

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 June 28, 2020

or

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

Commission File Number 1-11430

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MINERALS TECHNOLOGIES INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

25-1190717

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

622 Third Avenue, New York, New York 10017-6707
(Address of principal executive offices, including zip code)

(212) 878-1800

(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol	Name of exchange on which registered
Common Stock, \$0.10 par value	MTX	New York Stock Exchange LLC

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, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large Accelerated Filer

Non-accelerated Filer

Emerging Growth Company

Accelerated Filer

Smaller Reporting Company

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

YES NO

As of July 20, 2020, there were 34,119,516 shares of common stock, par value of \$0.10 per share, of the registrant outstanding.

MINERALS TECHNOLOGIES INC.
INDEX TO FORM 10-Q

	<u>Page No.</u>
PART I. FINANCIAL INFORMATION	
Item 1. Financial Statements:	
Condensed Consolidated Statements of Income for the three-month and six-month periods ended June 28, 2020 and June 30, 2019 (Unaudited)	3
Condensed Consolidated Statements of Comprehensive Income for the three-month and six-month periods ended June 28, 2020 and June 30, 2019 (Unaudited)	4
Condensed Consolidated Balance Sheets as of June 28, 2020 (Unaudited) and December 31, 2019	5
Condensed Consolidated Statements of Cash Flows for the six-month periods ended June 28, 2020 and June 30, 2019 (Unaudited)	6
Condensed Consolidated Statements of Changes in Shareholders' Equity for the three-month and six-month periods ended June 28, 2020 and June 30, 2019 (Unaudited)	7
Notes to Condensed Consolidated Financial Statements (Unaudited)	8
Report of Independent Registered Public Accounting Firm	20
Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations	21
Item 3. Quantitative and Qualitative Disclosures about Market Risk	34
Item 4. Controls and Procedures	34
PART II. OTHER INFORMATION	
Item 1. Legal Proceedings	35
Item 1A. Risk Factors	36
Item 2. Unregistered Sales of Equity Securities and Use of Proceeds	38
Item 3. Default Upon Senior Securities	38
Item 4. Mine Safety Disclosures	38
Item 5. Other Information	38
Item 6. Exhibits	39
Signature	40

PART 1. FINANCIAL INFORMATION

ITEM 1. Financial Statements

MINERALS TECHNOLOGIES INC. AND SUBSIDIARY COMPANIES
CONDENSED CONSOLIDATED STATEMENTS OF INCOME
(Unaudited)

(millions of dollars, except per share data)	Three Months Ended		Six Months Ended	
	Jun. 28, 2020	Jun. 30, 2019	Jun. 28, 2020	Jun. 30, 2019
Product sales	\$ 339.5	\$ 438.0	\$ 731.8	\$ 855.4
Service revenue	17.7	25.8	42.9	46.1
Total net sales	357.2	463.8	774.7	901.5
Cost of goods sold	256.6	334.0	550.7	648.0
Cost of service revenue	11.7	17.8	28.3	31.8
Total cost of sales	268.3	351.8	579.0	679.8
Production margin	88.9	112.0	195.7	221.7
Marketing and administrative expenses	41.8	48.4	85.2	91.3
Research and development expenses	5.1	4.9	10.2	9.7
Litigation expenses	8.3	—	8.9	—
Restructuring and other items, net	6.5	13.2	6.5	13.2
Income from operations	27.2	45.5	84.9	107.5
Interest expense, net	(8.1)	(10.9)	(17.4)	(22.3)
Non-cash pension settlement charge	(4.3)	—	(4.3)	—
Other non-operating income (deductions), net	(0.2)	(2.4)	0.4	(3.8)
Total non-operating deductions, net	(12.6)	(13.3)	(21.3)	(26.1)
Income from operations before tax and equity in earnings	14.6	32.2	63.6	81.4
Provision for taxes on income	0.9	5.1	10.6	14.4
Equity in earnings of affiliates, net of tax	1.2	0.5	1.5	0.6
Consolidated net income	14.9	27.6	54.5	67.6
Less:				
Net income attributable to non-controlling interests	0.5	1.0	1.5	1.9
Net income attributable to Minerals Technologies Inc.	\$ 14.4	\$ 26.6	\$ 53.0	\$ 65.7
Earnings per share:				
Basic:				
Income from operations attributable to Minerals Technologies Inc.	\$ 0.42	\$ 0.76	\$ 1.55	\$ 1.87
Diluted:				
Income from operations attributable to Minerals Technologies Inc.	\$ 0.42	\$ 0.75	\$ 1.55	\$ 1.86
Cash dividends declared per common share	\$ 0.05	\$ 0.05	\$ 0.10	\$ 0.10
Shares used in computation of earnings per share:				
Basic	34.1	35.2	34.2	35.2
Diluted	34.1	35.3	34.3	35.3

See accompanying Notes to Condensed Consolidated Financial Statements.

MINERALS TECHNOLOGIES INC. AND SUBSIDIARY COMPANIES
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(Unaudited)

(millions of dollars)	Three Months Ended		Six Months Ended	
	Jun. 28, 2020	Jun. 30, 2019	Jun. 28, 2020	Jun. 30, 2019
Consolidated net income	\$ 14.9	\$ 27.6	\$ 54.5	\$ 67.6
Other comprehensive income (loss), net of tax:				
Foreign currency translation adjustments	7.9	(18.7)	(35.2)	(19.1)
Pension and postretirement plan adjustments	5.3	1.7	7.4	3.3
Unrealized gains (losses) on derivative instruments	(0.8)	(3.3)	1.0	(2.1)
Total other comprehensive income (loss), net of tax	12.4	(20.3)	(26.8)	(17.9)
Total comprehensive income including non-controlling interests	27.3	7.3	27.7	49.7
Comprehensive income attributable to non-controlling interests	(1.5)	(0.8)	(1.2)	(2.2)
Comprehensive income attributable to Minerals Technologies Inc.	\$ 25.8	\$ 6.5	\$ 26.5	\$ 47.5

See accompanying Notes to Condensed Consolidated Financial Statements.

MINERALS TECHNOLOGIES INC. AND SUBSIDIARY COMPANIES
CONDENSED CONSOLIDATED BALANCE SHEETS

(millions of dollars)		<u>Jun. 28, 2020*</u>	<u>Dec. 31, 2019 **</u>
	ASSETS		
Current assets:			
	Cash and cash equivalents	\$ 232.8	\$ 241.6
	Short-term investments	5.4	1.6
	Accounts receivable, net	336.8	376.2
	Inventories	269.8	253.3
	Prepaid expenses and other current assets	39.6	46.5
	Total current assets	<u>884.4</u>	<u>919.2</u>
	Property, plant and equipment	2,217.9	2,257.0
	Less accumulated depreciation and depletion	<u>(1,194.3)</u>	<u>(1,204.2)</u>
	Property, plant and equipment, net	1,023.6	1,052.8
	Goodwill	805.8	807.4
	Intangible assets	198.5	203.0
	Deferred income taxes	23.0	23.0
	Other assets and deferred charges	121.6	107.2
	Total assets	<u>\$ 3,056.9</u>	<u>\$ 3,112.6</u>
LIABILITIES AND SHAREHOLDERS' EQUITY			
Current liabilities:			
	Short-term debt	\$ 100.3	\$ 101.2
	Current maturities of long-term debt	149.2	2.1
	Accounts payable	139.4	163.4
	Other current liabilities	120.1	131.8
	Total current liabilities	<u>509.0</u>	<u>398.5</u>
	Long-term debt, net of unamortized discount and deferred financing costs	647.7	824.3
	Deferred income taxes	181.4	180.6
	Accrued pension and post-retirement benefits	145.9	148.9
	Other non-current liabilities	132.1	125.7
	Total liabilities	<u>1,616.1</u>	<u>1,678.0</u>
Shareholders' equity:			
	Common stock	4.9	4.9
	Additional paid-in capital	445.5	442.2
	Retained earnings	1,955.3	1,905.7
	Accumulated other comprehensive loss	(316.9)	(290.4)
	Less common stock held in treasury	<u>(682.3)</u>	<u>(659.7)</u>
	Total Minerals Technologies Inc. shareholders' equity	1,406.5	1,402.7
	Non-controlling interests	34.3	31.9
	Total shareholders' equity	<u>1,440.8</u>	<u>1,434.6</u>
	Total liabilities and shareholders' equity	<u>\$ 3,056.9</u>	<u>\$ 3,112.6</u>

* Unaudited

** Condensed from audited financial statements

See accompanying Notes to Condensed Consolidated Financial Statements.

MINERALS TECHNOLOGIES INC. AND SUBSIDIARY COMPANIES
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

(millions of dollars)	Six Months Ended	
	Jun. 28, 2020	Jun. 30, 2019
Operating Activities:		
Consolidated net income	\$ 54.5	\$ 67.6
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation, depletion and amortization	46.3	48.9
Non-cash pension settlement costs	4.3	—
Reduction of right of use asset	6.2	6.6
Asset impairment charge	6.0	7.5
Other non-cash items	1.3	4.5
Pension plan funding	(4.3)	(3.1)
Net changes in operating assets and liabilities	(20.2)	(33.7)
Net cash provided by operating activities	94.1	98.3
Investing Activities:		
Purchases of property, plant and equipment, net	(31.6)	(35.5)
Proceeds from sale of short-term investments	0.7	3.4
Purchases of short-term investments	(5.5)	(4.7)
Other investing activities	—	(0.8)
Net cash used in investing activities	(36.4)	(37.6)
Financing Activities:		
Repayment of long-term debt	(31.3)	(36.6)
Repayment of short-term debt	(0.9)	(1.1)
Purchase of common stock for treasury	(22.6)	(10.0)
Proceeds from issuance of stock under option plan	0.7	0.4
Excess tax benefits related to stock incentive programs	(2.1)	(1.9)
Dividends paid to non-controlling interests	(0.5)	(3.9)
Capital contribution from non-controlling interests	1.7	0.6
Cash dividends paid	(3.4)	(3.5)
Net cash used in financing activities	(58.4)	(56.0)
Effect of exchange rate changes on cash and cash equivalents	(8.1)	1.0
Net (decrease) increase in cash and cash equivalents	(8.8)	5.7
Cash and cash equivalents at beginning of period	241.6	208.8
Cash and cash equivalents at end of period	\$ 232.8	\$ 214.5
Supplemental disclosure of cash flow information:		
Interest paid	\$ 16.9	\$ 21.9
Income taxes paid	\$ 14.6	\$ 13.7

See accompanying Notes to Condensed Consolidated Financial Statements.

MINERALS TECHNOLOGIES INC. AND SUBSIDIARY COMPANIES
CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY
(Unaudited)

(millions of dollars)	Equity Attributable to Minerals Technologies Inc.						Total
	Common Stock	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Treasury Stock	Non-controlling Interests	
<i>Balance as of December 31, 2019</i>	\$ 4.9	\$ 442.2	\$ 1,905.7	\$ (290.4)	\$ (659.7)	\$ 31.9	\$ 1,434.6
Net income	—	—	38.6	—	—	1.0	39.6
Other comprehensive loss	—	—	—	(37.8)	—	(1.4)	(39.2)
Dividends declared	—	—	(1.7)	—	—	—	(1.7)
Capital contribution from non-controlling interests	—	—	—	—	—	0.7	0.7
Issuance of shares pursuant to employee stock compensation plans	—	0.5	—	—	—	—	0.5
Purchase of common stock for treasury	—	—	—	—	(22.6)	—	(22.6)
Stock-based compensation	—	0.1	—	—	—	—	0.1
<i>Balance as of March 29, 2020</i>	\$ 4.9	\$ 442.8	\$ 1,942.6	\$ (328.2)	\$ (682.3)	\$ 32.2	\$ 1,412.0
Net income	—	—	14.4	—	—	0.5	14.9
Other comprehensive income	—	—	—	11.3	—	1.1	12.4
Dividends declared	—	—	(1.7)	—	—	—	(1.7)
Dividends paid to non-controlling interests	—	—	—	—	—	(0.5)	(0.5)
Capital contribution from non-controlling interests	—	—	—	—	—	1.0	1.0
Issuance of shares pursuant to employee stock compensation plans	—	0.2	—	—	—	—	0.2
Stock-based compensation	—	2.5	—	—	—	—	2.5
<i>Balance as of June 28, 2020</i>	\$ 4.9	\$ 445.5	\$ 1,955.3	\$ (316.9)	\$ (682.3)	\$ 34.3	\$ 1,440.8

(millions of dollars)	Equity Attributable to Minerals Technologies Inc.						Total
	Common Stock	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Treasury Stock	Non-controlling Interests	
<i>Balance as of December 31, 2018</i>	\$ 4.9	\$ 431.9	\$ 1,769.1	\$ (233.7)	\$ (618.7)	\$ 31.8	\$ 1,385.3
Net income	—	—	39.1	—	—	0.9	40.0
Other comprehensive income	—	—	—	1.9	—	0.5	2.4
Dividends declared	—	—	(1.7)	—	—	—	(1.7)
Dividends paid to non-controlling interests	—	—	—	—	—	(0.1)	(0.1)
Cumulative effect of accounting change	—	—	10.9	(10.9)	—	—	—
Capital contribution from non-controlling interests	—	—	—	—	—	0.8	0.8
Issuance of shares pursuant to employee stock compensation plans	—	0.1	—	—	—	—	0.1
Stock based compensation	—	0.6	—	—	—	—	0.6
<i>Balance as of March 31, 2019</i>	\$ 4.9	\$ 432.6	\$ 1,817.4	\$ (242.7)	\$ (618.7)	\$ 33.9	\$ 1,427.4
Net income	—	—	26.6	—	—	1.0	27.6
Other comprehensive loss	—	—	—	(20.1)	—	(0.2)	(20.3)
Dividends declared	—	—	(1.8)	—	—	—	(1.8)
Dividends paid to non-controlling interests	—	—	—	—	—	(3.8)	(3.8)
Capital contribution from non-controlling interests	—	—	—	—	—	(0.2)	(0.2)
Issuance of shares pursuant to employee stock compensation plans	—	0.2	—	—	—	—	0.2
Stock based compensation	—	2.5	—	—	—	—	2.5
Purchase of common stock for treasury	—	—	—	—	(10.0)	—	(10.0)
<i>Balance as of June 30, 2019</i>	\$ 4.9	\$ 435.3	\$ 1,842.2	\$ (262.8)	\$ (628.7)	\$ 30.7	\$ 1,421.6

See accompanying Notes to Consolidated Financial Statements.

MINERALS TECHNOLOGIES INC. AND SUBSIDIARY COMPANIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Note 1. Basis of Presentation and Summary of Significant Accounting Policies

The accompanying unaudited condensed consolidated financial statements have been prepared by management of Minerals Technologies Inc. (the "Company", "MTI", "we", or "us") in accordance with the rules and regulations of the United States Securities and Exchange Commission. Accordingly, certain information and footnote disclosures normally included in financial statements prepared in accordance with U.S. generally accepted accounting principles have been condensed or omitted. Therefore, these financial statements should be read in conjunction with the consolidated financial statements and notes thereto contained in the Company's Annual Report on Form 10-K for the year ended December 31, 2019. In the opinion of management, all adjustments, consisting solely of normal recurring adjustments necessary for a fair presentation of the financial information for the periods indicated, have been included. The results for the three-month and six-month periods ended June 28, 2020 are not necessarily indicative of the results that may be expected for the year ending December 31, 2020.

Company Operations

The Company is a resource- and technology-based company that develops, produces and markets worldwide a broad range of specialty mineral, mineral-based and synthetic mineral products and supporting systems and services.

The Company has four reportable segments: Performance Materials, Specialty Minerals, Refractories and Energy Services.

- The Performance Materials segment is a leading global supplier of bentonite and bentonite-related products and leonardite. This segment also provides products for non-residential construction, environmental and infrastructure projects worldwide, serving customers engaged in a broad range of construction projects.
- The Specialty Minerals segment produces and sells the synthetic mineral product precipitated calcium carbonate ("PCC") and processed mineral product quicklime ("lime"), and mines mineral ores then processes and sells natural mineral products, primarily limestone and talc.
- The Refractories segment produces and markets monolithic and shaped refractory materials and specialty products, services and application and measurement equipment, and calcium metal and metallurgical wire products.
- The Energy Services segment provides services to improve the production, costs, compliance, and environmental impact of activities performed in the oil and gas industry. This segment offers a range of patented and unpatented technologies, products and services to the upstream and downstream oil and gas sector throughout the world.

Use of Estimates

The Company employs accounting policies that are in accordance with U.S. generally accepted accounting principles and require management to make estimates and assumptions relating to the reporting of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenue and expenses during the reported period. Significant estimates include those related to revenue recognition, valuation of long-lived assets, goodwill and other intangible assets, income taxes, including valuation allowances, and pension plan assumptions. Actual results could differ from those estimates.

