)	(55)
Total other expense, net	(4,574)	(457)	(16,175)	(404)
Income before income taxes	17,156	8,583	25,635	17,316
Provision for income taxes	8,181	(2,097)	5,552	(5,089)
Net income	<u>\$ 25,337</u>	<u>\$ 6,486</u>	<u>\$ 31,187</u>	<u>\$ 12,227</u>
Earnings per share				
Net income per common share basic	\$ 1.64	\$ 0.55	\$ 2.24	\$ 1.03
Net income per common share diluted	\$ 1.59	\$ 0.53	\$ 2.18	\$ 1.00
Weighted average shares outstanding				
Basic	15,495	11,882	13,923	11,881
Diluted	15,903	12,293	14,285	12,203

See accompanying notes to condensed consolidated financial statements.

KMG CHEMICALS, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(UNAUDITED)
(In thousands)

	Three Months Ended		Six Months Ended	
	January 31,		January 31,	
	2018	2017	2018	2017
Net income	\$ 25,337	\$ 6,486	\$ 31,187	\$ 12,227
Other comprehensive income				
Foreign currency translation gain (loss)	5,112	(360)	4,490	(2,671)
Total comprehensive income	<u>\$ 30,449</u>	<u>\$ 6,126</u>	<u>\$ 35,677</u>	<u>\$ 9,556</u>

See accompanying notes to condensed consolidated financial statements.

KMG CHEMICALS, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(UNAUDITED)
(In thousands)

	Six Months Ended January 31,	
	2018	2017
Cash flows from operating activities		
Net income	\$ 31,187	\$ 12,227
Adjustments to reconcile net income to net cash provided by operating activities		
Depreciation and amortization	14,695	7,048
Loss on extinguishment of debt	6,091	—
Stock-based compensation expense	3,593	3,087
Amortization of debt discounts and financing costs included in interest expense	828	—
Debt repricing transaction costs	602	—
Deferred income tax benefit	(11,780)	(821)
Derivative fair value gain	(3,873)	—
Other	(77)	53
Changes in operating assets and liabilities		
Accounts receivable — trade	(2,041)	(2,585)
Accounts receivable — other	1,554	1,846
Inventories	(2,272)	1,002
Other current and noncurrent assets	442	(302)
Accounts payable	2,579	951
Accrued liabilities and other	(5,293)	(3,083)
Net cash provided by operating activities	<u>36,235</u>	<u>19,423</u>
Cash flows from investing activities		
Additions to property, plant and equipment	(9,030)	(5,310)
Other investing activities	(1,262)	—
Proceeds — insurance claim	—	250
Net cash used in investing activities	<u>(10,292)</u>	<u>(5,060)</u>
Cash flows from financing activities		
Proceeds from sale of common stock, net of issuance costs	175,669	—
Borrowings under credit facility	—	17,000
Payments under credit facility	—	(11,800)
Principal payments on borrowings on term loan	(196,000)	—
Debt repricing transaction costs	(602)	—
Payment of dividends	(822)	(709)
Cash payments related to tax withholdings from stock-based awards	(3,729)	(277)
Net cash provided by (used in) financing activities	<u>(25,484)</u>	<u>4,214</u>
Effect of exchange rate changes on cash	799	(418)
Net increase in cash, cash equivalents and restricted cash	1,258	18,159
Cash, cash equivalents and restricted cash at beginning of period	20,708	13,428
Cash, cash equivalents and restricted cash at end of period	<u>\$ 21,966</u>	<u>\$ 31,587</u>
Supplemental disclosures of cash flow information		
Cash paid for interest	\$ 11,856	\$ 244
Cash paid for income taxes, net	\$ 3,564	\$ 4,740
Supplemental disclosure of non-cash investing activities		
Purchase of property, plant and equipment through accounts payable	\$ 280	\$ 206

See accompanying notes to condensed consolidated financial statements.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

1. Basis of Presentation

The condensed consolidated balance sheet as of July 31, 2017, which has been derived from audited consolidated financial statements, and the unaudited condensed consolidated financial statements included herein have been prepared pursuant to the rules and regulations of the Securities and Exchange Commission for interim reporting. As permitted under those requirements, certain footnotes or other financial information that are normally required by generally accepted accounting principles in the United States of America (“GAAP”) have been condensed or omitted. The Company believes that the disclosures made are adequate to make the information not misleading and in the opinion of management reflect all adjustments, including those of a normal recurring nature, that are necessary for a fair presentation of financial position and results of operations for the interim periods presented. Certain reclassifications of prior year amounts have been made to conform to current year presentation. These reclassifications had no impact on net income or total stockholders’ equity as previously reported. The results of operations for the interim periods are not necessarily indicative of results of operations to be expected for the full year. The unaudited condensed consolidated financial statements included herein should be read in conjunction with the consolidated financial statements and notes thereto included in the Company’s Annual Report on Form 10-K for the year ended July 31, 2017.

These condensed consolidated financial statements are prepared using certain estimates by management and include the accounts of KMG Chemicals, Inc. and its subsidiaries (collectively, the “Company”). All significant intercompany balances and transactions have been eliminated in consolidation.

The following table provides a brief description of recent Accounting Standard Updates (“ASU”) issued by the Financial Accounting Standards Board (“FASB”):

Standard	Description	Effective Date	Effect on the Financial Statements or Other Significant Matters
In August 2017, the FASB issued ASU 2017-12, Targeted Improvements to Accounting for Hedging Activities.	The new guidance improves the financial reporting of hedging relationships to better portray the economic results of an entity's risk management activities in its financial statements through changes to both the designation and measurement guidance for qualifying hedging relationships and the presentation of hedge results.	August 1, 2019. Early adoption is permitted.	The Company is currently evaluating the impact of adoption on its financial statements and related disclosures, but does not expect adoption will have a material impact as the Company does not currently utilize hedge accounting for derivative instruments.
In January 2017, the FASB issued ASU 2017-04, Intangibles: Goodwill and Other: Simplifying the Test for Goodwill Impairment.	The new guidance simplifies subsequent measurement of goodwill by eliminating Step 2 from the goodwill impairment test.	August 1, 2020. Early adoption is permitted.	The Company adopted the new guidance as of August 1, 2017, as part of the FASB's simplification initiative. The adoption of the new guidance did not have a material impact to the Company.
In June 2016, the FASB issued ASU 2016-13, Financial Instruments—Credit Losses (Topic 326), Measurement of Credit Losses on Financial Instruments	The new guidance changes the impairment model for most financial assets and certain other instruments, including trade and other receivables, held-to-maturity debt securities and loans, and requires entities to use a new forward-looking expected loss model that will result in the earlier recognition of allowance for losses.	August 1, 2020. Early adoption is permitted.	The Company does not expect adoption will have a material impact on its financial statements and related disclosures.

In February 2016, the FASB issued ASU 2016-02, Leases.	The new guidance supersedes the lease guidance under FASB Accounting Standards Codification ("ASC") Topic 840, Leases, resulting in the creation of FASB ASC Topic 842, Leases. The guidance requires a lessee to recognize in the statement of financial position a liability to make lease payments and a right-of-use asset representing its right to use the underlying asset for the lease term for both finance and operating leases.	August 1, 2019. Early adoption is permitted.	The Company is currently evaluating its population of leases, and is continuing to assess all potential impacts of the standard, but currently believes the most significant impact relates to its accounting for manufacturing and logistics equipment, and real estate operating leases. The Company anticipates recognition of additional assets and corresponding liabilities related to leases upon adoption, but cannot quantify these at this time. The Company plans to adopt the standard effective August 1, 2019.
In May 2014, the FASB issued ASU 2014-09, Revenue from Contracts with Customers. Since that date, the FASB has issued additional ASUs clarifying certain aspects of ASU 2014-09.	The new guidance requires entities to recognize revenue in a way that depicts the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled to in exchange for those goods or services. The new guidance provides alternative methods of adoption. Subsequent guidance issued after May 2014 did not change the core principle of ASU 2014-09.	August 1, 2018.	The Company is currently reviewing its revenue contracts to assess the potential impact on its condensed consolidated financial statements. The Company plans to adopt the revenue guidance effective August 1, 2018, and expects to utilize the modified retrospective method of adoption.

2. Acquisitions

On June 15, 2017, the Company completed the acquisition of Flowchem Holdings LLC ("Flowchem"). The consideration paid on the closing date was the purchase price of \$495.0 million plus \$11.4 million for cash acquired. Based in Waller, Texas, Flowchem is a global provider of drag-reducing agents, related support services and equipment to midstream crude oil and refined fuel pipeline operators. To finance the acquisition the Company entered into a new credit agreement providing for a seven year syndicated term loan of \$550.0 million. See Note 11 for further discussion of the Company's credit agreement. The Company expensed transaction and acquisition-related costs of approximately \$0.5 million in the six months ended January 31, 2018, which is included in selling, general and administrative expenses on the Company's consolidated statement of income.

The Company has accounted for the purchase using the acquisition method of accounting for business combinations. Accordingly, the purchase price has been allocated to the underlying assets and liabilities in proportion to their respective fair values. The following table summarizes the acquired assets and assumed liabilities and the preliminary acquisition accounting for the fair value of the assets and liabilities recognized in the condensed consolidated balance sheet at January 31, 2018 (in thousands):

Cash	\$ 11,445
Accounts receivable	11,280
Inventory	9,310
Other assets	499
Property, plant and equipment, net	19,665
Intangible assets	
Customer relationships	205,467
Trade names and trademark	32,353
Proprietary manufacturing process	39,323
Total assets	<u>\$ 329,342</u>
Current liabilities	3,132
Deferred tax liability	24,484
Net identifiable assets acquired	<u>301,726</u>
Goodwill	204,717
Fair value of net assets acquired	<u>\$ 506,443</u>

This purchase price allocation is preliminary and is pending the finalization of the valuation analysis. The fair value of the accounts receivable acquired was \$11.3 million, equivalent to the amount the Company expects to be collected. The \$204.7 million of goodwill was assigned to the performance materials segment, and the Company expects \$155.9 million of goodwill to be tax deductible. The goodwill is primarily attributable to the assembled workforce of Flowchem and the allocation of proceeds in excess of the fair value of net identifiable assets acquired. Final accounting is incomplete for the state and local tax liability, deferred taxes and goodwill acquired June 15, 2017, as the Company has not yet finalized the detailed valuation analyses as of January 31, 2018.

During the fiscal quarter ended October 31, 2017, measurement period adjustments were made to the preliminary purchase price allocation recorded in the consolidated financial statements for the fiscal year ended July 31, 2017. The acquired intangible assets, deferred tax liabilities and goodwill were adjusted as a result of additional analyses performed on the estimates used in the calculation of the fair value of the assets acquired and liabilities assumed. The measurement period adjustments to the amortizable intangible assets resulted in an immaterial reduction in the amortization expense recognized in the Company's condensed consolidated statements of income for the three months ended October 31, 2017, and a reduction in the estimated amortization expense going forward.

	October 31, 2017	Measurement Period Adjustment	July 31, 2017
Customer relationships	\$ 205,467	\$ (9,415)	\$ 214,882
Trade names and trademark	32,353	3,402	28,951
Proprietary manufacturing process	39,323	78	39,245
Deferred tax liability	24,484	(562)	25,046
Goodwill	204,717	5,371	199,346

On February 1, 2017, the Company completed the acquisition of the assets of Sealweld Corporation ("Sealweld"), a privately held corporation organized under the laws of the Province of Alberta, Canada, for CAD\$22.3 million in cash (or approximately US\$17.2 million, at an exchange rate of 0.77 CAD\$ to US\$ at February 1, 2017), which included CAD\$5.5 million (or approximately US\$4.2 million, at an exchange rate of 0.77 CAD\$ to US\$ at February 1, 2017) for estimated working capital. Sealweld is based in Calgary, Alberta, Canada, with additional facilities in the United States and the United Arab Emirates. Sealweld is a global supplier of high-performance products and services for industrial valve and actuator maintenance, including lubricants, sealants, cleaners, valve fittings, tools and equipment. Additionally, Sealweld provides routine and emergency valve maintenance services and technician training for many of the world's largest pipeline operators. The Company completed the acquisition by borrowing \$17.0 million on the revolving loan under its revolving credit facility. See Note 11 for further discussion of the Company's revolving credit facility. Sealweld is included in the performance materials segment. The Company expensed transaction and acquisition-related costs of approximately fifty-six thousand dollars in the six months ended January 31, 2018, which is included in selling, general and administrative expenses on the Company's condensed consolidated statement of income.

The following table summarizes the acquired assets and assumed liabilities and the final acquisition accounting for the fair value of the assets and liabilities recognized in the condensed consolidated balance sheet at January 31, 2018 (in thousands):

Cash	\$ 69
Accounts receivable	2,937
Inventory	2,350
Other assets	38
Property, plant and equipment, net	4,192
Intangible assets	—
Trade name/trademark	2,185
Non-compete agreements	2,254
Customer relationships	2,348
Total assets acquired	<u>\$ 16,373</u>
Current liabilities	1,272
Deferred taxes	681
Net identifiable assets acquired	<u>14,420</u>
Goodwill	2,771
Fair value of net assets acquired	<u>\$ 17,191</u>

This purchase price allocation is final. The fair value of the accounts receivable acquired was \$2.9 million, equivalent to the contractual amount acquired. The Company expects all acquired accounts receivable to be collected. During the fiscal quarter ended

January 31, 2018, the Company recorded a measurement period adjustment of \$0.1 million to the acquired current liabilities as a result of the identification of certain tax liabilities existing at the date of the acquisition. As a result of the measurement period adjustment, the Company increased goodwill from \$2.7 million to \$2.8 million. The goodwill was assigned to the performance materials segment, and the Company expects \$0.1 million of goodwill to be tax deductible. The goodwill is primarily attributable to the assembled workforce of Sealweld.

3. Cash, Cash Equivalents and Restricted Cash

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported within the unaudited condensed consolidated balance sheets that sum to the total of the same amounts shown in the unaudited condensed consolidated statements of cash flows:

Current Presentation	January 31, 2018	January 31, 2017
Cash and cash equivalents	\$ 21,966	\$ 30,587
Restricted cash	—	1,000
Total cash, cash equivalents and restricted cash	\$ 21,966	\$ 31,587

The Company's restricted cash includes cash balances which are legally or contractually restricted to use. The Company's restricted cash was included in other long term assets as of January 31, 2017 and included proceeds that were placed in escrow in connection with the sale of the animal health business in fiscal year 2013. These proceeds were released from escrow in February 2017.

4. Earnings Per Share

Basic earnings per share have been computed by dividing net income by the weighted average shares outstanding. Diluted earnings per share have been computed by dividing net income by the weighted average shares outstanding plus potentially dilutive common shares. There were approximately 408,000 and 362,000 dilutive shares related to stock-based awards for the three and six months ended January 31, 2018, respectively. There were approximately 412,000 and 321,000 dilutive shares related to stock-based awards for the three and six months ended January 31, 2017, respectively.

Outstanding stock-based awards are not included in the computation of diluted earnings per share under the treasury stock method if the effect of including them would be anti-dilutive. There were no potentially dilutive securities that were not included in the computation of diluted earnings per share for the three and six months ended January 31, 2018, respectively. All outstanding stock awards were dilutive for the three months ended January 31, 2017. There were 97,000 performance-based stock awards that were not included in the computation of diluted earnings per share because the performance metrics had not been met as of January 31, 2017. There were 5,580 potentially dilutive securities that were not included for the six months ended January 31, 2017.

On October 23, 2017, the Company completed an underwritten public offering of 3,450,000 shares of its common stock, including 450,000 shares issued pursuant to the underwriters' exercise of their option to purchase additional shares, at a public offering price of \$54 per share, resulting in estimated net proceeds of approximately \$175.7 million after deducting underwriting commissions and estimated offering expenses.

5. Inventories, net

Inventories, net are summarized in the following table (in thousands):

	January 31, 2018	July 31, 2017
Raw materials	\$ 10,879	\$ 9,124
Work in process	3,117	3,763
Supplies	933	884
Finished products	35,236	33,341
Less: reserve for inventory obsolescence	(631)	(630)
Inventories, net	\$ 49,534	\$ 46,482

6. Property, Plant and Equipment

Property, plant and equipment and related accumulated depreciation and amortization are summarized as follows (in thousands):

	January 31, 2018	July 31, 2017
Land	\$ 13,128	\$ 12,632
Buildings and improvements	53,302	50,973
Equipment	113,725	106,379
Leasehold improvements	2,777	2,755
	<u>182,932</u>	<u>172,739</u>
Less: accumulated depreciation and amortization	(85,354)	(76,974)
	<u>97,578</u>	<u>95,765</u>
Construction-in-progress	11,376	9,670
Property, plant and equipment, net ⁽¹⁾	<u>\$ 108,954</u>	<u>\$ 105,435</u>

- (1) In fiscal year 2016, as part of the Company's ongoing review of its Milan production facilities, the Company determined that certain other facilities had excess capacity sufficient to absorb the manufacturing operations of one of its Milan plants. As a result, the Company committed to sell properties with a total estimated fair value, less costs to sell, of approximately \$4.3 million at July 31, 2016. Assets held for sale are included in prepaid expenses and other in current assets. The Company obtained an updated third party market analysis on the property and has increased marketing and advertising efforts to sell the property.

7. Stock-Based Compensation

The Company has stock-based incentive plans which are described in more detail in the consolidated financial statements in the Company's Annual Report on Form 10-K for fiscal year 2017. The Company recognized stock-based compensation costs of approximately \$2.0 million and \$1.7 million for the three months ended January 31, 2018 and 2017, respectively, and \$3.6 million and \$3.1 million for the six months ended January 31, 2018 and 2017, respectively. The Company also recognized the related tax benefits of \$0.6 million and \$0.6 million for the three months ended January 31, 2018 and 2017, respectively, and \$1.0 million and \$1.1 million for the six months ended January 31, 2018 and 2017, respectively. Stock-based compensation costs are recorded under selling, general and administrative expenses in the condensed consolidated statements of income.

As of January 31, 2018, the unrecognized compensation costs related to stock-based awards was approximately \$10.1 million, which is expected to be recognized over a weighted-average period of 1.8 years.

Performance-Based Stock Awards

There were 472,773 and 373,698 non-vested performance-based restricted stock unit (“RSU”) awards outstanding at January 31, 2018 and August 1, 2017, respectively, which reflected the number of RSUs granted under outstanding awards that were expected to vest as of such dates. There were no performance-based RSU awards that vested during the six months ended January 31, 2018. As of January 31, 2018, the non-vested performance-based RSU awards consisted of Series 1, Series 3 and Series 4 awards granted to certain executives and employees in fiscal years 2018, 2017 and 2016 as summarized below reflecting the target number of RSUs under the awards. Upon vesting, each RSU is converted to one share of common stock.