Recently Adopted Accounting Standards

Measurement of Credit Losses on Financial Instruments

In June 2016, the FASB issued ASU 2016-13, "Measurement of Credit Losses on Financial Instruments", which replaces existing incurred loss impairment guidance and establishes a single allowance framework for financial assets carried at amortized cost. The Company adopted this guidance on January 1, 2020 using a modified retrospective transition method. The Company did not record a cumulative-effect adjustment upon adoption of this standard. Adoption of this standard did not have a material impact on the Company's consolidated financial statements.

MINERALS TECHNOLOGIES INC. AND SUBSIDIARY COMPANIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Recently Issued Accounting Standards

Changes to accounting principles generally accepted in the United States of America (U.S. GAAP) are established by the Financial Accounting Standards Board (FASB) in the form of accounting standards updates (ASUs) to the FASB's Accounting Standards Codification. The Company considers the applicability and impact of all ASUs. ASUs not listed below were assessed and determined to be either not applicable or are expected to have minimal impact on our consolidated financial position and results of operations.

Investments - Equity Securities, Investments - Equity Method and Joint Ventures, and Derivatives and Hedging

In January 2020, the FASB issued ASU 2020-01, "Investments - Equity Securities, Investments - Equity Method and Joint Ventures, and Derivatives and Hedging", which addresses the accounting for the transition into and out of the equity method and measuring certain purchased options and forward contracts to acquire investments. The standard is effective for interim and annual periods beginning on or after December 15, 2020. The adoption of this standard is not expected to have a material impact on the Company's financial statements.

Note 2. COVID-19

In March 2020, the World Health Organization categorized the novel coronavirus (COVID-19) as a pandemic. Around the world, the Company has been closely adhering to all government regulations as they are issued. Applicable governmental directives across the United States and other global locations have typically permitted the continued operation of essential critical infrastructure sectors. As the Company supplies products and services to many essential industries, including critical manufacturing and energy sectors, all of our operations have qualified as essential businesses. Accordingly, all of the Company's production facilities are currently operational. In a few locations, however, sites were temporarily impacted by the pandemic.

The recent economic environment related to the rapidly evolving global pandemic, which has slowed business activity in several key end-markets, negatively impacted the Company's second quarter results and will continue to impact our results in the third quarter. The extent to which our operations will continue to be impacted by the pandemic will depend largely on future developments, including the continued severity of the pandemic and future actions by government authorities to contain it or treat its impact. These conditions are highly uncertain and cannot be accurately predicted. The Company will continue to actively monitor and respond to the COVID-19 pandemic.

As we cannot predict the duration or scope of the COVID-19 pandemic and its impact on our customers and suppliers, the negative financial impact to our future results cannot be reasonably estimated, but could be material. We are actively managing the business to maintain cash flow and we have significant liquidity. We believe that these factors will allow us to meet our anticipated funding requirements.

On March 27, 2020, the U.S. government enacted the Coronavirus Aid, Relief, and Economic Security Act ("CARES Act") which includes modifications to the limitation on business interest expense and net operating loss provisions, and provides a payment delay of employer payroll taxes during 2020 after the date of enactment with 50% due by December 31, 2021 and the remaining 50% due by December 31, 2022. The CARES Act is not expected to have a material impact on the Company's consolidated financial statements.

MINERALS TECHNOLOGIES INC. AND SUBSIDIARY COMPANIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Note 3. Revenue from Contracts with Customers

On a regular basis, the Company reviews its product line groupings to generate greater alignment within each product line. Accordingly, in the third quarter of 2019, the Company combined its Basic Minerals product line with its Household, Personal Care & Specialty Products product line, both within our Performance Materials segment. Prior year amounts were reclassified to conform to current presentation.

The following table disaggregates our revenue by major source (product line) for the three and six-month periods ended June 28, 2020 and June 30, 2019 :

(millions of dollars)	Three Months Ended		Six Months Ended	
	Jun. 28, 2020	Jun. 30, 2019	Jun. 28, 2020	Jun. 30, 2019
Net Sales				
Metalcasting	\$ 52.8	\$ 75.8	\$ 114.5	\$ 149.0
Household, Personal Care & Specialty Products	87.9	91.5	184.1	186.3
Environmental Products	19.9	29.0	31.4	44.9
Building Materials	13.2	19.1	30.0	34.4
Performance Materials	173.8	215.4	360.0	414.6
Paper PCC	65.5	90.2	150.6	181.7
Specialty PCC	14.9	17.3	32.4	35.4
Ground Calcium Carbonate	20.6	24.8	43.2	47.1
Talc	8.8	12.8	20.7	25.3
Specialty Minerals	109.8	145.1	246.9	289.5
Refractory Products	47.1	61.0	102.9	123.0
Metallurgical Products	8.8	16.5	22.0	28.3
Refractories	55.9	77.5	124.9	151.3
Energy Services	17.7	25.8	42.9	46.1
Total	\$ 357.2	\$ 463.8	\$ 774.7	\$ 901.5

Note 4. Earnings per Share (EPS)

Basic earnings per share are based upon the weighted average number of common shares outstanding during the period. Diluted earnings per share are based upon the weighted average number of common shares outstanding during the period assuming the issuance of common shares for all potentially dilutive common shares outstanding.

The following table sets forth the computation of basic and diluted earnings per share:

(in millions, except per share data)	Three Months Ended		Six Months Ended	
	Jun. 28, 2020	Jun. 30, 2019	Jun. 28, 2020	Jun. 30, 2019
Net income attributable to Minerals Technologies Inc.	\$ 14.4	\$ 26.6	\$ 53.0	\$ 65.7
Weighted average shares outstanding	34.1	35.2	34.2	35.2
Dilutive effect of stock options and stock units	—	0.1	0.1	0.1
Weighted average shares outstanding, adjusted	34.1	35.3	34.3	35.3
Basic earnings per share attributable to Minerals Technologies Inc.	\$ 0.42	\$ 0.76	\$ 1.55	\$ 1.87
Diluted earnings per share attributable to Minerals Technologies Inc.	\$ 0.42	\$ 0.75	\$ 1.55	\$ 1.86

MINERALS TECHNOLOGIES INC. AND SUBSIDIARY COMPANIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Options to purchase 1,448,699 shares and 470,304 shares of common stock for the three-month and six-month periods ended June 28, 2020 and June 30, 2019, respectively, were not included in the computation of diluted earnings per share because they were anti-dilutive, as the exercise prices of the options were greater than the average market price of the common shares.

Note 5. Restructuring and Other Items, net

During the second quarter of 2019, the Company initiated a restructuring and cost savings program to better align our costs and organizational structure with the current market environment. The Company recorded a \$7.5 million non-cash impairment of assets charge related to facilities no longer operating and underutilization of certain equipment, and \$5.7 million in other restructuring costs in the second quarter of 2019.

In June 2020, Verso Papers announced they would be idling two of their paper mills indefinitely. As a result, the Company recorded a non-cash write-down of assets charge of \$6.0 million and \$0.3 million in severance related costs for its Paper PCC satellite facilities at these mills.

The following table outlines the amount of restructuring charges recorded within the Consolidated Statements of Income and the segments they relate to for the three and six-months ending June 28, 2020 and June 30, 2019:

(millions of dollars)	<u>Jun. 28, 2020</u>	<u>Jun. 30, 2019</u>
<i>Asset Write-Downs</i>		
Performance Materials	\$ —	\$ 4.2
Specialty Minerals	6.0	1.6
Energy Services	—	1.7
Total charge for asset write-down	<u>\$ 6.0</u>	<u>\$ 7.5</u>
<i>Severance and other related costs</i>		
Performance Materials	\$ —	\$ 2.8
Specialty Minerals	0.3	0.9
Refractories	—	0.8
Energy Services	—	0.1
Corporate	—	1.1
Total severance and other related costs	<u>\$ 0.3</u>	<u>\$ 5.7</u>
<i>Other</i>		
Corporate	\$ 0.2	\$ —
Total restructuring and other items, net	<u><u>\$ 6.5</u></u>	<u><u>\$ 13.2</u></u>

At June 28, 2020, the Company had \$4.6 million included within accrued liabilities in the Condensed Consolidated Balance Sheet for cash expenditures needed to satisfy remaining obligations under workforce reduction initiatives. The Company expects to pay these amounts by the end of 2020.

The following table is a reconciliation of our restructuring liability balance as of June 28, 2020:

(millions of dollars)	
Restructuring liability, December 31, 2019	\$ 5.0
Additional provision	0.3
Cash payments	(0.7)
Restructuring liability, June 28, 2020	<u><u>\$ 4.6</u></u>

Note 6. Income Taxes

Provision for taxes was \$0.9 million and \$10.6 million during the three and six-month periods ended June 28, 2020, respectively. The effective tax rate was 6.2%, as compared with 15.8% in the prior year. The lower effective tax rate was primarily due to restructuring and other charges and to the mix of earnings.

MINERALS TECHNOLOGIES INC. AND SUBSIDIARY COMPANIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

As of June 28, 2020, the Company had approximately \$8.2 million of total unrecognized income tax benefits. Included in this amount were a total of \$5.5 million of unrecognized income tax benefits that, if recognized, would affect the Company's effective tax rate. While it is expected that the amount of unrecognized tax benefits will change in the next 12 months, the Company does not expect the change to have a significant impact on the results of operations or the financial position of the Company.

The Company's accounting policy is to recognize interest and penalties accrued relating to unrecognized income tax benefits as part of its provision for income taxes. The Company had a net increase of approximately \$0.1 million and \$0.2 million during the three and six-months ended June 28, 2020 and an accrued balance of \$2.2 million of interest and penalties as of June 28, 2020.

The Company operates in multiple taxing jurisdictions, both within and outside the U.S. In certain situations, a taxing authority may challenge positions that the Company has adopted in its income tax filings. The Company, with a few exceptions (none of which are material), is no longer subject to income tax examinations by tax authorities for years prior to 2010.

Note 7. Inventories

The following is a summary of inventories by major category:

(millions of dollars)	Jun. 28, 2020	Dec. 31, 2019
Raw materials	\$ 116.1	\$ 105.9
Work-in-process	9.7	7.2
Finished goods	98.4	95.5
Packaging and supplies	45.6	44.7
Total inventories	<u>\$ 269.8</u>	<u>\$ 253.3</u>

Note 8. Goodwill and Other Intangible Assets

Goodwill and other intangible assets with indefinite lives are not amortized, but instead are assessed for impairment, at least annually. The carrying amount of goodwill was \$805.8 million and \$807.4 million as of June 28, 2020 and December 31, 2019, respectively. The change in goodwill from December 31, 2019 to June 28, 2020 is attributable to the effects of foreign exchange.

Intangible assets subject to amortization as of June 28, 2020 and December 31, 2019 were as follows:

(millions of dollars)	Weighted Average Useful Life (Years)	June 28, 2020		December 31, 2019	
		Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
Tradenames	35	\$ 203.9	\$ 35.4	\$ 203.9	\$ 32.5
Technology	13	18.8	8.8	18.8	8.0
Patents and trademarks	19	6.4	6.0	6.4	5.9
Customer relationships	22	24.8	5.2	24.7	4.4
	<u>32</u>	<u>\$ 253.9</u>	<u>\$ 55.4</u>	<u>\$ 253.8</u>	<u>\$ 50.8</u>

The weighted average amortization period for acquired intangible assets subject to amortization is approximately 32 years. Estimated amortization expense is \$4.8 million for the remainder of 2020, \$36.4 million for 2021–2024 and \$157.3 million thereafter.

Note 9. Derivative Financial Instruments

As a multinational corporation with operations throughout the world, the Company is exposed to certain market risks. The Company uses a variety of practices to manage these market risks, including, when considered appropriate, derivative financial instruments. The Company's objective is to offset gains and losses resulting from interest rates and foreign currency exposures with gains and losses on the derivative contracts used to hedge them. The Company uses derivative financial instruments only for risk management and not for trading or speculative purposes.

MINERALS TECHNOLOGIES INC. AND SUBSIDIARY COMPANIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

By using derivative financial instruments to hedge exposures to changes in interest rates and foreign currencies, the Company exposes itself to credit risk and market risk. Credit risk is the risk that the counterparty will fail to perform under the terms of the derivative contract. When the fair value of a derivative contract is positive, the counterparty owes the Company, which creates credit risk for the Company. When the fair value of a derivative contract is negative, the Company owes the counterparty, and therefore, it does not face any credit risk. The Company minimizes the credit risk in derivative instruments by entering into transactions with major financial institutions.

Market risk is the adverse effect on the value of a financial instrument that results from a change in interest rates, currency exchange rates, or commodity prices. The market risk associated with interest rate and forward exchange contracts is managed by establishing and monitoring parameters that limit the types and degree of market risk that may be undertaken.

Cash Flow Hedges

For derivative instruments that are designated and qualify as cash flow hedges, the Company records the effective portion of the gain or loss in accumulated other comprehensive income (loss) as a separate component of shareholders' equity. The Company subsequently reclassifies the effective portion of gain or loss into earnings in the period during which the hedged transaction is recognized in earnings.

The Company utilizes interest rate swaps to limit exposure to market fluctuations on floating-rate debt. In the second quarter of 2018, the Company entered into a floating to fixed interest rate swap for a notional amount of \$150 million. The fair value of this swap is a liability of \$9.2 million at June 28, 2020 and is recorded in other non-current liabilities on the Condensed Consolidated Balance Sheet. In addition, in the second quarter of 2016, the Company entered into a floating to fixed interest rate swap with an initial aggregate notional amount of \$300 million. The notional amount was \$57 million at June 28, 2020. The fair value of this swap is a liability of \$0.2 million at June 28, 2020 and is recorded in other current liabilities on the Condensed Consolidated Balance Sheet. These interest rate swaps are designated as cash flow hedges. As a result, the gains and losses associated with these interest rate swaps are recorded in accumulated other comprehensive income (loss).

Net Investment Hedges

For derivative instruments that are designated and qualify as net investment hedges, the Company records the effective portion of the gain or loss in accumulated other comprehensive income (loss) as a separate component of shareholders' equity.

To protect the value of our investments in our foreign operations against adverse changes in foreign currency exchange rates, the Company from time to time hedges a portion of our net investment in one or more of our foreign subsidiaries. During the second quarter of 2018, the Company entered into a cross currency rate swap with a total notional value of \$150 million to exchange monthly fixed-rate interest payments in U.S. dollars for monthly fixed-rate interest rate payments in Euros. This contract matures in May 2023 and requires the exchange of Euros and U.S. dollar principal payments upon maturity. The fair value of this swap is an asset of \$15.1 million at June 28, 2020 and is recorded in other assets and deferred charges on the Condensed Consolidated Balance Sheet. Changes in the fair value of this financial instrument are recognized in accumulated other comprehensive income (loss) to offset the change in the carrying amount of the net investment being hedged. Amounts are reclassified out of accumulated other comprehensive income (loss) into earnings when the hedged net investment is either sold or substantially liquidated.

Assets and liabilities measured at fair value are based on one or more of three valuation techniques. The three valuation techniques are as follows:

- Market approach - prices and other relevant information generated by market transactions involving identical or comparable assets or liabilities.
- Cost approach - amount that would be required to replace the service capacity of an asset or replacement cost.
- Income approach - techniques to convert future amounts to a single present amount based on market expectations, including present value techniques, option-pricing and other models.

The Company primarily applies the income approach for interest rate derivatives for recurring fair value measurements and attempts to utilize valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs.

The fair value of our interest rate and cross currency rate swap contracts are determined based on inputs that are readily available in public markets or can be derived from information available in publicly quoted markets and are categorized as Level 2.

MINERALS TECHNOLOGIES INC. AND SUBSIDIARY COMPANIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Note 10. Long-Term Debt and Commitments

The following is a summary of long-term debt:

(millions of dollars)	<u>Jun. 28, 2020</u>	<u>December 31, 2019</u>
Term Loan Facility-Variable Tranche due February 14, 2024, net of unamortized discount and deferred financing costs of \$14.2 million and \$16.0 million	\$ 643.7	\$ 642.0
Term Loan Facility- Fixed Tranche due May 9, 2021, net of unamortized discount and deferred financing costs of \$0.1 million and \$0.2 million	147.9	177.8
Netherlands Term Loan due 2020	0.3	1.1
Netherlands Term Loan due 2022	0.7	1.0
Japan Loan Facilities	4.3	4.5
Total	<u>796.9</u>	<u>826.4</u>
Less: Current maturities	<u>149.2</u>	<u>2.1</u>
Total long-term debt	<u>\$ 647.7</u>	<u>\$ 824.3</u>

On May 9, 2014, in connection with the acquisition of AMCOL International Corporation (“AMCOL”), the Company entered into a credit agreement providing for a \$1.560 billion senior secured term loan facility (the “Term Facility”) and a \$200 million senior secured revolving credit facility.

On June 23, 2015, the Company entered into an amendment (the “First Amendment”) to the credit agreement to reprice the \$1.378 billion then outstanding on the Term Facility. As amended, the Term Facility had a \$1.078 billion floating rate tranche and a \$300 million fixed rate tranche. On February 14, 2017, the Company entered into an amendment (the “Second Amendment”) to the credit agreement to reprice the \$788 million floating rate tranche then outstanding, which extended the maturity and lowered the interest costs by 75 basis points. On April 18, 2018, the Company entered into an amendment (the “Third Amendment”) to the credit agreement to refinance its then existing senior secured revolving credit facility. In connection with the Third Amendment, the existing senior secured revolving credit facility was replaced with a new revolving credit facility with \$300 million of aggregate commitments (the “Revolving Credit Facility” and, together with the Term Facility, the “Senior Secured Credit Facilities”). Following the amendments, the loans outstanding under the floating rate tranche of the Term Facility are scheduled to mature on February 14, 2024, the loans outstanding under the fixed rate tranche of the Term Facility are scheduled to mature on May 9, 2021 and the loans outstanding (if any) and commitments under the Revolving Facility will mature and terminate, as the case may be, on April 18, 2023. Loans under the floating rate tranche of the Term Facility bear interest at a rate equal to an adjusted LIBOR rate (subject to a floor of 0.75%) plus an applicable margin equal to 2.25% per annum. Loans under the fixed rate tranche of the Term Facility bear interest at a rate of 4.75%. Loans under the Revolving Facility bear interest at a rate equal to an adjusted LIBOR rate plus an applicable margin equal to 1.625% per annum. Such rates are subject to decrease by up to 25 basis points in the event that, and for so long as, the Company’s net leverage ratio (as defined in the credit agreement) is less than certain thresholds. The floating rate tranche of the Term Facility was issued at par and the fixed rate tranche of the Term Facility was issued at a 0.25% discount in connection with the First Amendment. The variable rate tranche of the Term Facility was issued at a 0.25% discount in connection with the Second Amendment. The variable rate tranche has a 1% required amortization per year. The Company will pay certain fees under the credit agreement, including customary annual administration fees. The obligations of the Company under the Senior Secured Credit Facilities are unconditionally guaranteed jointly and severally by, subject to certain exceptions, all material domestic subsidiaries of the Company (the “Guarantors”) and secured, subject to certain exceptions, by a security interest in substantially all of the assets of the Company and the Guarantors.

The credit agreement contains certain customary affirmative and negative covenants that limit or restrict the ability of the Company and its restricted subsidiaries to enter into certain transactions or take certain actions. In addition, the credit agreement contains a financial covenant that requires the Company, if on the last day of any fiscal quarter loans or letters of credit were outstanding under the Revolving Facility (excluding up to \$25 million of letters of credit), to maintain a maximum net leverage ratio (as defined in the credit agreement) of 3.50 to 1.00 for the four fiscal quarters preceding such day. In connection with the Sivomatic acquisition, the Company incurred \$113 million of short-term debt under the Revolving Facility. As of June 28, 2020, there were \$100 million in outstanding loans and \$9.4 million in letters of credit outstanding under the Revolving Facility. The Company is in compliance with all the covenants associated with the Revolving Facility as of the end of the period covered by this report.

MINERALS TECHNOLOGIES INC. AND SUBSIDIARY COMPANIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

As part of the Sivomatic acquisition, the Company assumed \$10.7 million in long-term debt, recorded at fair value, consisting of two term loans, one of which matures in 2020 and the other of which matures in 2022. These loans carry an interest rate of Euribor plus 2.0% and have quarterly repayments. During the first half of 2020, the Company repaid \$1.0 million on these loans.

The Company has a committed loan facility in Japan. As of June 28, 2020, \$4.3 million was outstanding under this loan facility. Principal will be repaid in accordance with the payment schedule ending in 2021. The Company repaid \$0.3 million on this facility during the first half of 2020.

As of June 28, 2020, the Company had \$41.8 million in uncommitted short-term bank credit lines, of which approximately \$0.3 million was in use.

Note 11. Benefit Plans

The Company and its subsidiaries have pension plans covering the majority of eligible employees on a contributory or non-contributory basis. The Company also provides postretirement health care and life insurance benefits for the majority of its U.S. retired employees. Disclosures for the U.S. plans have been combined with those outside of the U.S. as the international plans do not have significantly different assumptions, and together represent less than 21% of our total benefit obligation.

Components of Net Periodic Benefit Cost

(millions of dollars)	Pension Benefits			
	Three Months Ended		Six Months Ended	
	Jun. 28, 2020	Jun. 30, 2019	Jun. 28, 2020	Jun. 30, 2019
Service cost	\$ 2.0	\$ 1.8	\$ 3.9	\$ 3.6
Interest cost	2.9	3.6	5.9	7.1
Expected return on plan assets	(5.2)	(4.6)	(10.4)	(9.2)
Amortization:				
Prior service cost	0.1	0.1	0.2	0.2
Recognized net actuarial loss	2.8	2.3	5.6	4.6
Settlement loss	4.3	—	4.3	—
Net periodic benefit cost	<u>\$ 6.9</u>	<u>\$ 3.2</u>	<u>\$ 9.5</u>	<u>\$ 6.3</u>

(millions of dollars)	Other Benefits			
	Three Months Ended		Six Months Ended	
	Jun. 28, 2020	Jun. 30, 2019	Jun. 28, 2020	Jun. 30, 2019
Service cost	\$ —	\$ 0.1	\$ 0.1	\$ 0.1
Interest cost	0.1	—	0.1	0.1
Amortization:				
Recognized net actuarial (gain) loss	(0.2)	(0.2)	(0.4)	(0.4)
Net periodic benefit cost	<u>\$ (0.1)</u>	<u>\$ (0.1)</u>	<u>\$ (0.2)</u>	<u>\$ (0.2)</u>

Amortization amounts of prior service costs and recognized net actuarial losses are recorded, net of tax, as increases to accumulated other comprehensive income.

The Company expects to contribute approximately \$9.0 million to its pension plans and \$0.3 million to its other postretirement benefit plans in 2020. As of June 28, 2020, \$4.3 million has been contributed to the pension plans and approximately \$0.1 million has been contributed to the other postretirement benefit plans.

MINERALS TECHNOLOGIES INC. AND SUBSIDIARY COMPANIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Note 12. Comprehensive Income

The following table summarizes the amounts reclassified out of accumulated other comprehensive loss attributable to the Company:

(millions of dollars)	Three Months Ended		Six Months Ended	
	Jun. 28, 2020	Jun. 30, 2019	Jun. 28, 2020	Jun. 30, 2019
Amortization of pension items:				
Pre-tax amount	\$ 7.0	\$ 2.2	\$ 9.7	\$ 4.4
Tax	(1.7)	(0.5)	(2.3)	(1.1)
Net of tax	\$ 5.3	\$ 1.7	\$ 7.4	\$ 3.3

The pre-tax amounts in the table above are included within the components of net periodic pension benefit cost (see Note 11 to the Condensed Consolidated Financial Statements) and the tax amounts are included within the provision for taxes on income line within the Condensed Consolidated Statements of Income.

The major components of accumulated other comprehensive loss, net of related tax, attributable to MTI are as follows:

(millions of dollars)	Foreign Currency Translation Adjustment	Unrecognized Pension Costs	Net Gain (Loss) on Derivative Instruments	Total
	Balance as of December 31, 2019	\$ (200.2)	\$ (96.1)	\$ 5.9
Other comprehensive income (loss) before reclassifications	(34.9)	—	1.1	(33.8)
Amounts reclassified from AOCI	—	7.3	—	7.3
Net current period other comprehensive income (loss)	(34.9)	7.3	1.1	(26.5)
Balance as of June 28, 2020	\$ (235.1)	\$ (88.8)	\$ 7.0	\$ (316.9)

Note 13. Accounting for Asset Retirement Obligations

The Company records asset retirement obligations for situations in which the Company will be required to incur costs to retire tangible long-lived assets. The fair value of the liability for an asset retirement obligation is recognized in the period in which it is incurred if a reasonable estimate of fair value can be made.

The Company also records liabilities related to land reclamation as a part of asset retirement obligations. The Company mines various minerals using a surface mining process that requires the removal of overburden. In certain areas and under various governmental regulations, the Company is obligated to restore the land comprising each mining site to its original condition at the completion of the mining activity. The obligation is adjusted to reflect the passage of time, mining activities, and changes in estimated future cash outflows.

The asset retirement costs are capitalized as part of the carrying amount of the associated asset. The current portion of the liability of approximately \$0.4 million is included in other current liabilities and the long-term portion of the liability of approximately \$23.2 million is included in other non-current liabilities in the Condensed Consolidated Balance Sheet as of June 28, 2020.

Note 14. Contingencies

The Company is party to a number of lawsuits arising in the normal course of our business.

Certain of the Company's subsidiaries are among numerous defendants in a number of cases seeking damages for exposure to silica or to asbestos containing materials. As of June 28, 2020, the Company currently has three pending silica cases and 176 pending asbestos cases. In total, 1,493 silica cases and 83 asbestos cases were dismissed as of the end of the first quarter, not including any lawsuits against AMCOL or American Colloid Company dismissed prior to our acquisition of AMCOL. Forty-six new asbestos cases were filed in the second quarter of 2020. Five asbestos cases and no silica cases were dismissed during the second quarter of 2020. Most of these claims do not provide adequate information to assess their merits, the likelihood that the Company will be found liable, or the magnitude of such liability, if any. Additional claims of this nature may be made against the Company or its subsidiaries. At this time management anticipates that the amount of the Company's liability, if any, and the cost of defending such claims, will not have a material effect on its financial position or results of operations.

MINERALS TECHNOLOGIES INC. AND SUBSIDIARY COMPANIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

The Company has settled only one silica lawsuit, for a nominal amount, and no asbestos lawsuits to date (not including any that may have been settled by AMCOL prior to completion of the acquisition). We are unable to state an amount or range of amounts claimed in any of the lawsuits because state court pleading practices do not require identifying the amount of the claimed damage. The aggregate cost to the Company for the legal defense of these cases since inception continues to be insignificant. The majority of the costs of defense for these cases, excluding cases against AMCOL or American Colloid, are reimbursed by Pfizer Inc. pursuant to the terms of certain agreements entered into in connection with the Company's initial public offering in 1992. The Company is entitled to indemnification, pursuant to agreement, for sales prior to the initial public offering. Of the 176 pending asbestos cases as of the end of the second quarter, 136 of the non-AMCOL cases are subject to indemnification, in whole or in part, because the plaintiffs claim liability based on sales of products that occurred either entirely before the initial public offering, or both before and after the initial public offering. Thirty-three of the thirty-eight remaining non-AMCOL cases as of the end of the second quarter are subject to indemnity in part until dates of exposure, which were not alleged in the complaint, can be ascertained in discovery. In the five remaining non-AMCOL cases, exposure is alleged to have been after the Company's initial public offering in 1992. The remaining two cases involve AMCOL only, so no Pfizer indemnity is available. Our experience has been that the Company is not liable to plaintiffs in any of these lawsuits and the Company does not expect to pay any settlements or jury verdicts in these lawsuits.

The Company is also the respondent in an arbitration requested by the Plan Administrator for the Bankruptcy Estate of Novinda Corp. ("Novinda"), a start-up company which declared bankruptcy in April 2016 and with which the Company had several relationships, including an equity and debt interest and a product supply relationship. On July 30, 2018, the Plan Administrator filed a Demand for Arbitration against the Company and certain of its officers for the alleged destruction of Novinda's business. In the second quarter of 2020, the arbitration panel rendered an award in the arbitration, finding for the Company in part and for Novinda in part. The total amount of the award has not yet been finalized. The Company has recorded a charge of \$8.0 million related to this matter in the second quarter of 2020, representing its reasonable estimate of the damages, interest and costs awarded by the panel to Novinda. In addition, the Company has recorded a total of \$11.8 million in litigation expense related to this matter, \$ 0.9 million of which was recorded in 2020.

Environmental Matters

On April 9, 2003, the Connecticut Department of Environmental Protection issued an administrative consent order relating to our Canaan, Connecticut plant where both our Refractories segment and Specialty Minerals segment have operations. We agreed to the order, which includes provisions requiring investigation and remediation of contamination associated with historic use of polychlorinated biphenyls ("PCBs") and mercury at a portion of the site. We have completed the required investigations and submitted several reports characterizing the contamination and assessing site-specific risks. We are awaiting regulators' approval of the risk assessment report, which will form the basis for a proposal by the Company concerning eventual remediation.

We believe that the most likely form of overall site remediation will be to leave the existing contamination in place (with some limited soil removal), encapsulate it, and monitor the effectiveness of the encapsulation. We anticipate that a substantial portion of the remediation cost will be borne by the United States based on its involvement at the site from 1942 – 1964, as historic documentation indicates that PCBs and mercury were first used at the facility at a time of U.S. government ownership for production of materials needed by the military. Pursuant to a Consent Decree entered on October 24, 2014, the United States paid the Company \$2.3 million in the 4th quarter of 2014 to resolve the Company's claim for response costs for investigation and initial remediation activities at this facility through October 24, 2014. Contribution by the United States to any future costs of investigation or additional remediation has, by agreement, been left unresolved. Though the cost of the likely remediation remains uncertain pending completion of the phased remediation decision process, we have estimated that the Company's share of the cost of the encapsulation and limited soil removal described above would approximate \$0.4 million, which has been accrued as of June 28, 2020.

The Company is evaluating options for upgrading the wastewater treatment facilities at its Adams, Massachusetts plant. This work has been undertaken pursuant to an administrative Consent Order originally issued by the Massachusetts Department of Environmental Protection ("DEP") on June 18, 2002. This order was amended on June 1, 2009 and on June 2, 2010. The amended Order includes the investigation by January 1, 2022 of options for ensuring that the facility's wastewater treatment ponds will not result in unpermitted discharge to groundwater. Additional requirements of the amendment include the submittal by July 1, 2022 of a plan for closure of a historic lime solids disposal area. Preliminary engineering reviews completed in 2005 indicate that the estimated cost of wastewater treatment upgrades to operate this facility beyond 2024 may be between \$6 million and \$8 million. The Company estimates that the remaining remediation costs would approximate \$0.4 million, which has been accrued as of June 28, 2020.

MINERALS TECHNOLOGIES INC. AND SUBSIDIARY COMPANIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

The Company and its subsidiaries are not party to any other material pending legal proceedings, other than routine litigation incidental to their businesses.

Note 15. Segment and Related Information

The Company has four reportable segments: Performance Materials, Specialty Minerals, Refractories and Energy Services. See Note 1 to the Condensed Consolidated Financial Statements. Segment information for the three and six-month periods ended June 28, 2020 and June 30, 2019 is as follows:

(millions of dollars)	Three Months Ended		Six Months Ended	
	Jun. 28, 2020	Jun. 30, 2019	Jun. 28, 2020	Jun. 30, 2019
Net Sales				
Performance Materials	\$ 173.8	\$ 215.4	\$ 360.0	\$ 414.6
Specialty Minerals	109.8	145.1	246.9	289.5
Refractories	55.9	77.5	124.9	151.3
Energy Services	17.7	25.8	42.9	46.1
Total	\$ 357.2	\$ 463.8	\$ 774.7	\$ 901.5
Income from Operations				
Performance Materials	\$ 21.0	\$ 20.7	\$ 45.1	\$ 47.0
Specialty Minerals	9.0	20.0	29.3	42.0
Refractories	5.9	7.1	17.1	19.2
Energy Services	1.4	0.9	4.6	3.3
Total	\$ 37.3	\$ 48.7	\$ 96.1	\$ 111.5

A reconciliation of the totals reported for the operating segments to the applicable line items in the condensed consolidated financial statements is as follows:

(millions of dollars)	Three Months Ended		Six Months Ended	
	Jun. 28, 2020	Jun. 30, 2019	Jun. 28, 2020	Jun. 30, 2019
Income from operations for reportable segments	\$ 37.3	\$ 48.7	\$ 96.1	\$ 111.5
Litigation expenses	(8.3)	—	(8.9)	—
Unallocated and other corporate expenses	(1.8)	(3.2)	(2.3)	(4.0)
Consolidated income from operations	27.2	45.5	84.9	107.5
Non-operating deductions, net	(12.6)	(13.3)	(21.3)	(26.1)
Income from operations before tax and equity in earnings	\$ 14.6	\$ 32.2	\$ 63.6	\$ 81.4

On a regular basis, the Company reviews its product line groupings to generate greater alignment within each product line. Accordingly, in the third quarter of 2019, the Company combined its Basic Minerals product line with its Household, Personal Care & Specialty Products product line, both within our Performance Materials segment. Prior year amounts were reclassified to conform to current presentation.