Date of Grant	Series Award	Target Award Shares	Grant Date Fair Value	Measurement Period Ending	Expected Percentage of Vesting(1)	Shares Expected to Vest
Fiscal Year 2018 Awards						
12/5/2017	Series 4, Tranche 1	27,541	\$ 54.09	7/31/2020	100%	27,541
12/5/2017	Series 4, Tranche 2	27,542	\$ 54.09	7/31/2020	172%	47,371
12/5/2017	Series 3	14,000	\$ 54.09	7/31/2018	100%	14,000
Fiscal Year 2017 Awards						
12/8/2016	Series 1	10,531				
	Forfeitures(2)	(654)				
	Total Series 1	9,877	\$ 34.95	7/31/2019	184%	18,210
4/28/2017	Series 4, Tranche 1	4,545	\$ 52.55	7/31/2019		
10/21/2016	Series 4, Tranche 1	44,337	\$ 29.11	7/31/2019		
	Forfeitures(2)	(4,957)				
	Total Series 4, Tranche 1	43,925			100%	43,925
4/28/2017	Series 4, Tranche 2	4,546	\$ 52.55	7/31/2019		
10/21/2016	Series 4, Tranche 2	44,337	\$ 29.11	7/31/2019		
	Forfeitures(2)	(4,957)				
	Total Series 4, Tranche 2	43,926			184%	80,986
Fiscal Year 2016 Awards						
3/10/2016	Series 1	14,625	\$ 21.89	10/31/2018		
1/29/2016	Series 1	57,163	\$ 21.80	10/31/2018		
	Forfeitures(2)	(12,983)				
	Total Series 1	58,805			196%	115,503
1/19/2016	Series 3	82,938	\$ 20.89	7/31/2020	151%	125,236

- (1) The percentage vesting for performance-based RSU awards is currently estimated at 184% and 196% of the target award for Series 1 awards granted in fiscal years 2017 and 2016, respectively, 100% and 151% of the target award for Series 3 awards granted in fiscal years 2018 and 2016, respectively, 100% and 172% of the target award for the first and second tranches, respectively, of the Series 4 awards granted in fiscal year 2018, and 100% and 184% of the target award for the first and second tranches, respectively, of the Series 4 awards granted in fiscal year 2017.
- (2) Forfeitures include Series 1 and Series 4 awards that were granted to certain employees in fiscal years 2017 and 2016 but that were forfeited at the termination of their employment.

Series 1: For the fiscal year 2017 and 2016 awards, vesting is subject to performance requirements composed of certain objectives including average annual return on invested capital and annual compound growth rate in the Company’s diluted earnings per share. These objectives are assessed quarterly using the Company’s budget, actual results and long-term projections. For each of the Series 1 awards, the expected percentage of vesting is evaluated through January 31, 2018, and reflects the percentage of RSUs projected to vest for the respective awards at the end of their measurement periods. For the fiscal year 2017 and 2016 awards, RSUs vested may increase to a maximum of 200% of the target award on achievement of maximum performance objectives.

Series 3: In fiscal year 2018, Mr. Fraser was awarded (i) a performance-based Series 3 award for 10,000 shares of common stock having a performance requirement related to debt payments during the fiscal year, and (ii) a performance-based Series 3 award for 4,000 shares of common stock having certain organizational objectives as a performance requirement, and in each case such awards vest and are measured over a one year period beginning August 1 and ending July 31. These awards are expected to vest at 100% of the target award. In fiscal year 2016, Mr. Fraser was awarded a performance-based Series 3 award for 82,938 shares of common stock (at target) having performance requirements related to cumulative revenue and total stockholder return. The measurement period for the fiscal year 2016 award begins on November 1, 2015 and the award vests one-third (1/3) at July 31, 2018, 2019 and 2020. The shares vested may increase to a maximum of 200% of the target award on achievement of maximum performance objectives. These awards are expected to vest at 150% of the target award.

Series 4: For the fiscal year 2018 and 2017 awards, each award includes two tranches. For the first tranche, vesting is subject to the achievement of an adjusted earnings before interest, taxes and depreciation and amortization (“EBITDA”) metric. For the second tranche, vesting is subject to performance requirements for average annual return on invested capital and annual compound growth rate in the Company’s diluted earnings per share. These objectives are assessed quarterly using the Company’s budget, actual results and long-term projections. For each of the Series 4 awards, the expected percentage vesting is evaluated through January 31, 2018, and reflects the percentage of RSUs projected to vest at the end of the measurement period. For the fiscal year 2018 and 2017 awards, the RSUs vested in the second tranche may increase to a maximum of 200% of the target award on achievement of maximum performance objectives.

The weighted-average per share grant-date fair value of the target award RSUs for performance-based awards outstanding was \$30.72 and \$25.49 at January 31, 2018 and August 1, 2017, respectively.

The weighted-average per share grant-date fair value of the target award RSUs for performance-based awards granted during the six months ended January 31, 2018 and January 31, 2017 was \$54.09 and \$29.64, respectively. There were 69,083 performance-based RSU awards granted during the six months ended January 31, 2018.

The weighted-average per share grant-date fair value of performance-based awards forfeited during the six months ended January 31, 2018 and 2017 was \$27.47 and \$25.85, respectively.

Time-Based Stock Awards

A summary of activity for time-based stock awards for the six months ended January 31, 2018 is presented below:

	Shares	Weighted-Average Grant-Date Fair Value
Non-vested on August 1, 2017	173,603	\$ 24.37
Granted (1)	6,100	56.69
Vested(2)	(15,672)	37.48
Forfeited	(385)	31.39
Non-vested on January 31, 2018	<u>163,646</u>	<u>24.30</u>

(1) Includes 4,100 shares granted to non-employee directors for service during the six months ended January 31, 2018.

(2) Includes 4,100 shares granted to non-employee directors for service for the six months ended January 31, 2018. The shares vest on the date of grant, and the Company recognizes compensation expense on such date. Includes 11,572 time-based RSU awards granted to certain employees and executives, and the Company recognizes compensation expense related to the awards over the respective service periods in accordance with GAAP. Upon vesting, each RSU was converted to one share of common stock.

The total fair value of time-based stock awards vested during the six months ended January 31, 2018 and 2017 was approximately \$0.6 million and \$0.5 million, respectively.

8. Intangible Assets

Intangible assets are summarized as follows (in thousands):

	Number of Years Weighted Average Amortization Period	January 31, 2018			
		Original Cost	Accumulated Amortization	Foreign Currency Translation Adjustment	Carrying Amount
Intangible assets subject to amortization (range of useful life):					
Electronic chemicals-value of product qualifications (5-15 years)	14.1	\$ 14,100	\$ (5,912)	\$ (483)	\$ 7,705
Performance materials-customer relationships (15-20 years)	19.7	218,106	(8,465)	74	209,715
Performance materials-proprietary manufacturing process (15 years)	15.0	39,323	(1,639)	—	37,684
Electronic chemicals-other (1-15 years)	7.4	2,649	(1,892)	(73)	684
Performance materials-other (5-15 years)	6.2	3,160	(562)	73	2,671
Total intangible assets subject to amortization	18.5	\$ 277,338	\$ (18,470)	\$ (409)	\$ 258,459
Intangible assets not subject to amortization:					
Performance materials-penta product registrations					8,765
Performance materials-related trade name and trademark					37,496
Performance materials-proprietary manufacturing process					2,808
Total intangible assets not subject to amortization					49,069
Total intangible assets, net					\$ 307,528

	Number of Years Weighted Average Amortization Period	July 31, 2017			
		Original Cost	Accumulated Amortization	Foreign Currency Translation Adjustment	Carrying Amount
Intangible assets subject to amortization (range of useful life):					
Electronic chemicals-value of product qualifications (5-15 years)	14.1	\$ 14,100	\$ (5,479)	\$ (841)	\$ 7,780
Performance materials-customer relationships (15-20 years)	19.7	227,521	(3,244)	54	224,331
Performance materials-proprietary manufacturing process (15 years)	15.0	39,245	(322)	—	38,923
Electronic chemicals-other (1-15 years)	7.4	2,649	(1,740)	(114)	795
Performance materials-other (5-15 years)	6.2	3,160	(289)	54	2,925
Total intangible assets subject to amortization	13.6	\$ 286,675	\$ (11,074)	\$ (847)	\$ 274,754
Intangible assets not subject to amortization:					
Performance materials-penta product registrations					8,765
Performance materials-related trade name and trademark					34,074
Performance materials-proprietary manufacturing process					2,808
Total intangible assets not subject to amortization					45,647
Total intangible assets, net					\$ 320,401

Intangible assets subject to amortization are amortized over their estimated useful lives. Amortization expense was approximately \$3.9 million and \$0.5 million for the three months ended January 31, 2018 and 2017, respectively, and \$7.4 million and \$1.1 million for the six months ended January 31, 2018 and 2017, respectively.

9. Dividends

Dividends of approximately \$0.5 million (\$0.03 per share) and \$0.4 million (\$0.03 per share) were declared and paid in the second quarter of fiscal years 2018 and 2017, respectively. Dividends of approximately \$0.8 million (\$0.06 per share) and \$0.7 million (\$0.06 per share) were declared and paid in the first six months of fiscal years 2018 and 2017, respectively. A dividend of \$0.03 per share was approved by the Company's board of directors on February 28, 2018 to be paid on March 19, 2018 to shareholders of record on March 12, 2018.

10. Segment Information

The Company has two reportable segments — electronic chemicals and performance materials. In the fiscal quarter ended April 30, 2017, the Company's management, including the chief executive officer, who is the chief operating decision maker, determined that the Company's operations should be reported as the electronic chemicals segment and the performance materials segment. Previously the Company had two reportable segments – electronic chemicals and other chemicals. The performance materials segment includes the Company's pipeline performance business platform and wood treating chemicals business platform that were previously referred to as the other chemicals segment. The Flowchem and Sealweld businesses acquired in the second half of fiscal year 2017 are included in the performance materials segment.

	Three Months Ended		Six Months Ended	
	January 31,		January 31,	
	2018	2017	2018	2017
	(Amounts in thousands)		(Amounts in thousands)	
Net sales				
Electronic chemicals	\$ 73,924	\$ 69,766	\$ 147,732	\$ 136,688
Performance materials	39,927	9,305	76,783	18,878
Other activities	—	—	—	—
Total consolidated net sales	\$ 113,851	\$ 79,071	\$ 224,515	\$ 155,566
Depreciation and amortization				
Electronic chemicals	\$ 2,760	\$ 2,793	\$ 5,554	\$ 5,645
Performance materials	4,287	285	8,168	572
Other activities	539	418	973	831
Total consolidated depreciation and amortization	\$ 7,586	\$ 3,496	\$ 14,695	\$ 7,048
Operating income ⁽¹⁾				
Electronic chemicals	\$ 12,730	\$ 9,583	\$ 23,988	\$ 17,644
Performance materials	12,810	3,023	24,394	6,704
Other activities	(3,810)	(3,566)	(6,572)	(6,628)
Total consolidated operating income	21,730	9,040	41,810	17,720
Total other (expense) income, net	(4,574)	(457)	(16,175)	(404)
Income before income taxes	\$ 17,156	\$ 8,583	\$ 25,635	\$ 17,316

(1) Segment income from operations includes allocated corporate overhead expenses, but excludes restructuring and realignment charges, which are included in other activities.

11. Long-Term Debt

The Company's debt as of January 31, 2018 and July 31, 2017 consisted of the following:

	January 31, 2018	July 31, 2017
	(Amounts in thousands)	
Senior secured debt:		
Term loan, maturing on June 15, 2024, variable interest rates based on LIBOR plus 2.75%, at January 31, 2018	\$ 344,000	\$ 540,000
Total debt	344,000	540,000
Current maturities of long-term debt	—	(3,167)
Unamortized debt issuance costs and original issue discount	(6,952)	(13,731)
Long-term debt, net of current maturities	\$ 337,048	\$ 523,102

On June 15, 2017, the Company entered into a credit agreement (as amended, the “Credit Agreement”) with KeyBank National Association, as agent, KeyBanc Capital Markets, Inc., HSBC Securities (USA) Inc., and JPMorgan Chase Bank, N.A., as joint lead arrangers and joint bookrunners, the lenders named therein, and ING Capital LLC, as documentation agent. The Credit Agreement provides for a seven year syndicated senior secured term loan of \$550.0 million (the “Term Loan”) and a five year senior secured revolving credit facility of \$50.0 million (the “Revolving Loan”). On December 19, 2017, the Company entered into an amendment to the Credit Agreement to reduce the interest rate margins applicable to borrowings under the Term Loan and the Revolving Loan.

During the six months ended January 31, 2018, the Company made principal payments totaling \$196.0 million on the Term Loan, including \$175.7 million paid using the net proceeds from the public offering of the Company’s common stock that closed on October 23, 2017. In conjunction with the amendment to the Credit Agreement and principal payments on the Term Loan, the Company recorded an accelerated amortization of deferred financing costs and original issue discount of \$6.1 million as a loss on extinguishment of debt in the Company’s condensed consolidated statements of income. At January 31, 2018, the Company had \$344.0 million outstanding under the Term Loan, with up to \$46.9 million of additional borrowing capacity under the Revolving Loan after giving effect to a reduction of \$3.1 million for outstanding letters of credit.

The Term Loan bears interest at a varying rate of LIBOR plus a margin based on net funded debt to adjusted EBITDA, as calculated in accordance with the Credit Agreement:

Term Loan - Ratio of Net Funded Debt to Adjusted EBITDA	Margin
Greater than 2.5 to 1.0	2.75%
Less than or equal to 2.5 to 1.0	2.50%

The Revolving Loan bears interest at a varying rate of LIBOR plus a margin based on net funded debt to adjusted EBITDA, as calculated in accordance with the Credit Agreement:

Revolving Loan - Ratio of Net Funded Debt to Adjusted EBITDA	Margin
Greater than 4.25 to 1.0	2.75%
Greater than 3.75 to 1.0, but less than or equal to 4.25 to 1.0	2.50%
Less than 3.75 to 1.0	2.25%

As of January 31, 2018, the Term Loan bore interest at 4.323% and the Revolving Loan bore interest at 3.823%. There were no outstanding borrowings under the Revolving Loan as of January 31, 2018. The Company also incurs an unused commitment fee on the unused amount of commitments under the Revolving Loan of 0.375%.

Loans under the Credit Agreement are secured by the Company’s assets, including stock in subsidiaries, inventory, accounts receivable, equipment, intangible assets, and real property. The Credit Agreement has restrictive covenants, including a covenant that the Company must maintain a consolidated net leverage ratio between 6.5 to 1.0 through the fiscal quarter ended April 30, 2018, which ratio is reduced each year thereafter by an amount set forth in the Credit Agreement, until the twelve months ended April 30, 2022, following which the Company must maintain a consolidated net leverage ratio below 4.0 to 1.0. As of January 31, 2018, the Company was in compliance with all covenants of the Credit Agreement.

12. Fair Value Measurements

Fair Value Hierarchy

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. There are three approaches for measuring the fair value of assets and liabilities: the market approach, the income approach and the cost approach, each of which includes multiple valuation techniques.

The fair value accounting standards do not prescribe which valuation technique should be used when measuring fair value and do not prioritize among the techniques. These standards establish a fair value hierarchy that prioritizes the inputs used in applying the various valuation techniques. Inputs broadly refer to the assumptions that market participants use to make pricing decisions, including assumptions about risk. Level 1 inputs are given the highest priority in the fair value hierarchy while Level 3 inputs are given the lowest priority. The three levels of the fair value hierarchy are as follows:

- Level 1 – Observable inputs that reflect unadjusted quoted prices for identical assets or liabilities in active markets as of the reporting date. Active markets are those in which transactions for the asset or liability occur in sufficient frequency and volume to provide pricing information on an ongoing basis.

- Level 2 – Observable market-based inputs or unobservable inputs that are corroborated by market data. These are inputs other than quoted prices in active markets included in Level 1, which are either directly or indirectly observable as of the reporting date.
- Level 3 – Unobservable inputs for which there is little, if any, market activity for the asset or liability being measured. These inputs reflect management’s best estimates of the assumptions market participants would use in determining fair value. The level 3 measurements consist of instruments using standard pricing models and other valuation methods that utilize unobservable pricing inputs that are significant to the overall fair value.

Valuation techniques that maximize the use of observable inputs are favored. Assets and liabilities are classified in their entirety based on the lowest priority level of input that is significant to the fair value measurement. The assessment of the significance of a particular input to the fair value measurement requires judgment and may affect the placement of assets and liabilities within the levels of the fair value hierarchy.

Significant uses of fair value measurements include:

- impairment assessments of long-lived assets;
- impairment assessments of goodwill;
- recorded value of derivative instruments; and
- assets acquired and liabilities assumed in business combinations.

Fair Values – Recurring

The derivative instrument transactions occurred on August 14, 2017, and as of January 31, 2018 are included within Level 2 other assets, net in the Company’s condensed consolidated balance sheet. The following tables present the fair value hierarchy table for assets and liabilities measured at fair value, on a recurring basis (in thousands):

Description	Fair Value Measurements at January 31, 2018, Using:			Total
	Level 1	Level 2	Level 3	
Assets				
Derivatives – interest rate swaps	\$ —	\$ 3,873	\$ —	\$ 3,873
Total	\$ —	\$ 3,873	\$ —	\$ 3,873

Derivative assets consist of interest rate swaps entered into to mitigate the risk relating to possible adverse changes in interest rates for the Company’s floating rate borrowings. The fair value of the interest rate swaps is estimated as the net present value of projected cash flows based upon forward interest rates at the balance sheet date. The models used to value the interest rate swaps are based primarily on readily observable market data, such as LIBOR forward rates, for all substantial terms of the interest rate swap contracts and the credit risk of the counterparties. As such, these derivative instruments are included in Level 2 inputs. See Note 13, *Derivative Financial Instruments*.

Fair Values – Non-Recurring

In addition to the financial assets and liabilities included in the above table, certain nonfinancial assets and liabilities are to be measured at fair value on a nonrecurring basis in accordance with applicable GAAP. In general, nonfinancial assets including goodwill, other intangible assets and property and equipment are measured at fair value when there is an indication of impairment and are recorded at fair value only when any impairment is recognized. As of January 31, 2018, the Company had not recorded any impairment related to such assets and had no other material nonfinancial assets or liabilities requiring adjustments or write-downs to their current fair value.

As allowed by applicable FASB guidance, the Company has elected not to apply the fair value option for financial assets and liabilities to any of its currently eligible financial assets or liabilities. As of January 31, 2018 and July 31, 2017, the Company’s material financial assets and liabilities not carried at fair value included cash and cash equivalents, accounts receivable, accounts payable and accrued expenses. These financial instruments are recorded at their carrying values which are deemed to approximate fair value, generally due to their short periods to maturity.

13. Derivative Financial Instruments

The Company held certain derivative instruments that were accounted for pursuant to ASC 815, *Derivatives and Hedging* (ASC 815). The Company entered into certain interest rate swaps with notional amounts totaling \$243.0 million, to limit its exposure to variability of the one-month LIBOR floating interest rate on a significant portion of the outstanding balance of its Term Loans. See Note 11, *Long-Term Debt*. The interest rate swap agreements are in place with two U.S.-based counterparties, with expected termination dates of June 15, 2024.

Every derivative instrument is required to be recorded on the balance sheet as either an asset or a liability measured at its fair value. If the derivative does not qualify as a hedge or is not designated as a hedge, changes in fair value of these non-hedge derivatives are recognized in earnings in derivative fair value income or loss.

None of the derivative instruments are used for trading purposes. The effects of the derivative instruments on the condensed consolidated financial statements were as follows as of or for each of the period presented below (amounts presented exclude any income tax effects):

The combined fair value of derivatives not designated as hedging instruments included in the accompanying condensed consolidated balance sheet as of January 31, 2018 is summarized below (in thousands).

Description	Location	Fair Value as of January 31, 2018
Derivative instruments – interest rate swaps	Other assets, net	\$ 3,873

The effects of derivatives not designated as hedging instruments on the condensed consolidated statements of income for the three and six months ended January 31, 2017 are summarized below (in thousands).

Description	Location	Three Months Ended January 31, 2018	Six Months Ended January 31, 2018
Derivative instruments – interest rate swaps	Derivative fair value gain	\$ 3,024	\$ 3,873

14. Income Taxes

Income tax expense for the interim periods was computed using an estimated annual effective income tax rate applied to year-to-date income before income tax expense. In determining the estimated annual effective income tax rate, the Company analyzes various factors, including forecasts of projected annual earnings and the ability to use tax credits and net operating loss carry forwards. The overall effective income tax rate for the three and six months ended January 31, 2018 was (47.7)% and (21.7)%, respectively. For the three and six months ended January 31, 2017, the overall effective income tax rate was 24.4% and 29.4%, respectively. The decrease in the effective tax rate from the prior fiscal year was due to one-time tax benefits reflecting the impact of the re-measurement of net deferred tax liabilities resulting from the Tax Cuts and Jobs Act of 2017 described below, and stock-based compensation tax benefits realized as a result of the adoption of ASU 2016-09 in the second quarter of fiscal year 2017.