MINERALS TECHNOLOGIES INC. AND SUBSIDIARY COMPANIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

The Company's sales by product category are as follows:

(millions of dollars)	Three Months Ended		Six Months Ended	
	Jun. 28, 2020	Jun. 30, 2019	Jun. 28, 2020	Jun. 30, 2019
Metalcasting	\$ 52.8	\$ 75.8	\$ 114.5	\$ 149.0
Household, Personal Care & Specialty Products	87.9	91.5	184.1	186.3
Environmental Products	19.9	29.0	31.4	44.9
Building Materials	13.2	19.1	30.0	34.4
Performance Materials	173.8	215.4	360.0	414.6
Paper PCC	65.5	90.2	150.6	181.7
Specialty PCC	14.9	17.3	32.4	35.4
Ground Calcium Carbonate	20.6	24.8	43.2	47.1
Talc	8.8	12.8	20.7	25.3
Specialty Minerals	109.8	145.1	246.9	289.5
Refractory Products	47.1	61.0	102.9	123.0
Metallurgical Products	8.8	16.5	22.0	28.3
Refractories	55.9	77.5	124.9	151.3
Energy Services	17.7	25.8	42.9	46.1
Total	\$ 357.2	\$ 463.8	\$ 774.7	\$ 901.5

Note 16. Subsequent Event

On June 30, 2020, the Company issued \$400 million aggregate principal amount of 5.0% Senior Notes due 2028 (the "Notes"). The Notes were issued pursuant to an indenture, dated as of June 30, 2020, between the Company and The Bank of New York Mellon Trust Company, N.A., as trustee. The Company used the net proceeds of its offering of the Notes to repay all of its outstanding loans under the fixed rate tranche of the Term Facility, repay all of its outstanding borrowings under its Revolving Credit Facility, and the remainder for general corporate purposes

The Notes bear an interest rate of 5.0% per annum payable semi-annually on January 1 and July 1 of each year, beginning on January 1, 2021. The Notes are unconditionally guaranteed on a senior unsecured basis by each of the Company's existing and future wholly owned domestic restricted subsidiaries that is a borrower under or that guarantees the Company's obligations under its Senior Secured Credit Facilities or that guarantees the Company's or any of the Company's wholly owned domestic subsidiaries' long-term indebtedness in an aggregate amount in excess of \$50 million.

At any time and from time to time prior to July 1, 2023, the Company may redeem some or all of the Notes for cash at a redemption price equal to 100% of their principal amount, plus the "make-whole" premium described in the Indenture and accrued and unpaid interest, if any, to, but excluding, the applicable redemption date. Beginning on July 1, 2023, the Company may redeem some or all of the Notes at any time and from time to time at the applicable redemption prices listed in the Indenture, plus accrued and unpaid interest, if any, to, but excluding, the applicable redemption date. In addition, at any time and from time to time prior to July 1, 2023, the Company may redeem up to 40% of the aggregate principal amount of the Notes with funds from one or more equity offerings at a redemption price equal to 105.000% of the principal amount thereof, plus accrued and unpaid interest, if any, to, but excluding, the applicable redemption date.

If the Company experiences a change of control (as defined in the indenture), the Company is required to offer to repurchase the Notes at 101% of the principal amount of such Notes, plus accrued and unpaid interest, if any, to, but excluding, the date of repurchase.

The indenture contains certain customary affirmative and negative covenants that limit or restrict the ability of the Company and its restricted subsidiaries to enter into certain transactions or take certain actions, as well as customary events of default.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors
Minerals Technologies Inc.:

Results of Review of Interim Financial Information

We have reviewed the condensed consolidated balance sheet of Minerals Technologies Inc. and subsidiaries (the Company) as of June 28, 2020, the related condensed consolidated statements of income and comprehensive income for the three-month and six-month periods ended June 28, 2020 and June 30, 2019, the related condensed consolidated statements of cash flows for the six-month periods ended June 28, 2020 and June 30, 2019, the related condensed statements of changes in shareholders' equity for the three-month periods ended June 28 and March 29, 2020 and June 30 and March 31, 2019, and the related notes (collectively, the consolidated interim financial information). Based on our reviews, we are not aware of any material modifications that should be made to the consolidated interim financial information for it to be in conformity with U.S. generally accepted accounting principles.

We have previously audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheet of the Company as of December 31, 2019, and the related consolidated statements of income, comprehensive income, changes in shareholders' equity, and cash flows for the year then ended (not presented herein); and in our report dated February 14, 2020, we expressed an unqualified opinion on those consolidated financial statements. In our opinion, the information set forth in the accompanying condensed consolidated balance sheet as of December 31, 2019, is fairly stated, in all material respects, in relation to the consolidated balance sheet from which it has been derived.

Basis for Review Results

This consolidated interim financial information is the responsibility of the Company's management. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our reviews in accordance with the standards of the PCAOB. A review of consolidated interim financial information consists principally of applying analytical procedures and making inquiries of persons responsible for financial and accounting matters. It is substantially less in scope than an audit conducted in accordance with the standards of the PCAOB, the objective of which is the expression of an opinion regarding the financial statements taken as a whole. Accordingly, we do not express such an opinion.

/s/ KPMG LLP

New York, New York
July 31, 2020

ITEM 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Executive Summary

Our consolidated sales for the second quarter of 2020 were \$357.2 million, as compared with \$463.8 million in the prior year. Income from operations was \$27.2 million and represented 7.6% of sales, as compared with \$45.5 million and 9.8% of sales in the prior year. Included in income from operations for the second quarter of 2020 were \$6.5 million of restructuring and other items. In addition, we recorded \$8.3 million of litigation expenses associated with the bankruptcy of Novinda Corp, including an \$8.0 million estimated amount of damages, interest and costs awarded to Novinda. Net income was \$14.4 million, as compared to \$26.6 million in the second quarter of 2019. Diluted earnings in the second quarter ended June 28, 2020 were \$0.42 per share, as compared with \$0.75 per share in 2019.

In March 2020, the World Health Organization categorized the novel coronavirus (COVID-19) as a pandemic. We have remained focused on the health and safety of our employees, and deployed rigorous health, safety and wellness protocols for all of our facilities in order to protect our employees. We have also conducted scenario planning and developed contingency plans to ensure we are supporting our customers and adjusting to changing market dynamics. Around the world, the Company continues to closely adhere to all government regulations as they are issued. Applicable governmental directives across the United States and other global locations have typically permitted the continued operation of essential critical infrastructure sectors. As the Company supplies products and services to many essential industries, including critical manufacturing and energy sectors, all of our operations had qualified as essential businesses. Accordingly, all of the Company's production facilities are currently operational. In a few locations, however, sites were temporarily impacted by the pandemic.

The recent economic environment related to the rapidly evolving global pandemic, which has slowed business activity in several key end-markets, negatively impacted the Company's second quarter results. The pandemic has affected and we expect will continue to affect the demand for a number of our Performance Materials segment's products and services. We expect paper consumption to be down in the next quarter. Global steel production has been and will continue to be affected by volatility in the market due to the COVID-19 pandemic and we expect steel consumption to be lower due to delays in the construction and automotive industries, which will impact our Refractory segment. Oil and natural gas prices have decreased significantly as a result of the COVID-19 pandemic, which, if sustained, will continue to cause oil and natural gas companies to reduce their capital expenditures and production and exploration activities.

We expect the impacts of the COVID-19 pandemic to continue to impact our results for the third quarter. The extent to which our operations will be impacted by the pandemic will depend largely on future developments, including the continued severity of the pandemic and future actions by government authorities to contain it or treat its impact. These conditions are highly uncertain and cannot be accurately predicted. We will continue to actively monitor and respond to the COVID-19 pandemic. We are actively managing the business to maintain cash flow.

Our balance sheet continues to be strong. Cash, cash equivalents and short-term investments were \$238.2 million as of June 28, 2020. On June 30, 2020, the Company completed a \$400 million private offering of senior unsecured notes due 2028. The net proceeds were used to repay \$148 million of fixed rate term loans and \$100 million of outstanding borrowing under its revolving credit facility and the remainder for general corporate purposes. As a result, the Company currently has more than \$650 million of available liquidity, including cash on hand as well as availability under its revolving credit facility. We believe that these factors will allow us to meet our anticipated funding requirements.

Outlook

The COVID-19 pandemic had a material adverse effect on our reported results for our second quarter, and we expect it will negatively impact our business and results of operations for our third quarter. The extent to which our operations will be impacted by the pandemic will depend largely on future developments, including the severity of the pandemic and actions by government authorities to contain it or treat its impact. These are highly uncertain and cannot be accurately predicted. We will continue to actively monitor and respond to the COVID-19 pandemic.

The Company will also continue to focus on innovation and new product development and other opportunities for sales growth from our existing businesses in 2020, as follows:

- Increase our presence and gain penetration of our bentonite-based foundry customers for the Metalcasting industry in emerging markets, such as China and India.
- Increase our presence and market share in global pet care products, particularly in emerging markets.
- Deploy new products in pet care such as lightweight litter.

- Increase our presence and market share in Asia and in the global powdered detergent market.
- Continue the development of our proprietary Enersol® products for agricultural applications worldwide.
- Pursue opportunities for our products in environmental and building and construction markets in the Middle East, Asia Pacific and South America regions.
- Increase our presence and market share for geosynthetic clay liners within the Environmental Products product line.
- Develop multiple high-filler technologies under the FulFill® platform of products, to increase the fill rate in freesheet paper and continue to progress with commercial discussions and full-scale paper machine trials.
- Develop products and processes for waste management and recycling opportunities to reduce the environmental impact of the paper mill, reduce energy consumption and improve the sustainability of the papermaking process, including our NewYield® and ENVIROFIL® products.
- Further penetration into the packaging segment of the paper industry.
- Increase our sales of PCC for paper by further penetration of the markets for paper filling at both freesheet and groundwood mills, particularly in emerging markets.
- Expand the Company's PCC coating product line using the satellite model.
- Promote the Company's expertise in crystal engineering, especially in helping papermakers customize PCC morphologies for specific paper applications.
- Expand PCC produced for paper filling applications by working with industry partners to develop new methods to increase the ratio of PCC for fiber substitutions.
- Develop unique calcium carbonate and talc products used in the manufacture of novel biopolymers, a new market opportunity.
- Deploy new talc and GCC products in paint, coating and packaging applications.
- Deploy value-added formulations of refractory materials that not only reduce costs but improve performance.
- Deploy our laser measurement technologies into new applications.
- Expand our refractory maintenance model to other steel makers globally.
- Increase our presence and market penetration in offshore produced water and offshore filtration and well testing within the Energy Services segment.
- Deploy operational excellence principles into all aspects of the organization, including system infrastructure and lean principles.
- Continue to explore selective acquisitions to fit our core competencies in minerals and fine particle technology.

However, there can be no assurance that we will achieve success in implementing any one or more of these opportunities.

Results of Operations

Three months ended June 28, 2020 as compared with three months ended June 30, 2019

Consolidated Income Statement Review

(millions of dollars)	Three Months Ended		% Change
	Jun. 28, 2020	Jun. 30, 2019	
Net sales	\$ 357.2	\$ 463.8	(23)%
Cost of sales	268.3	351.8	(24)%
Production margin	88.9	112.0	(21)%
Production margin %	24.9%	24.1%	
Marketing and administrative expenses	41.8	48.4	(14)%
Research and development expenses	5.1	4.9	4%
Litigation expenses	8.3	—	*
Restructuring and other items, net	6.5	13.2	*
Income from operations	27.2	45.5	(40)%
Operating margin %	7.6%	9.8%	
Interest expense, net	(8.1)	(10.9)	(26)%
Non-cash pension settlement charge	(4.3)	—	*
Litigation settlement expense	-	—	*
Other non-operating deductions, net	(0.2)	(2.4)	(92)%
Total non-operating deductions, net	(12.6)	(13.3)	(5)%
Income from operations before tax and equity in earnings	14.6	32.2	(55)%
Provision for taxes on income	0.9	5.1	(82)%
Effective tax rate	6.2%	15.8%	
Equity in earnings of affiliates, net of tax	1.2	0.5	140%
Net income	14.9	27.6	(46)%
Net income attributable to non-controlling interests	0.5	1.0	(50)%
Net income attributable to Minerals Technologies Inc.	\$ 14.4	\$ 26.6	(46)%

* Not meaningful

Net Sales

(millions of dollars)	Three Months Ended Jun. 28, 2020			Three Months Ended Jun. 30, 2019		
	Net Sales	% of Total Sales	% Change	Net Sales	% of Total Sales	
U.S.	\$ 180.7	50.6%	(29)%	\$ 253.3	54.6%	
International	176.5	49.4%	(16)%	210.5	45.4%	
Total sales	\$ 357.2	100.0%	(23)%	\$ 463.8	100.0%	
Performance Materials Segment	\$ 173.8	48.7%	(19)%	\$ 215.4	46.4%	
Specialty Minerals Segment	109.8	30.7%	(24)%	145.1	31.3%	
Refractories Segment	55.9	15.6%	(28)%	77.5	16.7%	
Energy Services Segment	17.7	5.0%	(31)%	25.8	5.6%	
Total sales	\$ 357.2	100.0%	(23)%	\$ 463.8	100.0%	

Worldwide net sales decreased 23% to \$357.2 million in the second quarter from \$463.8 million in the prior year. Foreign exchange had an unfavorable impact on sales of approximately \$9.9 million or 2%. Sales decreased in all business segments primarily due to reduced volumes related to the impacts of the COVID-19 pandemic.

Net sales in the United States decreased 29% to \$180.7 million from \$253.3 million in the prior year. International sales decreased 16% to \$176.5 million from \$210.5 million in the prior year.

Operating Costs and Expenses

Cost of sales was \$268.3 million and represented 75.1% of sales for the three month period ended June 28, 2020, as compared with \$351.8 million and 75.9% of sales in the prior year. Production margin increased from 24.1% of sales in the prior year to 24.9% of sales in the second quarter of 2020. This improvement was primarily due to favorable mix, higher selling prices and cost control.

Marketing and administrative costs were \$41.8 million and 11.7% of sales for the three months ended June 28, 2020, as compared to \$48.4 million and 10.4% of sales in the prior year. The decrease was primarily due to lower expenses as a result of the pandemic. Included in marketing and administrative costs for the three months ended June 30, 2019 was bad debt expense of \$2.5 million relating to a refractories customer bankruptcy in the U.K.

Research and development expenses were \$5.1 million and represented 1.4% of sales for the three months ended June 28, 2020, as compared with \$4.9 million and 1.1% of sales in the prior year.

The Company recorded \$6.5 million and \$13.2 million for asset write-downs and other restructuring costs for the three months ended June 28, 2020 and June 30, 2019, respectively.

In addition, the Company recorded \$8.3 million related to litigation expenses associated with the bankruptcy of Novinda Corp. for the three months ended June 28, 2020. Included in this amount is an \$8.0 million charge for the estimated amount of damages, interest and costs awarded to Novinda.

Income from Operations

The Company recorded income from operations of \$27.2 million as compared to \$45.5 million in the prior year. Operating income during the three months ended June 28, 2020 includes a \$6.5 million charge for the impairment of assets and other restructuring costs. In addition, the Company recorded \$8.3 million related to litigation expenses associated with the bankruptcy of Novinda Corp. for the three months ended June 28, 2020. Operating income during the three months ended June 30, 2019 includes a \$13.2 million charge for the impairment of assets and other restructuring costs.

Other Non-Operating Income (Deductions)

In the second quarter of 2020, non-operating deductions were \$12.6 million as compared with \$13.3 million in the prior year. The decrease was primarily related to lower interest expense in the quarter as compared with prior year due to lower interest rates and lower debt levels. Included in other non-operating deductions for the second quarter of 2020 is a \$4.3 million non-cash pension settlement charge associated with our plans in the U.S.

Provision for Taxes on Income

Provision for taxes on income was \$0.9 million and \$5.1 million for the three months ended June 28, 2020 and June 30, 2019, respectively. The effective tax rate was 6.2% and 15.8% for the three months ended June 28, 2020 and June 30, 2019, respectively. The lower effective tax rate was primarily due to discrete items related to restructuring and other charges and to the mix of earnings.

Consolidated Net Income Attributable to MTI Shareholders

Consolidated net income was \$14.4 million for the three months ended June 28, 2020, as compared with \$26.6 million in the prior year.

Segment Review

The following discussions highlight the operating results for each of our four segments.

Performance Materials Segment	Three Months Ended		% Change
	Jun. 28, 2020	Jun. 30, 2019	
	(millions of dollars)		
Net Sales			
Metalcasting	\$ 52.8	\$ 75.8	(30)%
Household, Personal Care & Specialty Products	87.9	91.5	(4)%
Environmental Products	19.9	29.0	(31)%
Building Materials	13.2	19.1	(31)%
Total net sales	<u>\$ 173.8</u>	<u>\$ 215.4</u>	<u>(19)%</u>
Income from operations	\$ 21.0	\$ 20.7	
% of net sales	12.1%	9.6%	

Net sales in the Performance Materials segment decreased 19% to \$173.8 million from \$215.4 million in the prior year. Sales in Metalcasting decreased 30% from prior year primarily driven by COVID-19 related automotive production slowdown in North American and parts of Asia. Metalcasting sales in China grew 9%, as economic activity rebounded following the COVID-19 related shutdowns, and we continued to penetrate the market with our pre-blended greensand bond formulations. Household, Personal Care & Specialty Products sales decreased 4% as compared with prior year. We saw continued strong performance from our global pet care business, which grew 3%, as well as fabric care, which grew 20%, and personal care, which grew 7%. The growth in these consumer-oriented businesses was offset by weakness in specialty drilling products. Environmental Products and Building Materials sales both decreased 31% primarily due to COVID-19 related project delays.

Income from operations was \$21.0 million and 12.1% of sales as compared to \$20.7 million and 9.6% of sales in the prior year. Included in income from operations for the three month period ended June 30, 2019 were \$7.0 million of restructuring and impairment costs. The impact of lower sales on operating income versus the prior year was partially mitigated by expense control, input cost reductions, and continued pricing actions.

Specialty Minerals Segment	Three Months Ended		% Change
	Jun. 28, 2020	Jun. 30, 2019	
	(millions of dollars)		
Net Sales			
Paper PCC	\$ 65.5	\$ 90.2	(27)%
Specialty PCC	14.9	17.3	(14)%
PCC Products	<u>\$ 80.4</u>	<u>\$ 107.5</u>	<u>(25)%</u>
Ground Calcium Carbonate	\$ 20.6	\$ 24.8	(17)%
Talc	8.8	12.8	(31)%
Processed Minerals Products	<u>\$ 29.4</u>	<u>\$ 37.6</u>	<u>(22)%</u>
Total net sales	<u>\$ 109.8</u>	<u>\$ 145.1</u>	<u>(24)%</u>
Income from operations	\$ 9.0	\$ 20.0	(55)%
% of net sales	8.2%	13.8%	

Worldwide sales in the Specialty Minerals segment were \$109.8 million, as compared with \$145.1 million in the prior year, a decrease of 24%.

Worldwide net sales of PCC, which is primarily used in the manufacturing process of the paper industry, decreased 25% to \$80.4 million from \$107.5 million in the prior year. Paper PCC sales decreased 27% to \$65.5 million from \$90.2 million in the prior year, primarily due to the decline in printing and writing paper demand resulting from the COVID-19 pandemic and paper machine shutdowns in the prior year. Paper PCC sales in China grew 4% on continued penetration and strong pull from our customers. Sales of Specialty PCC decreased 14% to \$14.9 million from \$17.3 million in the prior year as demand slowed late in the first quarter and remained at lower levels in the second quarter.

Net sales of Processed Minerals products decreased 22% to \$29.4 million due to COVID-19 related slowdown in construction and automotive activity. Ground Calcium Carbonate sales decreased 17% to \$20.6 for the three month periods ending June 28, 2020 as compared to \$24.8 million in the prior year. Talc sales decreased 31% to \$8.8 million as compared with \$12.8 million in the prior year.

Income from operations for Specialty Minerals was \$9.0 million as compared with \$20.0 million in the prior year and represented 8.2% of sales. The impact from volume reductions as compared with prior year were partially offset by continued pricing actions and cost control. Included in income from operations for the three months ended June 28, 2020 were \$6.3 million of impairment and restructuring costs. Included in income from operations for the three month period ended June 30, 2019 were \$2.5 million of restructuring and impairment costs.

Refractories Segment	Three Months Ended		% Change
	Jun. 28, 2020	Jun. 30, 2019	
	(millions of dollars)		
Net Sales			
Refractory Products	\$ 47.1	\$ 61.0	(23)%
Metallurgical Products	8.8	16.5	(47)%
Total net sales	<u>\$ 55.9</u>	<u>\$ 77.5</u>	<u>(28)%</u>
Income from operations	\$ 5.9	\$ 7.1	(17)%
% of net sales	10.6%	9.2%	

Net sales in the Refractories segment decreased 28% to \$55.9 million from \$77.5 million in the prior year driven by lower sales of Refractory and Metallurgical Products globally as steel mills reduced production in response to weaker demand from construction and automotive markets. Sales of refractory products and systems to steel and other industrial applications decreased 23% to \$47.1 million and sales of metallurgical products decreased 47% to \$8.8 million.

Income from operations was \$5.9 million and 10.6% of sales as compared with \$7.1 million and 9.2% of sales in the prior year due to lower volumes. Included in income from operations for the three month period ended June 30, 2019 were \$0.8 million of restructuring costs and a \$2.5 million bad debt reserve relating to a customer bankruptcy.

Energy Services Segment	Three Months Ended		% Change
	Jun. 28, 2020	Jun. 30, 2019	
	(millions of dollars)		
Net Sales	\$ 17.7	\$ 25.8	(31)%
Income from operations	\$ 1.4	\$ 0.9	56%
% of net sales	7.9%	3.5%	

Net sales in the Energy Services segment decreased 31% to \$17.7 million from \$25.8 million in the prior year, primarily driven by decreased activity due to COVID-19 restrictions and relatively low oil prices.

Operating income was \$1.4 million as compared with \$0.9 million in the prior year. Included in income from operations for the three month period ended June 30, 2019 were \$1.8 million of restructuring and impairment costs.

Six months ended June 28, 2020 as compared with six months ended June 30, 2019

Consolidated Income Statement Review

(millions of dollars)	<u>Six Months Ended</u>		<u>% Change</u>
	<u>Jun. 28, 2020</u>	<u>Jun. 30, 2019</u>	
Net sales	\$ 774.7	\$ 901.5	(14)%
Cost of sales	579.0	679.8	(15)%
Production margin	195.7	221.7	(12)%
Production margin %	25.3%	24.6%	
Marketing and administrative expenses	85.2	91.3	(7)%
Research and development expenses	10.2	9.7	5%
Litigation expenses	8.9	—	*
Restructuring and other items, net	6.5	13.2	(51)%
Income from operations	84.9	107.5	(21)%
Operating margin %	11.0%	11.9%	
Interest expense, net	(17.4)	(22.3)	(22)%
Non-cash pension settlement charge	(4.3)	—	*
Other non-operating income (deductions), net	0.4	(3.8)	*
Total non-operating deductions, net	(21.3)	(26.1)	(18)%
Income from operations before tax and equity in earnings	63.6	81.4	(22)%
Provision for taxes on income	10.6	14.4	(26)%
Effective tax rate	16.7%	17.7%	
Equity in earnings of affiliates, net of tax	1.5	0.6	150%
Net income	54.5	67.6	(19)%
Net income attributable to non-controlling interests	1.5	1.9	(21)%
Net income attributable to Minerals Technologies Inc.	\$ 53.0	\$ 65.7	(19)%

* Not meaningful

Net Sales

(millions of dollars)	<u>Six Months Ended Jun. 28, 2020</u>			<u>Six Months Ended Jun. 30, 2019</u>		
	<u>Net Sales</u>	<u>% of Total Sales</u>	<u>% Growth</u>	<u>Net Sales</u>	<u>% of Total Sales</u>	
U.S.	\$ 407.7	52.6%	(16)%	\$ 485.0	53.8%	
International	367.0	47.4%	(12)%	416.5	46.2%	
Total sales	\$ 774.7	100.0%	(14)%	\$ 901.5	100.0%	
Performance Materials Segment	\$ 360.0	46.5%	(13)%	\$ 414.6	46.0%	
Specialty Minerals Segment	246.9	31.9%	(15)%	289.5	32.1%	
Refractories Segment	124.9	16.1%	(17)%	151.3	16.8%	
Energy Services Segment	42.9	5.5%	(7)%	46.1	5.1%	
Total sales	\$ 774.7	100.0%	(14)%	\$ 901.5	100.0%	

Total sales decreased \$126.8 million or 14% from the previous year to \$774.7 million. Foreign exchange had an unfavorable impact on sales of approximately \$15.9 million or 2%. Sales decreased in all business segments primarily due to reduced volumes related to the impacts of the COVID-19 pandemic.

Net sales in the United States increased to \$407.7 million from \$485.0 million in the prior year. International sales decreased to \$367.0 million from \$416.5 million in the prior year.

Operating Costs and Expenses

Cost of sales decreased 15% from the prior year and was 74.7% of sales, as compared with 75.4% in the prior year. Gross margin increased to 25.3% of sales as compared with 24.6% of sales in the prior year. This improvement was primarily due to higher selling prices and cost control.

Marketing and administrative costs were \$85.2 million and 11.0% of sales compared to \$91.3 million and 10.1% of sales in the prior year. Included in marketing and administrative costs for the six months ended June 30, 2019 was bad debt expense of \$2.5 million relating to a refractories customer bankruptcy in the U.K.

Research and development expenses were \$10.2 million and represented 1.3% of sales for the six months ended June 28, 2020 as compared with \$9.7 million and 1.1% of sales in the prior year.

The Company recorded \$6.5 million and \$13.2 million for asset write-downs and other restructuring costs for the six months ended June 28, 2020 and June 30, 2019, respectively.

In addition, the Company recorded \$8.9 million related to litigation expenses associated with the bankruptcy of Novinda Corp. for the six months ended June 28, 2020. Included in litigation expense is an \$8.0 million charge for the estimated amount of damages, interest, and costs awarded to Novinda.

Income from Operations

The Company recorded income from operations of \$84.9 million as compared to \$107.5 million in the prior year. Operating income was 11.0% of sales in the first six months of 2020 as compared with 11.9% in the prior year. Operating income during the six months ended June 28, 2020 includes a \$6.5 million charge for the impairment of assets and other restructuring costs and \$8.9 million related to ongoing litigation associated with the bankruptcy of Novinda Corp. Operating income during the six months ended June 30, 2019 includes \$13.2 million of restructuring costs.

Other Non-Operating Income (Deductions)

The Company recorded non-operating deductions of \$21.3 million for the six months ended June 28, 2020, as compared with \$26.1 million in the prior year. Included in non-operating deductions for the six months ended June 28, 2020 is \$17.4 million of net interest expense and a \$4.3 million non-cash pension settlement charge. Included in non-operating deductions for the six months ended June 30, 2019 was \$22.3 million of net interest expense.

Provision for Taxes on Income

Provision for taxes was \$10.6 million as compared to \$14.4 million in the prior year. The effective tax rate was 16.7% as compared to 17.7% in the prior year. The lower effective tax rate was primarily due to discrete items related to restructuring and other charges and to the mix of earnings.

Consolidated Net Income Attributable to MTI Shareholders

Consolidated net income was \$53.0 million during the six months ended June 28, 2020, as compared with \$65.7 million in the prior year.

Segment Review

The following discussions highlight the operating results for each of our four segments.

	Six Months Ended		% Change
	Jun. 28, 2020	Jun. 30, 2019	
Performance Materials Segment	(millions of dollars)		
Net Sales			
Metalcasting	\$ 114.5	\$ 149.0	(23)%
Household, Personal Care & Specialty Products	184.1	186.3	(1)%
Environmental Products	31.4	44.9	(30)%
Building Materials	30.0	34.4	(13)%
Total net sales	<u>\$ 360.0</u>	<u>\$ 414.6</u>	<u>(13)%</u>
Income from operations	\$ 45.1	\$ 47.0	
% of net sales	12.5%	11.3%	

Net sales in the Performance Materials segment decreased to \$360.0 million from \$414.6 million in the prior year. Sales in Metalcasting decreased 23% to \$114.5 million due to COVID-19 related weaker foundry demand in U.S. and Asia. Household, Personal Care & Specialty Products decreased slightly by 1%. Environmental Products sales decreased 30% primarily due to a large project completed in the prior year and COVID-19 related project delays. Building Materials sales decreased 13% due to COVID-19 related project delays.

Income from operations was \$45.1 million and 12.5% of sales as compared to \$47.0 million and 11.3% of sales in the prior year. Included in income from operations for the six month period ended June 30, 2019 were \$7.0 million of restructuring and impairment costs. Operating income and margins were primarily affected by lower volumes.

	Six Months Ended		% Change
	Jun. 28, 2020	Jun. 30, 2019	
Specialty Minerals Segment	(millions of dollars)		
Net Sales			
Paper PCC	\$ 150.6	\$ 181.7	(17)%
Specialty PCC	32.4	35.4	(8)%
PCC Products	<u>\$ 183.0</u>	<u>\$ 217.1</u>	<u>(16)%</u>
Ground Calcium Carbonate	\$ 43.2	\$ 47.1	(8)%
Talc	20.7	25.3	(18)%
Processed Minerals Products	<u>\$ 63.9</u>	<u>\$ 72.4</u>	<u>(12)%</u>
Total net sales	<u>\$ 246.9</u>	<u>\$ 289.5</u>	<u>(15)%</u>
Income from operations	\$ 29.3	\$ 42.0	(30)%
% of net sales	11.9%	14.5%	

Worldwide sales in the Specialty Minerals segment were \$246.9 million, as compared with \$289.5 million in the prior year, a decrease of 15%.

Worldwide net sales of PCC products, which are primarily used in the manufacturing process of the paper industry, decreased 16% to \$183.0 million from \$217.1 million in the prior year. Paper PCC sales decreased 17% to \$150.6 million from \$181.7 million in the prior year due to previously announced customer paper machine shutdowns in North America and lower demand in printing and writing paper resulting from the COVID-19 pandemic. Specialty PCC products decreased 8%, primarily due to lower demand.

Net sales of Processed Minerals products decreased 12% to \$63.9 million from \$72.4 million in the prior year. Ground Calcium Carbonate sales decreased 8% primarily due to lower demand in the construction and automotive markets as a result of COVID-19.

Income from operations was \$29.3 million and 11.9% of net sales as compared to \$42.0 million and 14.5% of sales in the prior year. Included in income from operations for the six month period ended June 28, 2020 and June 30, 2019 were \$6.3 million and \$2.5 million of restructuring and impairment costs, respectively. The impact of lower volumes was partially offset by continued pricing actions and cost control.

Refractories Segment	Six Months Ended		% Change
	Jun. 28, 2020	Jun. 30, 2019	
	(millions of dollars)		
Net Sales			
Refractory Products	\$ 102.9	\$ 123.0	(16)%
Metallurgical Products	22.0	28.3	(22)%
Total net sales	<u>\$ 124.9</u>	<u>\$ 151.3</u>	<u>(17)%</u>
Income from operations	\$ 17.1	\$ 19.2	(11)%
% of net sales	13.7%	12.7%	

Net sales in the Refractories segment decreased 17% to \$124.9 million from \$151.3 million in the prior year. Sales of refractory products and systems to steel and other industrial applications decreased 16% to \$102.9 million from \$123.0 million in the prior year due to lower demand from steel mills.

Income from operations was \$17.1 million and 13.7% of sales as compared with \$19.2 million and 12.7% of sales. Included in income from operations for the six month period ended June 30, 2019 were \$0.8 million of restructuring costs and a \$2.5 million bad debt reserve relating to a customer bankruptcy.

Energy Services Segment	Six Months Ended		% Change
	Jun. 28, 2020	Jun. 30, 2019	
	(millions of dollars)		
Net Sales	\$ 42.9	\$ 46.1	(7)%
Income from operations	\$ 4.6	\$ 3.3	39%
% of net sales	10.7%	7.2%	

Net sales in the Energy Services segment decreased 7% to \$42.9 million from \$46.1 million in the prior year, primarily driven the decrease in activity due to COVID-19 restrictions and relatively low oil prices.

Income from operations during the six months ended June 28, 2020 was \$4.6 million and represented 10.7% of sales. Included in income from operations for the six month period ended June 30, 2019 were \$1.8 million of restructuring and impairment costs.

Liquidity and Capital Resources

Cash provided from operations during the six months ended June 28, 2020, was approximately \$94 million. Cash flows provided from operations during the first half of 2020 were principally used to repay debt, fund capital expenditures, repurchase shares and to pay the Company's dividend to common shareholders. The aggregate maturities of long-term debt are as follows: remainder of 2020 - \$1.1 million; 2021 - \$152.0 million; 2022 - \$0.2 million; 2023 - \$0.0 million; 2024 - \$658.0 million; thereafter - \$0.0 million.

On May 9, 2014, in connection with the acquisition of AMCOL International Corporation ("AMCOL"), the Company entered into a credit agreement providing for the \$1.560 billion senior secured term loan facility (the "Term Facility") and a \$200 million senior secured revolving credit facility.

On June 23, 2015, the Company entered into an amendment (the "First Amendment") to the credit agreement to reprice the \$1.378 billion then outstanding on the Term Facility. As amended, the Term Facility had a \$1.078 billion floating rate tranche and a \$300 million fixed rate tranche. On February 14, 2017, the Company entered into an amendment (the "Second Amendment") to the credit agreement to reprice the \$788 million floating rate tranche then outstanding, which extended the maturity and lowered the interest costs by 75 basis points. On April 18, 2018, the Company entered into an amendment (the "Third Amendment") to the credit agreement to refinance its then existing senior secured revolving credit facility. In connection with the Third Amendment, the existing senior secured revolving credit facility was replaced with a new revolving credit facility with \$300 million of aggregate commitments (the "Revolving Credit Facility" and, together with the Term Facility, the "Senior Secured Credit Facilities"). Following the amendments, the loans outstanding under the floating rate tranche of the Term Facility are scheduled to mature on February 14, 2024, the loans outstanding under the fixed rate tranche of the Term Facility are scheduled to mature on May 9, 2021 and the loans outstanding (if any) and commitments under the Revolving Facility will mature and terminate, as the case may be, on April 18, 2023. Loans under the floating rate tranche of the Term Facility bear interest at a rate equal to an adjusted LIBOR rate (subject to a floor of 0.75%) plus an applicable margin equal to 2.25% per annum. Loans under the fixed rate tranche of the Term Facility bear interest at a rate of 4.75%. Loans under the Revolving Facility bear interest at a rate equal to an adjusted LIBOR rate plus an applicable margin equal to 1.625% per annum. Such rates are subject to decrease by up to 25 basis points in the event that, and for so long as, the Company's net leverage ratio (as defined in the credit agreement) is less than certain thresholds. The floating rate tranche of the Term Facility was issued at par and the fixed rate tranche of the Term Facility was issued at a 0.25% discount in connection with the First Amendment. The variable rate tranche of the Term Facility was issued at a 0.25% discount in connection with the Second Amendment. The variable rate tranche has a 1% required amortization per year. The Company will pay certain fees under the credit agreement, including customary annual administration fees. The obligations of the Company under the Senior Secured Credit Facilities are unconditionally guaranteed jointly and severally by, subject to certain exceptions, all material domestic subsidiaries of the Company (the "Guarantors") and secured, subject to certain exceptions, by a security interest in substantially all of the assets of the Company and the Guarantors.