On December 22, 2017, the U.S. government enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act of 2017 (the “Tax Act”). The Tax Act significantly revises the future ongoing U.S. corporate income tax by, among other things, lowering the U.S. corporate income tax rate from 35% to 21%, changing how foreign earnings are subject to U.S. tax by implementing a territorial tax system, and eliminating certain deductions, including the domestic manufacturing deduction. The Tax Act also enhances and extends through 2026 the option to claim accelerated depreciation deductions on qualified property. As the Company has a July 31 fiscal year-end, the lower corporate income tax rate will be phased in, resulting in an estimated U.S. statutory federal rate of approximately 27% for our fiscal year ending July 31, 2018, and 21% for subsequent fiscal years. Under GAAP, the Company is required to recognize the effects of changes in tax laws and tax rates on deferred tax assets and liabilities in the period in which the new legislation is enacted.

For the fiscal quarter ended January 31, 2018, the Company recorded a net tax benefit of approximately \$11.0 million from the new legislation. The tax benefit mainly reflects the impact of the re-measurement of net deferred tax liabilities resulting from the permanent reduction in the U.S. statutory corporate tax rate from 35% to 21%.

There are also certain transitional impacts of the Tax Act. As part of the transition to the new territorial tax system, the Tax Act imposes a one-time repatriation tax on deemed repatriation of historical earnings of foreign subsidiaries. However, the Company does not believe the transitional tax is material.

The changes included in the Tax Act are broad and complex and the Company does not have all the necessary information to analyze all income tax effects of the Tax Act. The above income tax benefit amount is a provisional amount based on a reasonable estimate of the impact of the reduction in corporate tax rate on our current and deferred tax liabilities. Changes in the estimate of our deferred tax asset and liability activity during fiscal year 2018 could impact our remeasurement of net deferred tax liabilities. In addition, there is uncertainty about the interpretation of the Tax Act and the Internal Revenue Service guidance on the Tax Act. The Company's estimation of the one-time repatriation tax may differ from the provision amount as a result of the uncertainty from the interpretation of the Tax Act and changes in the estimate of historical earnings of foreign corporations. The Company will continue to evaluate the Tax Act and adjust the provisional amounts as additional information becomes available. The ultimate impact of the Tax Act may differ from the provisional amounts due to changes in the Company's interpretations and assumptions, as well as additional guidance on the interpretation of the Tax Act.

15. Litigation and Other Contingencies

The Company is subject to contingencies, including litigation relating to environmental laws and regulations, commercial disputes and other matters. Certain of these contingencies are discussed below. The ultimate resolution of these contingencies is subject to significant uncertainty, and should the Company fail to prevail in any of them or should several of them be resolved against the Company in the same reporting period, these matters could, individually or in the aggregate, be material to the condensed consolidated financial statements. The ultimate outcome of these matters, however, cannot be determined at this time, nor can the amount of any potential loss or range of loss be reasonably estimated, and as a result except where indicated no amounts have been recorded in the Company's condensed consolidated financial statements.

The Company records legal costs associated with loss contingencies as expenses in the period in which they are incurred.

The EPA has listed the Star Lake Canal Superfund Site near Beaumont, Texas on the National Priorities List. The Company's subsidiary, KMG-Bernuth, was notified in October 2014 that the EPA considered it to have potential liability under the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, also known as "CERCLA," in connection with this site by virtue of its relationship with certain alleged predecessor companies, including Idacon, Inc. (f/k/a Sonford Chemical Company). The EPA has estimated that the remediation will cost approximately \$22.0 million. The Company and approximately seven other parties entered into an agreement with the EPA in September 2016 to complete a remedial design phase of the remediation of the site. The remediation work will be performed under a separate future agreement. Although the Company has not conceded liability, the Company established a liability of \$1.3 million in the third quarter of fiscal year 2015 in connection with this matter. As of January 31, 2018, the liability remaining was \$1.1 million.

The Company is subject to federal, state, local and foreign laws and regulations and potential liabilities relating to the protection of the environment and human health and safety including, among other things, the cleanup of contaminated sites, the treatment, storage and disposal of wastes, the emission of substances into the air or waterways, and various health and safety matters. The Company expects to incur substantial costs for ongoing compliance with such laws and regulations. The Company may also face governmental or third-party claims, or otherwise incur costs, relating to cleanup of, or for injuries resulting from, contamination at sites associated with past and present operations. The Company accrues for environmental liabilities when a determination can be made that they are probable and reasonably estimable.

16. Restructuring and Realignment Events

In April 2017, the Company began implementation of a plan of restructuring of its electronic chemicals segment in Asia. As a result, the Company incurred approximately \$0.1 million of employee related severance costs during the six months ended January 31, 2018.

As part of the Company's global restructuring of its electronic chemicals operations, the Company closed one of its facilities in Milan, Italy in December 2015, and shifted some production to facilities in France and the United Kingdom. Accelerated depreciation with respect to the closed facilities has been completed.

At January 31, 2018, the accrued liability associated with restructuring and other related charges consisted of the following (in thousands):

	Decommissioning and Environmental	Total
Accrued liability at August 1, 2017	\$ 77	\$ 77
Payments	(36)	(36)
Adjustments	(41)	(41)
Accrued liability at January 31, 2018	\$ —	\$ —

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

We manufacture, formulate and globally distribute specialty chemicals and performance materials for the semiconductor, industrial wood preservation and pipeline and energy markets. We operate three business platforms: electronic chemicals, pipeline performance and wood treating chemicals. In our electronic chemicals platform, we formulate, purify and blend acids, solvents and other wet chemicals used to etch and clean silicon wafers in the production of semiconductors, photovoltaics (solar cells) and flat panel displays. In our pipeline performance platform, we provide products, services and solutions for optimizing pipeline throughput and maximizing performance and safety. Our pipeline performance products include drag-reducing agents, valve lubricants, cleaners and sealants, and related equipment. We also provide routine and emergency maintenance services and training for pipeline operators worldwide. Our wood treating chemicals, based on pentachlorophenol, or penta, are sold to industrial customers who use these products to extend the useful life of wood utility poles and crossarms.

Common Stock Offering

On October 23, 2017, we completed an underwritten public offering of 3,450,000 shares of our common stock, including 450,000 shares issued pursuant to the underwriters' exercise of their option to purchase additional shares, at a public offering price of \$54 per share, resulting in estimated net proceeds of approximately \$175.7 million after deducting underwriting commissions and estimated offering expenses. We used all of the net proceeds of the offering to pay down our outstanding term loan. See Notes 4 and 11 to the condensed consolidated financial statements included in this report.

Amendment to Credit Agreement and Reduction of Interest Rate Margins

Following the pay down of our Term Loan using proceeds of the common stock offering, on December 19, 2017, we entered into an amendment to our Credit Agreement to reduce the interest rate margins applicable to borrowings under our Term Loan and Revolving Loan facilities. As a result of the amendment, our Term Loan currently bears interest at a rate of LIBOR plus 2.75% with the potential to reduce the rate to LIBOR plus 2.50% when our ratio of net funded debt to adjusted EBITDA, as calculated in accordance with the Credit Agreement, reaches 2.5 to 1.0. Prior to the amendment, our Term Loan bore interest at a rate of LIBOR plus 4.00%.

Acquisition of Flowchem

On June 15, 2017, we completed the acquisition of Flowchem Holdings LLC, the parent company of Flowchem LLC ("Flowchem"). Based in Waller, Texas, Flowchem is a global provider of drag-reducing agents, related support services and equipment to midstream crude oil and refined fuel pipeline operators. The consideration paid for the acquisition was \$495.0 million plus \$11.4 million for cash acquired. The purchase price is subject to adjustment following closing for reconciliation of net working capital. See Note 2 to the condensed consolidated financial statements included in this report.

In connection with the acquisition, on June 15, 2017, we entered into a new credit agreement (the "Credit Agreement"), by and among, us, KeyBank National Association, as agent, KeyBanc Capital Markets Inc., HSBC Securities (USA) Inc., and JPMorgan Chase Bank, N.A., as joint lead arrangers and joint bookrunners and ING Capital LLC, as documentation agent. The Credit Agreement provides for (i) a seven year syndicated senior secured term loan of \$550.0 million (the "Term Loan") and (ii) a five year senior secured revolving credit facility of \$50.0 million (the "Revolving Loan"). The proceeds from the term loan under the Credit Agreement were used to finance the acquisition of Flowchem, pay the costs and expenses related to the acquisition, and to repay in full the \$31.0 million outstanding indebtedness under our prior credit facility.

Acquisition of Sealweld

On February 1, 2017, we completed the acquisition of the assets of Sealweld Corporation ("Sealweld"), a privately held corporation organized under the laws of the Province of Alberta, Canada, for CAD\$22.3 million in cash (or approximately US\$17.2 million, at an exchange rate of 0.77 CAD\$ to US\$ at February 1, 2017), which includes CAD\$5.5 million (or approximately US\$4.2 million, at an exchange rate of 0.77 CAD\$ to US\$ at February 1, 2017) for estimated net working capital. Sealweld is based in Calgary, Alberta, Canada, with additional facilities in the United States and the United Arab Emirates. Sealweld is a leading global supplier of high-performance products and services for industrial valve and actuator maintenance, including lubricants, sealants, cleaners, valve fittings, tools and equipment. Additionally, Sealweld provides routine and emergency valve maintenance services and technician training for many of the world's largest pipeline operators. See Note 2 to the condensed consolidated financial statements included in this report.