On June 30, 2020, the Company issued \$400 million aggregate principal amount of 5.0% Senior Notes due 2028 (the "Notes"). The Notes were issued pursuant to an indenture, dated as of June 30, 2020, between the Company and The Bank of New York Mellon Trust Company, N.A., as trustee. The Company used the net proceeds of its offering of the Notes to repay all of its outstanding loans under the fixed rate tranche of the Term Facility, repay all of its outstanding borrowings under its Revolving Credit Facility, and the remainder for general corporate purposes

The Notes bear an interest rate of 5.0% per annum payable semi-annually on January 1 and July 1 of each year, beginning on January 1, 2021. The Notes are unconditionally guaranteed on a senior unsecured basis by each of the Company's existing and future wholly owned domestic restricted subsidiaries that is a borrower under or that guarantees the Company's obligations under its Senior Secured Credit Facilities or that guarantees the Company's or any of the Company's wholly owned domestic subsidiaries' long-term indebtedness in an aggregate amount in excess of \$50 million.

At any time and from time to time prior to July 1, 2023, the Company may redeem some or all of the Notes for cash at a redemption price equal to 100% of their principal amount, plus the "make-whole" premium described in the Indenture and accrued and unpaid interest, if any, to, but excluding, the applicable redemption date. Beginning on July 1, 2023, the Company may redeem some or all of the Notes at any time and from time to time at the applicable redemption prices listed in the Indenture, plus accrued and unpaid interest, if any, to, but excluding, the applicable redemption date. In addition, at any time and from time to time prior to July 1, 2023, the Company may redeem up to 40% of the aggregate principal amount of the Notes with funds from one or more equity offerings at a redemption price equal to 105.000% of the principal amount thereof, plus accrued and unpaid interest, if any, to, but excluding, the applicable redemption date.

If the Company experiences a change of control (as defined in the indenture), the Company is required to offer to repurchase the Notes at 101% of the principal amount of such Notes, plus accrued and unpaid interest, if any, to, but excluding, the date of repurchase.

The credit agreement and the Notes contain certain customary affirmative and negative covenants that limit or restrict the ability of the Company and its restricted subsidiaries to enter into certain transactions or take certain actions. In addition, the credit agreement contains a financial covenant that requires the Company, if on the last day of any fiscal quarter loans or letters of credit were outstanding under the Revolving Facility (excluding up to \$25 million of letters of credit), to maintain a maximum net leverage ratio (as defined in the credit agreement) of 3.50 to 1.00 for the four fiscal quarter periods preceding such day. In connection with the Sivomatic acquisition, the Company incurred \$113.0 million of short-term debt under the Revolving Facility. As of June 28, 2020, there were \$100 million in outstanding loans and \$9.4 million in letters of credit outstanding under the Revolving Facility. The Company is in compliance with all the covenants associated with the Revolving Facility as of the end of the period covered by this report.

As part of the Sivomatic acquisition, the Company assumed \$10.7 million in long term debt, recorded at fair value, consisting of two term loans, one of which matures in 2020 and the other of which matures in 2022. In the first quarter of 2020, the Company repaid \$1.0 million on these loans.

The Company has a committed loan facility in Japan. As of June 28, 2020, \$4.3 million was outstanding under this loan facility. Principal will be repaid in accordance with the payment schedule ending in 2021. The Company repaid \$0.3 million on this facility during the first half of 2020.

As of June 28, 2020, the Company had \$41.8 million in uncommitted short-term bank credit lines, of which approximately \$0.3 million was in use. The credit lines are primarily outside the U.S. and are generally one year in term at competitive market rates at large, well-established institutions. The Company typically uses its available credit lines to fund working capital requirements or local capital spending needs. We anticipate that capital expenditures for 2020 should be between \$55 million and \$65 million, principally related to the construction of PCC plants and other opportunities that meet our strategic growth objectives. We expect to meet our other long-term financing requirements from internally generated funds, committed and uncommitted bank credit lines and, where appropriate, project financing of certain satellite plants.

On April 5, 2016, the Company entered into a floating to fixed interest rate swap for an initial aggregate notional amount of \$300 million to limit exposure to interest rate increases related to a portion of the Company's floating rate indebtedness. This swap agreement hedges a portion of contractual floating rate interest through its expiration in May 2021. As a result of the agreement, the Company's effective fixed interest rate on the notional amount floating rate indebtedness will be 4.25%. The fair value of this instrument at June 28, 2020 was a liability of \$0.2 million.

During the second quarter of 2018, the Company entered into a floating to fixed interest rate swap for a notional amount of \$150 million. Additionally, the Company entered into a cross currency rate swap with a total notional value of \$150 million to exchange monthly fixed-rate interest payments in U.S. dollars for monthly fixed-rate interest rate payments in Euros. These swaps mature in May 2023. As a result of these swaps, the Company's effective fixed interest rate on the notional floating rate indebtedness will be 2.5%. The combined fair value of these instruments at June 28, 2020 was an asset of \$5.9 million.

On October 23, 2019, the Company's Board of Directors authorized the Company's management to repurchase, at its discretion, up to \$75 million of the Company's shares over a one-year period. As of June 28, 2020, 851,258 shares have been repurchased under this program for \$42.6 million, or an average price of approximately \$50.00 per share. There were no share repurchases in the second quarter of 2020.

The Company is required to make future payments under various contracts, including debt agreements and lease agreements. The Company also has commitments to fund its pension plans and provide payments for other postretirement benefit plans. During the six months ended June 28, 2020, there were no material changes in the Company's contractual obligations. For an in-depth discussion of the Company's contractual obligations, see "Liquidity and Capital Resources" in "Management's Discussion and Analysis of Financial Condition and Results of Operations" in the Company's Annual Report on Form 10-K for the year ended December 31, 2019.

As we cannot predict the duration or scope of the COVID-19 pandemic and its impact on our customers and suppliers, the negative financial impact to our results cannot be reasonably estimated, but could be material. We are actively managing the business to maintain cash flow and we have significant liquidity. We believe that these factors will allow us to meet our anticipated funding requirements.

Cautionary Statement for "Safe Harbor" Purposes under the Private Securities Litigation Reform Act of 1995

The Private Securities Litigation Reform Act of 1995 provides a safe harbor for forward-looking statements made by or on behalf of the Company. This report contains statements that the Company believes may be "forward-looking statements" within the meaning of Section 21E of the Securities Exchange Act of 1934, particularly statements relating to the Company's objectives, plans or goals, future actions, future performance or results of current and anticipated products, sales efforts, expenditures, and financial results. From time to time, the Company also provides forward-looking statements in other publicly-released materials, both written and oral. Forward-looking statements provide current expectations and forecasts of future events such as new products, revenues and financial performance, and are not limited to describing historical or current facts. They can be identified by the use of words such as "believes," "expects," "plans," "intends," "anticipates," and other words and phrases of similar meaning.

Forward-looking statements are necessarily based on assumptions, estimates and limited information available at the time they are made. A broad variety of risks and uncertainties, both known and unknown, as well as the inaccuracy of assumptions and estimates, can affect the realization of the expectations or forecasts in these statements. Many of these risks and uncertainties are difficult to predict or are beyond the Company's control. Consequently, no forward-looking statement can be guaranteed. Actual future results may vary materially. Significant factors that could affect the expectations and forecasts include the duration and scope of the COVID-19 pandemic, and government and other third-party responses to it; worldwide general economic, business, and industry conditions, including the effects of the COVID-19 pandemic on the global economy; the cyclical nature of our customers' businesses and their changing demands; the dependence of certain of our product lines on the commercial construction and infrastructure markets, the domestic building and construction markets, and the automotive market; our ability to effectively achieve and implement our growth initiatives; our ability to service our debt; our ability to comply with the covenants in the agreements governing our debt; our ability to renew or extend long term sales contracts for our PCC satellite operations; consolidation in customer industries, principally paper, foundry and steel; compliance with or changes to regulation in the areas of environmental, health and safety, and tax; claims for legal, environmental and tax matters or product stewardship issues; our ability to successfully develop new products; our ability to defend our intellectual property; the increased risks of doing business abroad; the availability of raw materials and access to ore reserves at our mining operations; increases in costs of raw materials, energy, or shipping; our ability to compete in very competitive industries; operating risks and capacity limitations affecting our production facilities; seasonality of some of our segments; cybersecurity and other threats relating to our information technology systems; and other risks set forth under "Item 1A — Risk Factors" in the Company's Annual Report on Form 10-K for the year ended December 31, 2019, and in Exhibit 99 to this Quarterly Report on Form 10-Q.

The Company undertakes no obligation to update any forward-looking statements to reflect events or circumstances that arise after the date hereof. Investors should refer to the Company's subsequent filings under the Securities Exchange Act of 1934 for further disclosures.

Recently Issued Accounting Standards

Changes to accounting principles generally accepted in the United States of America (U.S. GAAP) are established by the Financial Accounting Standards Board (FASB) in the form of accounting standards updates (ASUs) to the FASB's Accounting Standards Codification. The Company considers the applicability and impact of all ASUs. ASUs not listed below were assessed and determined to be either not applicable or are expected to have minimal impact on our consolidated financial position and results of operations.

Investments - Equity Securities, Investments - Equity Method and Joint Ventures, and Derivatives and Hedging

In January 2020, the FASB issued ASU 2020-01, "Investments - Equity Securities, Investments - Equity Method and Joint Ventures, and Derivatives and Hedging", which addresses the accounting for the transition into and out of the equity method and measuring certain purchased options and forward contracts to acquire investments. The standard is effective for interim and annual periods beginning on or after December 15, 2020. The adoption of this standard is not expected to have a material impact on the Company's financial statements.

Recently Adopted Accounting Standards

Measurement of Credit Losses on Financial Instruments

In June 2016, the FASB issued ASU 2016-13, "Measurement of Credit Losses on Financial Instruments", which replaces existing incurred loss impairment guidance and establishes a single allowance framework for financial assets carried at amortized cost. The Company adopted this guidance on January 1, 2020 using a modified retrospective transition method. The Company did not record a cumulative-effect adjustment upon adoption of this standard. Adoption of this standard did not have a material impact on the Company's consolidated financial statements.

Critical Accounting Policies

Our discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with U.S. generally accepted accounting principles. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities.

On an ongoing basis, we evaluate our estimates and assumptions, including those related to revenue recognition, valuation of long-lived assets, goodwill and other intangible assets, income taxes, including valuation allowances and pension plan assumptions. We base our estimates on historical experience and on other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that cannot readily be determined from other sources. There can be no assurance that actual results will not differ from those estimates.

ITEM 3. Quantitative and Qualitative Disclosures about Market Risk

Market risk represents the risk of loss that may impact our financial position, results of operations or cash flows due to adverse changes in market prices and foreign currency and interest rates. We are exposed to market risk because of changes in foreign currency exchange rates as measured against the U.S. dollar. We do not anticipate that near-term changes in exchange rates will have a material impact on our future earnings or cash flows. However, there can be no assurance that a sudden and significant decline in the value of foreign currencies would not have a material adverse effect on our financial condition and results of operations. A portion of our long-term bank debt bears interest at variable rates; therefore, our results of operations would be affected by interest rate changes to the extent of such outstanding bank debt. An immediate 10 percent change in interest rates would have a material effect on our results of operations over the next fiscal year. A one-percent change in interest rates, inclusive of the impact of our interest rate derivatives, would result in \$2.0 million in incremental interest charges on an annual basis.

We do not enter into derivatives or other financial instruments for trading or speculative purposes. When appropriate, we enter into derivative financial instruments, such as forward exchange contracts, hedges and interest rate swaps, to mitigate the impact of foreign exchange rate movements and interest rate movements on our operating results. The counterparties are major financial institutions. Such forward exchange contracts, hedges and interest rate swaps would not subject us to additional risk from exchange rate or interest rate movements because gains and losses on these contracts would offset losses and gains on the assets, liabilities, and transactions being hedged.

On April 5, 2016, the Company entered into a floating to fixed interest rate swap for an initial aggregate notional amount of \$300 million to limit exposure to interest rate increases related to a portion of the Company's floating rate indebtedness. This swap agreement hedges a portion of contractual floating rate interest through its expiration in May 2021. As a result, the Company's effective fixed interest rate on the notional amount floating rate indebtedness will be 4.25% through May 2021. The fair value of this instrument at June 28, 2020 was a liability of \$0.2 million.

During the second quarter of 2018, the Company entered into a floating to fixed interest rate swap for a notional amount of \$150 million. Additionally, the Company entered into a cross currency rate swap with a total notional value of \$150 million to exchange monthly fixed-rate interest payments in U.S. dollars for monthly fixed-rate interest rate payments in Euros. These swaps mature in May 2023. As a result of these swaps, the Company's effective fixed interest rate on the notional floating rate indebtedness will be 2.5%. The combined fair value of these instruments at June 28, 2020 was an asset of \$5.9 million.

ITEM 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

As of the end of the period covered by this report, and under the supervision and with participation of the Company's management, including the Chief Executive Officer and the Chief Financial Officer, the Company carried out an evaluation of the effectiveness of the design and operation of the Company's disclosure controls and procedures, pursuant to Exchange Act Rule 13a-15(b). Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that as of the end of the period covered by this report the Company's disclosure controls and procedures were effective.

Changes in Internal Control Over Financial Reporting

There were no changes in the Company's internal controls over financial reporting during the quarter ended June 28, 2020 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II – OTHER INFORMATION

Item 1. Legal Proceedings

The Company and its subsidiaries are the subject of various pending legal actions in the ordinary course of their businesses. Except as described below, none of such legal proceedings are material.

Silica and Asbestos Litigation

Certain of the Company's subsidiaries are among numerous defendants in a number of cases seeking damages for exposure to silica or to asbestos containing materials. As of June 28, 2020, the Company currently has three pending silica cases and 176 pending asbestos cases. In total, 1,493 silica cases and 83 asbestos cases were dismissed as of the end of the second quarter, not including any lawsuits against AMCOL or American Colloid Company dismissed prior to our acquisition of AMCOL. Forty-six new asbestos cases were filed in the second quarter of 2020. Five asbestos cases and no silica cases were dismissed during the second quarter of 2020. Most of these claims do not provide adequate information to assess their merits, the likelihood that the Company will be found liable, or the magnitude of such liability, if any. Additional claims of this nature may be made against the Company or its subsidiaries. At this time management anticipates that the amount of the Company's liability, if any, and the cost of defending such claims, will not have a material effect on its financial position or results of operations.

The Company has settled only one silica lawsuit, for a nominal amount, and no asbestos lawsuits to date (not including any that may have been settled by AMCOL prior to completion of the acquisition). We are unable to state an amount or range of amounts claimed in any of the lawsuits because state court pleading practices do not require identifying the amount of the claimed damage. The aggregate cost to the Company for the legal defense of these cases since inception continues to be insignificant. The majority of the costs of defense for these cases, excluding cases against AMCOL or American Colloid, are reimbursed by Pfizer Inc. pursuant to the terms of certain agreements entered into in connection with the Company's initial public offering in 1992. The Company is entitled to indemnification, pursuant to agreement, for sales prior to the initial public offering. Of the 176 pending asbestos cases as of the end of the second quarter, 136 of the non-AMCOL cases are subject to indemnification, in whole or in part, because the plaintiffs claim liability based on sales of products that occurred either entirely before the initial public offering, or both before and after the initial public offering. In 33 of the 38 remaining non-AMCOL cases as of the end of the first quarter are subject to indemnity in part until dates of exposure, which were not alleged in the complaint, can be ascertained in discovery. In the five remaining non-AMCOL cases, exposure is alleged to have been after the Company's initial public offering in 1992. The remaining two cases involve AMCOL only, so no Pfizer indemnity is available. Our experience has been that the Company is not liable to plaintiffs in any of these lawsuits and the Company does not expect to pay any settlements or jury verdicts in these lawsuits.