Results of Operations

Three and Six Months Ended January 31, 2018 compared with the Three and Six Months Ended January 31, 2017

Segment Net Sales

Segment data is presented for our two reportable segments for the three and six months ended January 31, 2018 and 2017. The segment data should be read in conjunction with our condensed consolidated financial statements and related notes thereto included elsewhere in this report. The information presented for the performance materials segment for the three and six months ended January 31, 2017 represents information that was previously reported in our other chemicals segment. In the fiscal quarter ended April 30, 2017, the Company's management, including the chief executive officer, who is the chief operating decision maker, determined that the Company's operations should be reported as the electronic chemicals segment and the performance materials segment, as discussed in Note 10 to our consolidated financial statements included in this report.

	Three Months Ended		Six Months Ended	
	January 31,		January 31,	
	2018	2017	2018	2017
	(Amounts in thousands)		(Amounts in thousands)	
Sales				
Electronic chemicals	\$ 73,924	\$ 69,766	\$ 147,732	\$ 136,688
Performance materials	39,927	9,305	76,783	18,878
Total sales for reportable segments	<u>\$ 113,851</u>	<u>\$ 79,071</u>	<u>\$ 224,515</u>	<u>\$ 155,566</u>

Net Sales

Net sales for reportable segments increased by \$34.8 million, or 44.0%, to \$113.9 million in the second quarter of fiscal year 2018, from \$79.1 million in the same period of the prior year. For the six months ended January 31, 2018, net sales for reportable segments increased by \$68.9 million, or 44.3%, to \$224.5 million from \$155.6 million in the same period of the prior year. For both the quarter and the six month period, net sales increased primarily due to the acquisitions within the performance materials segment in the second half of fiscal year 2017, as well as volume growth globally within our other businesses in both reportable segments.

Net sales in the electronic chemicals segment increased by \$4.1 million, or 5.9%, to \$73.9 million in the second quarter of fiscal year 2018, from \$69.8 million in the same period of the prior year. Net sales increased primarily due to increased volume of higher priced products. For the six months ended January 31, 2018, net sales in the electronic chemicals segment increased by \$11.0 million, or 8.0%, to \$147.7 million from \$136.7 million in the same period of the prior year. For the six month period, net sales increased primarily due to global volume growth and increased volume of higher priced products.

Net sales of performance materials increased by \$30.6 million, or 329.0%, to \$39.9 million in the second quarter of fiscal year 2018, from \$9.3 million in the same period of the prior year. For the six months ended January 31, 2018, net sales of performance materials increased by \$57.9 million, or 306.3%, to \$76.8 million from \$18.9 million in the same period of the prior year. For both the quarter and the six month period, net sales increased primarily due to the acquisitions of Sealweld and Flowchem in the second half of fiscal 2017, as well as volume growth in our legacy businesses within the segment.

Gross Profit

Gross profit increased by \$18.1 million, or 58.0%, to \$49.3 million in the second quarter of fiscal year 2018, from \$31.2 million in the same period of the prior year. Gross profit as a percentage of net sales increased to 43.3% in the second quarter of fiscal year 2018, from 39.5% in the same period of the prior year. For the six months ended January 31, 2018, gross profit increased by \$34.8 million, or 57.1%, to \$95.7 million from \$60.9 million in the same period of the prior year. Gross profit as a percentage of net sales increased to 42.6% in the first six months of fiscal year 2018, from 39.1% in the same period of the prior year. For both the quarter and six month period, gross profit increased primarily due to the Flowchem and Sealweld acquisitions completed in the second half of fiscal 2017. Gross profit as a percentage of net sales increased primarily due to the Flowchem acquisition.

Other companies may include certain costs that we record in cost of sales as distribution expenses or selling, general and administrative expenses, and may include certain of the costs that we record in distribution expenses or selling, general and administrative expenses as a component of cost of sales, resulting in a lack of comparability between our gross profit and that reported by other companies. See discussion of distribution expenses below.

Distribution Expenses

Distribution expenses decreased by \$1.1 million, or 11.2%, to \$8.7 million in the second quarter of fiscal year 2018, from \$9.8 million in the same period of the prior year. Distribution expenses as a percentage of net sales decreased to 7.6% in the second quarter of fiscal year 2018, from 12.4% in the same period of the prior year. In addition, distribution expenses as a percentage of net sales within the electronic chemicals segment decreased to 11.1% in the second quarter of fiscal year 2018, from 13.4% in the same period in the prior year due to product mix. The electronic chemicals segment represented approximately 94.4% and 95.3% of distribution expenses in the three months ended January 31, 2018 and 2017, respectively. For the six months ended January 31, 2018, distribution expenses decreased by \$0.8 million, or 4.2%, to \$18.1 million from \$18.9 million in the same period of the prior year. Distribution expenses as a percentage of net sales decreased to 8.1% from 12.1% in the same period of the prior year. Distribution expenses decreased compared to the prior year periods as a result of certain internal distribution costs being classified as costs of sales instead of distribution expense, which amounted to \$2.0 million and \$3.7 million for the three and six month periods ended January 31, 2018, respectively. The decreases were partially offset by increased freight costs due to higher volume and less favorable freight market conditions. Distribution expenses as a percentage of net sales decreased in the quarter and the six month period primarily due to increased net sales within the performance materials segment, as a result of the Flowchem acquisition, which has lower distribution expense as a percentage of net sales than the electronic chemicals segment.

Selling, General and Administrative Expenses

Selling, general and administrative expenses increased by \$3.1 million, or 26.1%, to \$15.0 million in the second quarter of fiscal year 2018, from \$11.9 million in the same period of the prior year. Selling, general and administrative expenses increased primarily due to a \$0.6 million expense associated with the amendment of our Credit Agreement in December 2017, a \$0.3 million increase in stock based compensation, and the additional selling, general and administrative costs as a result of the acquisitions in the performance materials segment in the second half of fiscal year 2017. Selling, general and administrative expenses as a percentage of net sales decreased to 13.2% in the second quarter of fiscal year 2018, from 15.0% in the same period of the prior year. Selling, general and administrative expenses as a percentage of net sales at the businesses acquired in the second half of fiscal year 2017 were lower than our other businesses, resulting in a reduction in selling, general and administrative expenses as a percentage of net sales in the three months ended January 31, 2018, as compared to the prior period. For the six months ended January 31, 2018, selling, general and administrative expenses increased by \$5.1 million, or 22.0%, to \$28.3 million from \$23.2 million in the same period of the prior year. Selling, general and administrative expenses increased primarily due to a \$0.6 million expense associated with the amendment of our Credit Agreement in December 2017, a \$0.5 million increase in stock based compensation, and the additional selling, general and administrative costs as a result of the acquisitions in the performance materials segment in the second half of fiscal year 2017. Selling, general and administrative expenses as a percentage of net sales decreased to 12.6% from 14.9% in the same period of the prior year. Selling, general and administrative expenses as a percentage of net sales at the businesses acquired in the second half of fiscal year 2017 were lower than our other businesses, resulting in a reduction in selling, general and administrative expenses as a percentage of net sales in the six months ended January 31, 2018, as compared to the prior period.

Segment Income from Operations

Operating income in the electronic chemicals segment increased by \$3.1 million, or 32.3%, to \$12.7 million in the second quarter of fiscal year 2018, from \$9.6 million in the same period of the prior year. For the six months ended January 31, 2018, operating income in the electronic chemicals segment increased by \$6.4 million, or 36.4%, to \$24.0 million from \$17.6 million in the same period of the prior year. For both the quarter and the six month period, operating income increased primarily due to increased volume of higher priced products. We also benefited from operating efficiencies realized at our manufacturing facilities in the segment.

Operating income in the performance materials segment increased by \$9.8 million, or 326.7%, to \$12.8 million in the second quarter of fiscal year 2018, from \$3.0 million in the same period of the prior year. For the six months ended January 31, 2018, operating income increased by \$17.7 million, or 264.2%, to \$24.4 million from \$6.7 million in the same period of the prior year. For both the quarter and the six month period, operating income increased primarily due to contributions from the acquisitions of Flowchem and Sealweld, and volume growth within our legacy businesses within the segment.

Other corporate expenses are not allocated to segments when calculating a segment's income from operations. Other corporate expenses primarily represent employee stock-based compensation expenses and public entity expenses, such as board compensation, audit expense and fees related to the listing of our common stock. In the second quarter of fiscal year 2018, other corporate expenses increased to \$3.8 million from \$3.6 million in the same period of the prior year. For the six months ended January 31, 2018, other corporate expenses remained flat at \$6.6 million when compared to the same period of the prior year.

Net Income, Adjusted EBITDA, Adjusted Net Income and Adjusted Diluted Earnings Per Share

Net income increased by \$18.8 million, or 289.2% to \$25.3 million in the second quarter of fiscal year 2018, from \$6.5 million in the same period of the prior year. For the six months ended January 31, 2018, net income increased by \$19.0 million, or 155.7%, to \$31.2 million from \$12.2 million in the same period of the prior year. Diluted earnings per share was \$1.59 and \$0.53 in the second quarter of fiscal years 2018 and 2017, respectively, and \$2.18 and \$1.00 in the six months ended January 31, 2018 and 2017, respectively. For both the quarter and the six month period, net income and diluted earnings per share were both positively affected by the acquisitions of Flowchem and Sealweld, the derivative fair value gain and the tax benefits realized as a result of the Tax Cuts and Jobs Act of 2017 (the "Tax Act") passed on December 20, 2017. The positive impacts were partially offset by the increases in amortization of intangible assets, interest expense associated with our long-term borrowings and loss on the extinguishment of debt as a result of the accelerated payments we have recorded in fiscal year 2018.

Adjusted EBITDA (as defined below under Non-GAAP Financial Measures) excludes costs associated with the loss on the extinguishment of debt, costs incurred as a result of repricing our long-term borrowings, acquisition and integration expenses related to the acquisitions of Flowchem and Sealweld, derivative fair value gains and other charges related to restructuring activities in our electronic chemicals segment in Asia. Adjusted EBITDA increased by \$16.3 million, or 124.4% to \$29.4 million in the second quarter of fiscal year 2018, from \$13.1 million in the same period of the prior year. For the six months ended January 31, 2018, adjusted EBITDA increased by \$31.2 million, or 121.4%, to \$56.9 million from \$25.7 million in the same period of the prior year. The increases in adjusted EBITDA in both the quarter and the six month period were primarily the result of our acquisitions of Sealweld and Flowchem in the second half of fiscal year 2017, with additional positive contributions from each of our other businesses across both reportable segments.