Other Litigation

The Company is also the respondent in an arbitration requested by the Plan Administrator for the Bankruptcy Estate of Novinda Corp. ("Novinda"), a start-up company which declared bankruptcy in April 2016 and with which the Company had several relationships, including an equity and debt interest and a product supply relationship. On July 30, 2018, the Plan Administrator filed a Demand for Arbitration against the Company and certain of its officers for the alleged destruction of Novinda's business. In the second quarter of 2020, the arbitration panel rendered an award in the arbitration, finding for the Company in part and for Novinda in part. The total amount of the award has not yet been finalized. The Company has recorded a charge of \$8.0 million related to this matter in the second quarter of 2020, representing its reasonable estimate of the damages, interest and costs awarded by the panel to Novinda. In addition, the Company has recorded a total of \$11.8 million in litigation expense related to this matter, \$0.9 million of which were recorded in 2020.

Environmental Matters

On April 9, 2003, the Connecticut Department of Environmental Protection issued an administrative consent order relating to our Canaan, Connecticut plant where both our Refractories segment and Specialty Minerals segment have operations. We agreed to the order, which includes provisions requiring investigation and remediation of contamination associated with historic use of polychlorinated biphenyls ("PCBs") and mercury at a portion of the site. We have completed the required investigations and submitted several reports characterizing the contamination and assessing site-specific risks. We are awaiting regulators' approval of the risk assessment report, which will form the basis for a proposal by the Company concerning eventual remediation.

We believe that the most likely form of overall site remediation will be to leave the existing contamination in place (with some limited soil removal), encapsulate it, and monitor the effectiveness of the encapsulation. We anticipate that a substantial portion of the remediation cost will be borne by the United States based on its involvement at the site from 1942 – 1964, as historic documentation indicates that PCBs and mercury were first used at the facility at a time of U.S. government ownership for production of materials needed by the military. Pursuant to a Consent Decree entered on October 24, 2014, the United States paid the Company \$2.3 million in the 4th quarter of 2014 to resolve the Company’s claim for response costs for investigation and initial remediation activities at this facility through October 24, 2014. Contribution by the United States to any future costs of investigation or additional remediation has, by agreement, been left unresolved. Though the cost of the likely remediation remains uncertain pending completion of the phased remediation decision process, we have estimated that the Company’s share of the cost of the encapsulation and limited soil removal described above would approximate \$0.4 million, which has been accrued as of June 28, 2020.

The Company is evaluating options for upgrading the wastewater treatment facilities at its Adams, Massachusetts plant. This work has been undertaken pursuant to an administrative Consent Order originally issued by the Massachusetts Department of Environmental Protection (“DEP”) on June 18, 2002. This order was amended on June 1, 2009 and on June 2, 2010. The amended Order includes the investigation by January 1, 2022 of options for ensuring that the facility’s wastewater treatment ponds will not result in unpermitted discharge to groundwater. Additional requirements of the amendment include the submittal by July 1, 2022 of a plan for closure of a historic lime solids disposal area. Preliminary engineering reviews completed in 2005 indicate that the estimated cost of wastewater treatment upgrades to operate this facility beyond 2024 may be between \$6 million and \$8 million. The Company estimates that the remaining remediation costs would approximate \$0.4 million, which has been accrued as of June 28, 2020.

The Company and its subsidiaries are not party to any other material pending legal proceedings, other than routine litigation incidental to their businesses.

ITEM 1A. Risk Factors

For a description of Risk Factors, see Exhibit 99 attached to this report. There have been no material changes to our risk factors from those disclosed in our 2019 Annual Report on Form 10-K, except for the following:

We have been and expect to continue to be adversely affected by the recent COVID-19 outbreak.

The COVID-19 outbreak, declared a pandemic by the World Health Organization, has surfaced in nearly all regions around the world. Governments around the world have taken preventative measures to contain or mitigate the outbreak, including travel restrictions, border closings, restrictions on public gatherings, shelter-in-place restrictions and limitations on business. This has affected, and is continuing to affect, the global economy, the United States economy and the global financial markets. The outbreak and resulting preventative measures have disrupted our operations and affected our business, and we expect this to continue. The impacts include, but are not limited to, the following:

- We have experienced, and expect to experience in the future, temporary facility closures in response to government mandates in certain jurisdictions in which we operate. We may also be required to close certain of our facilities for the safety of our employees in response to positive diagnoses for COVID-19. Even in facilities that are not closed, we could be affected by reductions in employee availability and effectiveness, changes in operating procedures, and increased costs.
- Our customers have been, and may continue to be, affected by COVID-19 and the business slowdown caused by preventative measures, resulting in decreased demand for our products and services, delayed payments from customers and uncollectable accounts.
- Our supply chain could be disrupted. This could materially adversely impact our ability to secure raw materials and supplies for our facilities, which could materially adversely affect our operations.
- Significant disruption of global financial markets could have a negative impact on our ability to access capital in the future.
- Further or prolonged impact from COVID-19 could result in impairment of asset charges, including long-lived or intangible assets, inventory or bad debt charges.

We cannot predict the degree to which, or the time period that, global economic conditions and our business, sales, liquidity, financial condition and results of operations will continue to be affected by the COVID-19 pandemic and the resulting preventative measures. The extent to which we are affected will depend on future developments, including the duration of the outbreak, travel restrictions, business and workforce disruptions, and the effectiveness of actions taken to contain and treat the disease. The effects on our business, sales, liquidity, financial condition and results of operations could be material.

Our customers' businesses are cyclical or have changing regional demands. Our operations are subject to these trends and we may not be able to mitigate these risks.

Our Performance Materials segment's sales are predominantly derived from the metalcasting market. The metalcasting market is dependent upon the demand for castings for automobile components, farm and construction equipment, oil and gas production equipment, power generation turbine castings, and rail car components. Many of these types of equipment are sensitive to fluctuations in demand during periods of recession or difficult economic conditions, including the current conditions resulting from the COVID-19 pandemic, which has affected and we expect will continue to affect the demand for our Performance Materials segment's products and services.

In the paper industry, which is served by our Paper PCC product line, production levels for uncoated freesheet within North America and Europe, our two largest markets are projected to continue to decrease. The reduced demand for premium writing paper products has also caused recent paper mill closures. We expect paper consumption to be down in the next quarter as a result of the COVID-19 pandemic.

Our Refractories segment primarily serves the steel industry. Global steel production has been and will continue to be affected by volatility in the market due to the COVID-19 pandemic. We expect steel consumption to be lower due to delays in the construction and automotive industries.

Demand for our Energy Services segment's products and services is affected by the level of exploration, development, and production activity of, and the corresponding capital spending by, oil and natural gas companies, which are heavily influenced by the benchmark price of these commodities. Oil and natural gas prices decreased significantly as a result of the COVID-19 pandemic with West Texas Intermediate (WTI) oil spot prices declining from a high of \$63 per barrel in January 2020 to a low of \$13 per barrel in April 2020. We expect the current decline, if sustained, will continue to cause oil and natural gas companies to reduce their capital expenditures and production and exploration activities. This has the effect of decreasing the demand and increasing competition for the services we provide. In addition, the performance of our Energy Services segment is affected by changes in technologies, locations of customers' targeted reserves, and competition in various geographic markets.

Servicing the Company's debt will require a significant amount of cash. This could reduce the Company's flexibility to respond to changing business and economic conditions or fund capital expenditures or working capital needs. Our ability to generate cash depends on many factors beyond our control.

At June 28, 2020, on an as adjusted basis after giving effect to the transactions connected with our issuance of our 5.0% Senior Notes due 2028, the Company would have had \$1,063.3 million aggregate principal amount of total indebtedness (consisting primarily of \$658.0 million aggregate principal amount of loans under the fixed rate tranche of our term facility and \$400.0 million aggregate principal amount of notes) and an additional \$290.6 million of borrowing capacity under the revolving credit facility (after giving effect to \$9.4 million of outstanding letters of credit). Our outstanding indebtedness will require a significant amount of cash to make interest payments. Further, the interest rate on a significant portion of our borrowings under our senior secured credit facility is based on LIBOR interest rates, which could result in higher interest expense in the event of an increase in interest rates. In addition, since these borrowings under our senior secured credit facility extend beyond 2021, the interest rates for these obligations might be subject to change based on the United Kingdom's Financial Conduct Authority's intention to phase out LIBOR by the end of 2021. Our ability to pay interest on our debt and to satisfy our other debt obligations will depend in part upon our future financial and operating performance and upon our ability to renew or refinance borrowings. Prevailing economic conditions and financial, business, competitive, regulatory and other factors, many of which are beyond our control, will affect our ability to make these payments. We cannot guarantee that our business will generate sufficient cash flow from operations or that future borrowings will be available to us in an amount sufficient to enable us to fund our liquidity needs. If we are unable to generate sufficient cash flow to meet our debt service obligations, we will have to pursue one or more alternatives, such as reducing or delaying capital or other expenditures, refinancing debt, selling assets, or raising equity capital. Further, the requirement to make significant interest payments may reduce the Company's flexibility to respond to changing business and economic conditions or fund capital expenditure or working capital needs and may increase the Company's vulnerability to adverse economic conditions.

The agreements and instruments governing our debt contain various covenants that could significantly impact our ability to operate our business.

The agreement governing our senior secured credit facility and the indenture that governs our 5.0% Senior Notes due 2028 contain a number of significant covenants that, among other things, limit our ability to: incur or guarantee additional indebtedness, pay dividends or make other distributions or repurchase or redeem capital stock, prepay, redeem or repurchase certain debt, issue certain preferred stock or similar equity securities, make loans and investments, sell or otherwise dispose of assets, incur liens, enter into transactions with affiliates, enter into agreements restricting our subsidiaries' ability to pay dividends and consolidate, merge or sell all or substantially all of our assets. In addition, our revolving credit facility, if used, requires us to comply with specific financial ratios, including a maximum net leverage ratio, under which we are required to achieve specific financial results. Our ability to comply with these provisions may be affected by events beyond our control. A breach of any of these covenants would result in a default under the applicable agreements. In the event of any default under our senior secured credit facility, our lenders could elect to declare all amounts borrowed under the credit agreement, together with accrued interest thereon, to be due and payable. In such an event, we cannot assure you that we would have sufficient assets to pay debt then outstanding under the credit agreement, the indenture governing our notes, and any other agreements governing our debt. Any future refinancing of the senior secured credit facility is likely to contain similar restrictive covenants. We may also incur future debt obligations that might subject us to additional restrictive covenants that could affect our financial and operational flexibility. We cannot assure you that we will be granted waivers or amendments to these agreements if for any reason we are unable to comply with these agreements or that we will be able to refinance our debt on terms acceptable to us, or at all.

ITEM 2. Unregistered Sales of Equity Securities and Use of Proceeds

On October 23, 2019, the Company's Board of Directors authorized the Company's management to repurchase, at its discretion, up to \$75 million of the Company's shares over a one-year period. As of June 28, 2020, 851,258 shares have been repurchased under this program for \$42.6 million, or an average price of approximately \$50.00 per share. There were no share repurchases in the second quarter of 2020.

ITEM 3. Default Upon Senior Securities

Not applicable.

ITEM 4. Mine Safety Disclosures

The information concerning mine safety violations or other regulatory matters required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 104 of Regulation S-K is included in Exhibit 95 to this Quarterly Report on Form 10-Q.

ITEM 5. Other Information

None

ITEM 6. Exhibits

<u>Exhibit No.</u>	<u>Exhibit Title</u>
4.1	Indenture, dated as of June 30, 2020, by and among Minerals Technologies Inc., the subsidiary guarantors from time to time party thereto and The Bank of New York Mellon Trust Company, N.A., as a trustee (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on June 30, 2020.)
10.1	Amendment to the Minerals Technologies Inc. Savings and Investment Plan
15	Letter Regarding Unaudited Interim Financial Information.
31.1	Rule 13a-14(a)/15d-14(a) Certification executed by the Company's principal executive officer.
31.2	Rule 13a-14(a)/15d-14(a) Certification executed by the Company's principal financial officer.
32	Section 1350 Certifications.
95	Information concerning Mine Safety Violations
99	Risk Factors
101.INS	XBRL Instance Document (the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document).
101.SCH	Inline XBRL Taxonomy Extension Schema
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase
104	Cover Page Interactive Data File (formatted as inline XBRL and contain in Exhibit 101).

SIGNATURE

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

Minerals Technologies Inc.

By: /s/ Matthew E. Garth

Matthew E. Garth
Senior Vice President, Finance and Treasury,
Chief Financial Officer

July 31, 2020

**AMENDMENT TO THE
MINERALS TECHNOLOGIES INC. SAVINGS AND INVESTMENT PLAN**

WHEREAS, Minerals Technologies Inc. (the "Employer") sponsors the Minerals Technologies Inc. Savings and Investment Plan (the "Plan"); and

WHEREAS, the Employer reserved the right to amend the Plan; and

WHEREAS, the Employer desires to amend the Plan to add a Roth contribution feature to the Plan, permit Participants to convert vested non-Roth accounts to Roth accounts, permit Roth rollovers, to modify the in-service hardship distribution provision to reflect both elected optional provisions and required provisions of final Treasury regulations issued in September 2019, and permit forfeitures to fund safe-harbor contributions, QNECs, and QMACs;

NOW, THEREFORE, the Plan is hereby amended, effective as of January 1, 2020 unless otherwise set forth herein, as follows:

1. Section 1.12 of the Plan is hereby amended by deleting it in its entirety and replacing it with the following:

1.12 **"FAIL-SAFE CONTRIBUTION"** shall mean a qualified nonelective contribution which is a contribution (other than matching contributions or Qualified Matching Contributions (within the meaning of Section 10.2)) made by the Employer and allocated to Participants' Accounts that the Participants may not elect to receive in cash until distribution from the Plan; that is nonforfeitable when allocated to a Participant's Account, and that is distributable only in accordance with the distribution provisions under Section 401(k) of the Code and the regulations promulgated thereunder."

2. Effective April 1, 2020, Section 4.1(a) of the Plan is hereby amended by deleting the first two paragraphs thereof in their entirety and replacing them with the following three paragraphs:

"(a) *Elections.* Subject to the provisions of Section 4.2 below, a Participant may elect to contribute to the Plan a portion of his Compensation for a Plan Year on a pre-tax basis and/or in the form of designated Roth contributions. The amount of a Participant's Compensation contributed in accordance with the Participant's election shall be withheld by the Employer from the Participant's Compensation on a ratable basis throughout the Plan Year. Except as otherwise provided in Section 7.9, elective deferrals contributed to the Plan as one type, either as a pre-tax or a designated Roth contribution, may not later be reclassified as the other type. For purposes of making elective deferrals pursuant to this Section, only Compensation earned while eligible to make such deferrals shall be considered. The amount deferred on behalf of each Participant shall be contributed by the Employer to the Plan and allocated to the portions of the Participant's Account consisting of pre-tax contributions and/or designated Roth contributions, as the case may be. No contributions other than designated Roth contributions, in-plan Roth conversion amounts, and properly attributable earnings shall be credited to the Participant's Roth account, and gains, losses and other credits or charges shall be allocated on a reasonable and consistent basis to such account.

The Plan shall maintain a record of the amount of designated Roth contributions and in-plan Roth conversions, if any, that are in each Participant's Roth account.

Except as otherwise provided in Section 4.1(e) below, each Participant may elect to contribute from two percent (2%) to twenty percent (20%) of such Participant's Compensation as aggregate pre-tax and/or a designated Roth contributions. Notwithstanding the foregoing, a Participant who is a member of the United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union Local 521, at Minteq International, Inc., Dover Ohio plant may make a election to defer on a pre-tax and/or Roth basis from one percent (1%) to one hundred percent (100%) of any flat rate bonus paid to him during the Plan Year that is categorized in the Employer's payroll records as a "Dover Bonus," but any such election shall be separate from the Participant's normal elections and shall be made in accordance with procedures established the Administrator."

3. Effective April 1, 2020, Section 4.4 of the Plan is hereby amended by deleting such section in its entirety and replacing it with the following:

4.4 **ROLLOVERS AND TRANSFERS OF FUNDS FROM OTHER PLANS.** With the approval of the Administrator, there may be paid to the Trustee amounts which have been held under the following types of plans:

- (1) a qualified plan described in Section 401(a) or 403(a) of the Code, excluding after-tax employee contributions and including designated Roth contributions under Section 402A of the Code;
- (2) an annuity contract described in Section 403(b) of the Code, excluding after-tax employee contributions and including designated Roth contributions under Section 402A of the Code;

- (3) an eligible plan under Section 457(b) of the Code which is maintained by a state, political subdivision of a state, or any agency or instrumentality of a state or political subdivision of a state, excluding after-tax employee contributions and including designated Roth contributions under Section 402A of the Code; and
- (4) an individual retirement account.

Any amounts rolled over on behalf of any Employee shall be nonforfeitable and shall be maintained under a separate Plan account. Any amounts transferred (not rolled over) on behalf of any Employee shall be maintained in accordance with procedures established by the Plan Administrator and applicable law. Amounts rolled over or transferred shall be paid in addition to amounts otherwise payable under this Plan. The amount of any such account shall be equal to the fair market value of such account as adjusted for income, expenses, gains, losses, and withdrawals attributable thereto.”