In the second quarter of fiscal year 2018 adjusted diluted earnings per share (as defined below under Non-GAAP Financial Measures) was \$1.04, compared to \$0.57 in the second quarter of fiscal year 2017. For the six months ended January 31, 2018, adjusted diluted earnings per share was \$1.94, compared to \$1.05 in the same period of the prior year. The increases in adjusted diluted earnings per share in both the quarter and the six month period were primarily the result of our acquisitions of Sealweld and Flowchem in the second half of fiscal year 2017, with additional positive contributions from each of our other businesses across both reportable segments, and a reduction in our U.S. statutory tax rate.

Non-GAAP Financial Measures

We provide non-GAAP financial information to complement reported GAAP results including adjusted EBITDA, adjusted net income and adjusted diluted earnings per share. We believe that analysis of our financial performance is enhanced by an understanding of these non-GAAP financial measures. We believe that these measures aid in evaluating the underlying operational performance of our business and facilitate comparisons between periods. Non-GAAP financial information, such as adjusted EBITDA adjusted net income and adjusted diluted earnings per share, are used externally by users of our condensed consolidated financial statements, such as analysts and investors. A similar calculation of adjusted EBITDA is utilized internally for executives' compensation and by our lenders for a key debt compliance ratio.

We define adjusted EBITDA as earnings from continuing operations before interest, taxes, depreciation, amortization, acquisition and integration expenses, restructuring and realignment charges and other designated items. For the fiscal quarter ended January 31, 2018, other designated items include, among other items, significant recurring non-cash expenses, such as the amortization of Flowchem intangible assets and the amortization of deferred financing costs, the adjustments for which aid in the evaluation of our operating performance. Adjusted EBITDA is a primary measurement of cash flow from operations and a measure of our ability to invest in our operations and provide shareholder returns. Adjusted EBITDA is not intended to represent U.S. GAAP definitions of cash flow from operations or net income/(loss). Adjusted net income adjusts net income for acquisition and integration expenses, restructuring and realignment charges and other designated items, while adjusted diluted earnings per share is adjusted net income divided by diluted weighted average shares outstanding.

Adjusted EBITDA, adjusted net income and adjusted diluted earnings per share should be viewed as supplements to, and not substitutes for, U.S. GAAP measures of performance.

The table below provides a reconciliation of net income to adjusted EBITDA.

	Three Months Ended		Six Months Ended	
	January 31,		January 31,	
	2018	2017	2018	2017
	(Amounts in thousands)		(Amounts in thousands)	
Net income	\$ 25,337	\$ 6,486	\$ 31,187	\$ 12,227
Interest expense, net	5,086	172	13,180	349
Income taxes	(8,181)	2,097	(5,552)	5,089
Depreciation and amortization	7,586	3,496	14,695	7,048
EBITDA	29,828	12,251	53,510	24,713
Loss on the extinguishment of debt	1,916	—	6,091	—
Derivative fair value gain	(3,024)	—	(3,873)	—
Debt repricing transaction costs	602	—	602	—
Acquisition and integration expenses	119	501	530	584
Corporate relocation expense	—	316	—	366
Restructuring charges, excluding accelerated depreciation	(40)	—	69	—
Adjusted EBITDA	\$ 29,401	\$ 13,068	\$ 56,929	\$ 25,663

The table below provides a reconciliation of net income to adjusted net income and adjusted diluted earnings per share.

	Three Months Ended		Six Months Ended	
	January 31,		January 31,	
	2018	2017	2018	2017
	(Amounts in thousands)		(Amounts in thousands)	
Net income	\$ 25,337	\$ 6,486	\$ 31,187	\$ 12,227
Items impacting pre-tax income:				
Impact of the Tax Cuts and Jobs Act	(11,005)	—	(11,005)	—
Acquisition and integration expenses	119	501	530	584
Corporate relocation expense	—	316	—	366
Restructuring charges	(40)	—	69	—
Derivative fair value gain	(3,024)	—	(3,873)	—
Amortization of Flowchem intangible assets	3,224	—	6,115	—
Loss on the extinguishment of debt	1,916	—	6,091	—
Debt repricing transaction costs	602	—	602	—
Amortization of debt discounts and financing costs	335	—	828	—
Income taxes ⁽¹⁾	(846)	(286)	(2,798)	(332)
Adjusted net income ⁽²⁾	\$ 16,618	\$ 7,017	\$ 27,746	\$ 12,845
GAAP diluted earnings per share	\$ 1.59	\$ 0.53	\$ 2.18	\$ 1.00
Adjusted diluted earnings per share ⁽²⁾	\$ 1.04	\$ 0.57	\$ 1.94	\$ 1.05
Weighted average diluted shares outstanding	15,903	12,293	14,285	12,203

- (1) For the three and six months ended January 31, 2018, represents the aggregate tax-effect assuming a 27% tax rate of the items impacting pre-tax income, which is our estimated U.S. statutory federal tax rate for fiscal year 2018 following the enactment of the Tax Act in December 2017. For the three and six months ended January 31, 2017, represents the aggregate tax-effect assuming a 35% tax rate of items impacting pre-tax income.
- (2) Adjusted net income and adjusted diluted earnings per share for the first quarter of fiscal year 2018, which are included in the six months ended January 31, 2018, have been adjusted to reflect the assumed 27% tax rate for fiscal year 2018.

Interest Expense, net

Interest expense, net was \$5.1 million and \$0.2 million in the second quarter of fiscal years 2018 and 2017, respectively. For the six months ended January 31, 2018, interest expense, net was \$13.2 million, compared to \$0.3 million in the same period of the prior year. Interest expense was higher in both periods compared to the prior year due to the increase in long-term debt outstanding.

Income Taxes

The overall effective income tax rate for the three months ended January 31, 2018 and 2017 was (47.7)% and 24.4% respectively. For the six months ended January 31, 2018, the overall effective income tax rate was (21.7)%, compared to 29.4% in the same period of the prior year. The decrease in the effective tax rate from the prior fiscal year was due to one-time tax benefits of \$11.0 million reflecting the impact of the re-measurement of net deferred tax liabilities resulting from the Tax Act passed on December 20, 2017 and stock-based compensation tax benefits of \$1.1 million realized as a result of the adoption of ASU 2016-09 in the second quarter of fiscal year 2017.

Liquidity and Capital Resources

Cash Flows

Net cash provided by operating activities was \$36.2 million and \$19.4 million for the six months ended January 31, 2018 and 2017, respectively. Operating cash flows were favorably impacted by the acquisitions of Flowchem and Sealweld.

Net cash used in investing activities was \$10.3 million and \$5.1 million for the six months ended January 31, 2018 and 2017, respectively. During the six months ended January 31, 2018, we invested approximated \$9.0 million in capital investments, the majority of which was within the electronic chemicals segment, including investments in technology, supply chain and the expansion of our manufacturing facility in Singapore.

Net cash used in financing activities was \$25.5 million and \$4.2 million for the six months ended January 31, 2018 and 2017, respectively. During the six months ended January 31, 2018, we made payments totaling \$196.0 million on our outstanding term loan, of which \$175.7 million was paid using proceeds from the sale of our common stock that occurred on October 23, 2017. In addition to the payment made with the proceeds from the sale of common stock, we have paid down approximately \$20.3 million of the long-term debt with cash provided by operations. The increase in cash payments related to tax withholdings from stock-based awards was primarily a result of the vesting stock-based awards granted in fiscal year 2015 and the appreciation in the company's stock price.

Working Capital

On June 15, 2017, we entered into a credit agreement (as amended, the "Credit Agreement") providing for a seven year syndicated senior secured term loan of \$550.0 million (the "Term Loan") and a five year senior secured revolving credit facility of \$50.0 million (the "Revolving Loan"). At January 31, 2018, we had \$344.0 million outstanding under the Term Loan, with up to \$46.9 million of additional borrowing capacity under the Revolving Loan after giving effect to a reduction of \$3.1 million for outstanding letters of credit.

Management believes that the Credit Agreement, combined with cash flows from operations, will adequately provide for our working capital needs for current operations for the next twelve months.

Long Term Obligations

The Credit Agreement is with KeyBank National Association, as agent, KeyBanc Capital Markets, Inc., HSBC Securities (USA) Inc., and JPMorgan Chase Bank, N.A., as joint lead arrangers and joint bookrunners, the lenders referred to therein, and ING Capital LLC, as documentation agent.

On December 19, 2017, we entered into an amendment to the Credit Agreement to reduce the interest rate margins applicable to borrowings under the Term Loan and the Revolving Loan. Following the amendment, the interest rate on the Term Loan was reduced from LIBOR plus 4.00% to LIBOR plus 2.75%, based on a ratio of net funded debt to adjusted EBITDA, as calculated in accordance with the Credit Agreement:

Term Loan - Ratio of Net Funded Debt to Adjusted EBITDA	Margin
Greater than 2.5 to 1.0	2.75%
Less than or equal to 2.5 to 1.0	2.50%

As of January 31, 2018, the Term Loan bore interest at 4.323%.

In addition, following the amendment, the interest rate on the Revolving Loan was reduced from LIBOR plus 3.00% to LIBOR plus 2.25%, based on a ratio of net funded debt to adjusted EBITDA, as calculated in accordance with the Credit Agreement:

Revolving Loan - Ratio of Net Funded Debt to Adjusted EBITDA	Margin
Greater than 4.25 to 1.0	2.75%
Greater than 3.75 to 1.0, but less than or equal to 4.25 to 1.0	2.50%
Less than 3.75 to 1.0	2.25%

As of January 31, 2018, the Revolving Loan bore interest at 3.823%. There were no outstanding borrowings under the Revolving Loan as of January 31, 2018. We also incur an unused commitment fee on the unused amount of commitments under the Second Restated Credit Facility of 0.375%.

Loans under the Credit Agreement are secured by our assets, including stock in subsidiaries, inventory, accounts receivable, equipment, intangible assets, and real property. The Credit Agreement has restrictive covenants, including a covenant that the Company must maintain a consolidated net leverage ratio between 6.5 to 1.0 through the fiscal quarter ended April 30, 2018, which ratio is reduced each year thereafter by an amount set forth in the Credit Agreement, until the twelve months ended April 30, 2022, following which the Company must maintain a consolidated net leverage ratio below 4.0 to 1.0. As of January 31, 2018, we were in compliance with all covenants of the Credit Agreement.

Off-Balance Sheet Arrangements

We have no off-balance sheet arrangements, such as financing or unconsolidated variable interest entities, other than operating leases.

Disclosure Regarding Forward Looking Statements

This report includes “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These forward-looking statements include information about possible or assumed future results of our operations. All statements, other than statements of historical facts, included or incorporated by reference in this report that address activities, events or developments that we expect or anticipate may occur in the future, including such things as future capital expenditures, business strategy, competitive strengths, goals, growth of our business and operations, plans and references to future successes may be considered forward-looking statements. Also, when we use words such as “anticipate,” “believe,” “estimate,” “intend,” “plan,” “project,” “forecast,” “may,” “should,” “budget,” “goal,” “expect,” “probably” or similar expressions, we are making forward-looking statements. Many risks and uncertainties may impact the matters addressed in these forward-looking statements. Our forward-looking statements speak only as of the date made and we will not update forward-looking statements unless the securities laws require us to do so.

Some of the key factors which could cause our future financial results and performance to vary from those expected include:

- the loss or significant reduction in business from primary customers;
- our ability to realize the anticipated benefits of business acquisitions and to successfully integrate previous or future business acquisitions, including the integration of Flowchem;

- the loss of key suppliers, particularly for sulfuric, hydrofluoric and nitric acids, liquid nitrogen and olefin;
- our level of indebtedness, which could diminish our ability to raise additional capital to fund operations or limit our ability to react to changes in the economy or the chemicals industry;
- the implementation of our strategy with respect to the expansion of operations in Singapore taking longer or being more costly than currently believed, and the failure to achieve all the planned benefits of that effort;
- our ability to implement productivity improvements, cost reduction initiatives or facilities expansions;
- market developments affecting, and other changes in, the demand for our products and the entry of new competitors or the introduction of new competing products;
- volatility in oil and natural gas prices, which may impact customers' activity levels and spending for our products and services and which could impact goodwill impairment testing for our pipeline performance platform;
- increases in the price of energy, affecting our primary raw materials and active ingredients;
- the timing of planned capital expenditures;
- our ability to identify, develop or acquire, and market additional product lines and businesses necessary to implement our business strategy and our ability to finance such acquisitions and development;
- the condition of the capital markets generally, which will be affected by interest rates, foreign currency fluctuations and general economic conditions;
- cost and other effects of legal and administrative proceedings, settlements, investigations and claims, including environmental liabilities which may not be covered by indemnity or insurance;
- the effects of weather, earthquakes, other natural disasters and terrorist attacks;
- the impact of penta or any of our other products being or being proposed to be banned or restricted as a persistent organic pollutant or otherwise under the Stockholm Convention Treaty, REACH or other applicable laws or regulations, and the ability to obtain registration and re-registration of our products under applicable law;
- exposure to movements in foreign currency exchange rates as a result of the geographic diversity of our operations;
- the political and economic climate in the foreign or domestic jurisdictions in which we conduct business; and
- other United States or foreign regulatory or legislative developments which affect the demand for our products generally or increase the environmental compliance cost for our products or operations or impose liabilities on the manufacturers and distributors of such products.

The information contained in this report, including the information set forth under the heading "Risk Factors" contained herein and in our Annual Report on Form 10-K for the fiscal year ended July 31, 2017, identifies additional factors that could cause our results or performance to differ materially from those we express in our forward-looking statements. Although we believe that the assumptions underlying our forward-looking statements are reasonable, any of these assumptions and, therefore, the forward-looking statements based on these assumptions, could themselves prove to be inaccurate. In light of the significant uncertainties inherent in the forward-looking statements which are included in this report and the exhibits and other documents incorporated herein by reference, our inclusion of this information is not a representation by us or any other person that our objectives and plans will be achieved.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK

We are exposed to certain market risks in the ordinary course of our business, arising primarily from changes in interest rates and to a lesser extent foreign currency exchange rate fluctuations. Our exposure to interest rate risk and foreign currency risk is discussed in our Annual Report on Form 10-K for the fiscal year ended July 31, 2017. On August 11, 2017, we entered into interest rate swap agreements (the "Swap Transaction") to manage our exposure to fluctuations in variable interest rates. The Swap Transaction effectively exchanges the interest rate on 45% of the debt projected to be outstanding under the Credit Agreement from (i) variable LIBOR plus margin to (ii) a fixed rate of 1.925% per annum plus margin. The Swap Transaction has an effective date of August 31, 2017 and a termination date of June 15, 2024.

ITEM 4. CONTROLS AND PROCEDURES

The term "disclosure controls and procedures" is defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934. This term refers to the controls and procedures of a company that are designed to provide reasonable assurance that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed,

summarized and reported within the time periods specified by the Securities and Exchange Commission. Our management, including our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures as of the end of the period covered by this report. Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures were effective as of the end of the period covered by this report.

There were no changes to our internal control over financial reporting during the quarterly period covered by this Report on Form 10-Q that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II — OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

The information set forth in Note 15 to the condensed consolidated financial statements is incorporated herein by reference.

ITEM 1A. RISK FACTORS

There have been no material changes to the risk factors contained in our Annual Report on Form 10-K for the fiscal year ended July 31, 2017, as filed with the SEC.

ITEM 6. EXHIBITS

The financial statements are filed as part of this report in Part 1, Item 1. The following documents are filed as exhibits. Documents marked with an asterisk (*) are management contracts or compensatory plans, and portions of documents marked with a dagger (†) have been granted confidential treatment.

[10.1](#) [First Amendment to Credit Agreement, dated as of December 19, 2017, by and among KMG Chemicals, Inc. and the other Borrower Parties referred to therein, as Borrowers, and KeyBank National Association, as Administrative Agent, filed as Exhibit 10.1 to the Company's report on Form 8-K filed on December 19, 2017, and incorporated herein by reference.](#)

[10.2*](#) [Amendment No. 1 to the 2016 Long Term Incentive Plan of the Company.](#)

[31.1](#) [Certificate under Section 302 of the Sarbanes-Oxley Act of 2002 of the Chief Executive Officer.](#)

[31.2](#) [Certificate under Section 302 of the Sarbanes-Oxley Act of 2002 of the Chief Financial Officer.](#)

[32.1](#) [Certificate under Section 906 of the Sarbanes-Oxley Act of 2002 of the Chief Executive Officer.](#)

[32.2](#) [Certificate under Section 906 of the Sarbanes-Oxley Act of 2002 of the Chief Financial Officer.](#)

101.INS XBRL Instance Document

101.SCH XBRL Schema Document

101.CAL XBRL Calculation Linkbase Document

101.DEF XBRL Definition Linkbase Document

101.LAB XBRL Label Linkbase Document

101.PRE XBRL Presentation Linkbase Document

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Company has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

KMG Chemicals, Inc.

By: /s/ Christopher T. Fraser Date: March 9, 2018
Christopher T. Fraser
President and Chief Executive Officer

By: /s/ Marvin T. Green III Date: March 9, 2018
Marvin T. Green III
Chief Financial Officer

**Amendment No. 1 to the
KMG Chemicals, Inc.
2016 Long Term Incentive Plan**

The following constitutes Amendment No. 1 to the KMG Chemicals, Inc. 2016 Long Term Incentive Plan originally effective as of November 30, 2015 (the “*Plan*”) adopted in accordance with Section 8.7 of the Plan.

WHEREAS, on November 1, 2017, the Board of Directors of KMG Chemicals, Inc. (the “*Company*”) approved increasing the number of shares issuable under the Plan by 250,000 shares of common stock of the Company (the “*Share Increase*”);

WHEREAS, at the annual meeting of the shareholders of the Company on December 5, 2017, the shareholders approved the Share Increase;

NOW, THEREFORE:

Effective as of December 5, 2017, the first sentence of Section 1.4 of the Plan is hereby amended to read as follows:

“Subject to adjustment under Section 7.6, there shall be available for Incentive Awards that are granted wholly or partly in Common Stock (including rights or Stock Options that may be exercised for or settled in Common Stock) Seven Hundred Fifty Thousand (750,000) Shares of Common Stock.”

IN WITNESS WHEREOF, the Company has caused this Amendment No. 1 to the Plan to be duly executed in its name and on its behalf by its duly authorized officer, on this 23rd day of February, 2018.

ATTEST:

KMG Chemicals, Inc.

By: /s/ Roger C. Jackson

By: /s/ Christopher T. Fraser

Name: Roger C. Jackson

Name: Christopher T. Fraser

Title: Vice President & General Counsel

Title: President & Chief Executive Officer

CERTIFICATE

I, Christopher T. Fraser, certify that:

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

Date: March 9, 2018

/s/ Christopher T. Fraser

Christopher T. Fraser
President and Chief Executive Officer

CERTIFICATE

I, Marvin T. Green III, certify that:

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

Date: March 9, 2018

/s/ Marvin T. Green III
Marvin T. Green III
Chief Financial Officer

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

In connection with this report of KMG Chemicals, Inc. (the "Company") on Form 10-Q for the quarterly period ended January 31, 2018, I, Christopher T. Fraser, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

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

Date: March 9, 2018

/s/ Christopher T. Fraser

Christopher T. Fraser
Chief Executive Officer

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

In connection with this report of KMG Chemicals, Inc. (the "Company") on Form 10-Q for the quarterly period ended January 31, 2018, I, Marvin T. Green III, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

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

Date: March 9, 2018

/s/ Marvin T. Green III
Marvin T. Green III
Chief Financial Officer