4. Effective April 1, 2020, Article Seven of the Plan is hereby amended by adding the following new subsection:

“7.9 IN-PLAN ROTH CONVERSIONS. Effective April 1, 2020, an active or terminated Participant may elect to transfer amounts from his non-Roth Account to his Roth account under the Plan in accordance with Section 402A(c)(4) of the Code and regulatory guidance and procedures established by the Administrator. Such transfer is irrevocable once made. The Plan will maintain such records as are necessary for the proper reporting of in-plan Roth conversions. A Participant may withdraw amounts that have been so transferred only when the Participant is eligible for a withdrawal or a distribution from the Account that is the source of such transferred amounts.”

5. Section 8.2 of the Plan is hereby amended by deleting such section in its entirety and replacing with the following:

“8.2 HARDSHIP DISTRIBUTIONS. In the case of a financial hardship resulting from a proven immediate and heavy financial need, an active Participant may receive a distribution not to exceed the lesser of (i) the value of the Participant's vested Account, without regard to Fail Safe Contributions, Employer Safe-Harbor Basic Matching Contributions under Section 4.3(a), any Safe-Harbor Matching Contributions transferred from the AMCOL Plan, any Special Employer Contributions under 4.3(c) or transferred from the AMCOL Plan, any Dover Employer Matching Contributions under 4.3(d), any Annual Dover Contributions under 4.3(e), and Qualified Match Contributions (within the meaning of 10.2), or (ii) the amount necessary to satisfy the financial hardship. The amount of any such immediate and heavy financial need may include any amounts necessary to pay Federal, state or local income taxes reasonably anticipated to result from the distribution. Such distribution shall be made in accordance with nondiscriminatory and objective standards and procedures consistently applied by the Administrator. For purposes of this Section, an active Participant shall include an Employee who has severed employment with the Employer but is still employed by a member of the Employer’s related group (as defined in Section 2.4(b)) and who has an Account under the Plan.

Hardship distributions under this Section shall be deemed to be the result of an immediate and heavy financial need if such distribution is to: (a) pay expenses for (or to obtain) medical care that would be deductible under Section 213(d) of the Code determined without regard to whether the expenses exceed seven and one-half percent (7.5%) of adjusted gross income; (b) purchase the principal residence of the Participant (excluding mortgage payments); (c) pay tuition and related educational fees for the next twelve (12) months of post-secondary education for the Participant, Participant's spouse, or any of the Participant's dependents (as defined in Section 152 of the Code, and without regard to Section 152(b)(1), (b)(2) and (d)(1)(B) of the Code); (d) prevent the eviction of the Participant from his principal residence or foreclosure on the Participant's principal residence; (e) pay funeral or burial expenses for the Participant’s deceased parent, spouse, children or dependents (as defined in Section 152 of the Code, and without regard to Section 152(d)(1)(B) of the Code); (f) repair damage to the Participant’s principal residence that would qualify for a casualty loss deduction under Section 165 of the Code (determined without regard to whether the loss exceeds ten percent (10%) of adjusted gross income, and effective January 14, 2019 determined without regard to whether the loss is as a result of a federally declared disaster), or (g) pay expenses and losses (including loss of income) incurred by the Participant on account of a disaster declared by the Federal Emergency Management Agency (FEMA) under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, Pub. L. 100-707, provided that the Participant’s principal residence or principal place of employment at the time of the disaster was located in an area designated by FEMA for individual assistance with respect to the disaster. Distributions paid pursuant to this Section shall be deemed to be made as of the Valuation Date immediately preceding the hardship distribution, and the Participant's Account shall be reduced accordingly.

A distribution shall be deemed necessary to satisfy an immediate and heavy financial need of a Participant if all of the following requirements are satisfied:

- (1) The distribution is not in excess of the amount of the immediate and heavy financial need of the Participant;
- (2) The Participant has obtained all currently available distributions, other than hardship distributions, under all plans maintained by the Employer; and
- (3) The Participant represents, in accordance with procedures established by the Administrator, that he has

insufficient cash or other liquid assets reasonably available to satisfy the financial need. The Administrator may rely on the Participant's representation unless the Administrator has actual knowledge to the contrary.

Any cessation of elective deferrals pursuant to this section 8.2 and taking effect on or before December 31, 2019 shall remain in effect as determined by the terms of the Plan and administrative policies then in place.

6. Section 10.1 of the Plan is hereby amended by adding the following sentence to the end of the first paragraph thereof:
"For Plan Years beginning after December 31, 2019, Distribution of Excess Elective Deferrals for a year shall be made first from the portion of the Participant's vested account consisting of any pre-tax contributions made under Section 4.1, then from any "designated Roth contributions" made under Section 4.1, unless the Participant specifies otherwise in accordance with the rules and procedures established by the Administrator."
7. Section 10.2(a) of the Plan is hereby amended by deleting the second and third paragraph thereof in their entirety and replacing them with the following:
"Amounts contributed as elective deferrals under Section 4.1(a) and, if so elected by the Employer, "Qualified Matching Contributions" (as defined below) and any Fail-Safe Contributions made under this Section, are considered to be amounts deferred pursuant to Section 401(k) of the Code. For purposes of this Section, these amounts are referred to as the "deferred amounts." For purposes of the "actual deferral percentage test" described below, (i) such deferred amounts must be made before the last day of the twelve (12)-month period immediately following the Plan Year to which the contributions relate, and (ii) the deferred amounts must relate to Compensation that (A) would have been received by the Participant in the Plan Year but for the Participant's election to make deferrals, (B) is attributable to services performed by the Participant in the Plan Year, or (C) is contributed in the form of "designated Roth contributions" pursuant to Section 402A of the Code, and, but for the Participant's election to make deferrals, would have been received by the Participant within two and one-half (2½) months after the close of the Plan Year. The Employer shall maintain records sufficient to demonstrate satisfaction of the actual deferral percentage test and the deferred amounts used in such test.

For purposes of this Section, "Qualified Matching Contributions" shall mean matching contributions that are nonforfeitable when allocated to Participants' Accounts under the Plan, are subject to the distribution limitations under Section 1.401(k)-1(d) of the Treasury Regulations and satisfy Section 1.401(k)-2(a)(6) of the Treasury Regulations."
8. Section 10.2(b)(4) of the Plan is hereby amended by deleting it in its entirety and replacing it with the following:
"(4) Accounting for Excess Contributions. Excess contributions shall be distributed from that portion of the Participant's Account attributable to such deferred amounts as follows: first from any pre-tax contributions made under Section 4.1, then from any "designated Roth contributions" made under Section 4.1, unless the Participant specifies otherwise in accordance with the rules and procedures established by the Administrator."
9. Except as hereinabove amended, the provisions of the Plan shall continue in full force and effect.

IN WITNESS WHEREOF, the Employer, by its duly authorized officer, has caused this Amendment to be executed on the 16th day of July, 2020.

MINERALS TECHNOLOGIES INC.

By: /s/ Thomas J. Meek

ACCOUNTANTS' ACKNOWLEDGEMENT

The Board of Directors
Minerals Technologies Inc.:

Re: Registration Statement Nos. 333-160002, 33-59080, 333-62739, 333-138245 and 333-206244

With respect to the subject registration statements, we acknowledge our awareness of the use therein of our report dated July 31, 2020 related to our review of interim financial information.

Pursuant to Rule 436 under the Securities Act of 1933 (the Act), such report is not considered part of a registration statement prepared or certified by an independent registered public accounting firm, or a report prepared or certified by an independent registered public accounting firm within the meaning of Sections 7 and 11 of the Act.

/s/ KPMG LLP

New York, New York
July 31, 2020

RULE 13a-14(a)/15d-14(a) CERTIFICATION

I, Douglas T. Dietrich, certify that:

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

Date: July 31, 2020

By: **/s/Douglas T. Dietrich**
Douglas T. Dietrich
Chief Executive Officer

RULE 13a-14(a)/15d-14(a) CERTIFICATION

I, Matthew E. Garth, certify that:

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

Date: July 31, 2020

By: **/s/Matthew E. Garth**

Matthew E. Garth

Senior Vice President, Finance and Treasury,
Chief Financial Officer

SECTION 1350 CERTIFICATIONS

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of Section 1350 of Chapter 63 of Title 18, United States Code), each of the undersigned officers of Minerals Technologies Inc., a Delaware corporation (the "Company"), does hereby certify that:

The Quarterly Report on Form 10-Q for the quarter ended June 28, 2020 (the "Form 10-Q") of the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and information contained in the Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: July 31, 2020

By: **/s/Douglas T. Dietrich**
Douglas T. Dietrich
Chief Executive Officer

Date: July 31, 2020

By: **/s/Matthew E. Garth**
Matthew E. Garth
Senior Vice President, Finance and Treasury,
Chief Financial Officer

The foregoing certification is being furnished solely pursuant to Exchange Act Rule 13a-14(b); is not deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, or otherwise subject to the liability of that section; and is not deemed to be incorporated by reference into any filing under the Securities Act of 1933 or the Exchange Act of 1934.

Section 1503 of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 104 of Regulation S-K contain certain reporting requirements regarding coal or other mine safety. The Company, through its subsidiaries Specialty Minerals Inc., Barretts Minerals Inc., and American Colloid Company, operates fourteen mines in the United States. The operation of our mines is subject to regulation by the federal Mine Safety and Health Administration ("MSHA") under the Federal Mine Safety and Health Act of 1977 (the "Mine Act"). MSHA inspects our mines on a regular basis and issues various citations and orders when it believes a violation has occurred under the Mine Act.

The following table sets forth the required information with respect to each mine for which we are the operator for the period March 30, 2020 to June 28, 2020:

Mine	Section 104(a) S&S (A)	Section 104(b) (B)	Section 104(d) (C)	Section 110(b) (2) (D)	Section 107(a) (E)	Proposed Assessments (F)	Fatalities (G)
Lucerne Valley, CA 04-00219	6	0	0	2	0	\$ 26,411	0
Canaan, CT 06-00019	0	0	0	0	0	\$ 2,459	0
Adams, MA 19-00035	4	0	0	0	0	\$ 7,841	0
Barretts Mill, Dillon, MT 24-00157	0	0	0	0	0	\$ 0	0
Regal Mine, Dillon, MT 24-01994	0	0	0	0	0	\$ 0	0
Treasure Mine, Dillon, MT 24-00160	0	0	0	0	0	\$ 0	0
Belle/Colony Mine, WY 48-00888	0	0	0	0	0	\$ 480	0
Belle Fourche Mill, SD 39-00049	0	0	0	0	0	\$ 0	0
Colony East, WY 48-00594	0	0	0	0	0	\$ 267	0
Colony West, WY 48-00245	0	0	0	0	0	\$ 0	0
Gascoyne, ND 32-00459	0	0	0	0	0	\$ 0	0
Lovell, WY 48-00057	0	0	0	0	0	\$ 9,777	0
Sandy Ridge, AL 01-00093	0	0	0	0	0	\$ 0	0
Yellowtail, WY 48-00607	0	0	0	0	0	\$ 123	0

- (A) The total number of violations of mandatory health or safety standards that could significantly and substantially contribute to the cause and effect of a mine safety or health hazard under section 104 of the Mine Act for which we received a citation from MSHA.
- (B) The total number of orders issued under section 104(b) of the Mine Act.
- (C) The total number of citations and orders for unwarrantable failure of the Company to comply with mandatory health or safety standards under section 104(d) of the Mine Act.
- (D) The total number of flagrant violations under section 110(b)(2) of the Mine Act.
- (E) The total number of imminent danger orders issued under section 107(a) of the Mine Act.
- (F) The total dollar value of proposed assessments from MSHA under the Mine Act.
- (G) The total number of mining-related fatalities, other than fatalities determined by MSHA to be unrelated to mining activity.

During the period March 30, 2020 to June 28, 2020, we did not receive any written notice from MSHA, with respect to any mine for which we are the operator, of (A) a pattern of violations of mandatory health or safety standards that are of such nature as could have significantly and substantially contributed to the cause and effect of mine health and safety hazards under section 104(e) of the Mine Act or (B) the potential to have such a pattern.

The following table sets forth the required information with respect to legal actions before the Federal Mine Safety and Health Review Commission involving each mine for which we are the operator for the period March 30, 2020 to June 28, 2020:

Mine	Legal Actions Pending as of Last Day of Period ⁽¹⁾	Legal Actions Initiated During Period	Legal Actions Resolved During Period
------	--	--	---

Lucerne Valley, CA	0	0	0
Canaan, CT	0	0	0
Adams, MA	4	2	0
Barretts Mill, Dillon, MT	0	0	0
Regal Mine, Dillon, MT	0	0	0
Treasure Mine, Dillon, MT	0	0	0
Belle/Colony Mine, WY	0	0	0
Belle Fourche Mill, SD	0	0	0
Colony East, WY	2	1	0
Colony West, WY	0	0	0
Gascoyne, ND	0	0	0
Lovell, WY	1	1	0
Sandy Ridge, AL	0	0	0
Yellowtail, WY	0	0	0

(1) Of the three legal actions pending as of the last day of the period, all are notices of contest, as referenced in Subpart B of 29 CFR Part 2700.

RISK FACTORS

Our business faces significant risks. Set forth below are all risks that we believe are material at this time. Our business, financial condition and results of operations could be materially adversely affected by any of these risks. These risks should be read in conjunction with the other information in the Company's Annual Report on Form 10-K for the year ended December 31, 2019, and this Quarterly Report on Form 10-Q.

We have been and expect to continue to be adversely affected by the recent COVID-19 outbreak.

The COVID-19 outbreak, declared a pandemic by the World Health Organization, has surfaced in nearly all regions around the world. Governments around the world have taken preventative measures to contain or mitigate the outbreak, including travel restrictions, border closings, restrictions on public gatherings, shelter-in-place restrictions and limitations on business. This has affected, and is continuing to affect, the global economy, the United States economy and the global financial markets. The outbreak and resulting preventative measures have disrupted our operations and affected our business, and we expect this to continue. The impacts include, but are not limited to, the following:

- We have experienced, and expect to experience in the future, temporary facility closures in response to government mandates in certain jurisdictions in which we operate. We may also be required to close certain of our facilities for the safety of our employees in response to positive diagnoses for COVID-19. Even in facilities that are not closed, we could be affected by reductions in employee availability and effectiveness, changes in operating procedures, and increased costs.
- Our customers have been, and may continue to be, affected by COVID-19 and the business slowdown caused by preventative measures, resulting in decreased demand for our products and services, delayed payments from customers and uncollectable accounts.
- Our supply chain could be disrupted. This could materially adversely impact our ability to secure raw materials and supplies for our facilities, which could materially adversely affect our operations.
- Significant disruption of global financial markets could have a negative impact on our ability to access capital in the future.
- Further or prolonged impact from COVID-19 could result in impairment of asset charges, including long-lived or intangible assets, inventory or bad debt charges.

We cannot predict the degree to which, or the time period that, global economic conditions and our business, sales, liquidity, financial condition and results of operations will continue to be affected by the COVID-19 pandemic and the resulting preventative measures. The extent to which we are affected will depend on future developments, including the duration of the outbreak, travel restrictions, business and workforce disruptions, and the effectiveness of actions taken to contain and treat the disease. The effects on our business, sales, liquidity, financial condition and results of operations could be material.

Worldwide general economic, business, and industry conditions may have an adverse effect on the Company's results.

The global economic instability caused by the COVID-19 pandemic has caused and we expect will continue to cause, among other things, declining consumer and business confidence, volatile raw material prices, instability in credit markets, high unemployment, fluctuating interest and exchange rates, and other challenges in the countries in which we operate. The Company's business and operating results could be adversely affected by these global economic conditions. The Company's customers and potential customers may experience deterioration of their businesses, cash flow shortages, and difficulty obtaining financing. As discussed below, the industries we serve have in the past been adversely affected by the uncertain global economic climate due to the cyclical nature of their businesses. As a result, existing or potential customers may reduce or delay their growth and investments and their plans to purchase products and may not be able to fulfill their obligations in a timely fashion. Further, suppliers could experience similar conditions, which could affect their ability to fulfill their obligations to the Company. Adversity within capital markets may also impact the Company's results of operations by negatively affecting the amount of expense the Company records for its pension and other postretirement benefit plans. Actuarial valuations used to calculate income or expense for the plans reflect assumptions about financial market and other economic conditions – the most significant of which are the discount rate and the expected long-term rate of return on plan assets. Such actuarial valuations may change based on changes in key economic indicators. Global economic markets remain uncertain, and there can be no assurance that market conditions will improve in the near future. Future weakness in the global economy could materially and adversely affect our business and operating results.

Our customers' businesses are cyclical or have changing regional demands. Our operations are subject to these trends and we may not be able to mitigate these risks.

Our Performance Materials segment's sales are predominantly derived from the metalcasting market. The metalcasting market is dependent upon the demand for castings for automobile components, farm and construction equipment, oil and gas production equipment, power generation turbine castings, and rail car components. Many of these types of equipment are sensitive to fluctuations in demand during periods of recession or difficult economic conditions, including the current conditions resulting from the COVID-19 pandemic, which has affected and we expect will continue to affect the demand for our Performance Materials segment's products and services.

In the paper industry, which is served by our Paper PCC product line, production levels for uncoated freesheet within North America and Europe, our two largest markets are projected to continue to decrease. The reduced demand for premium writing paper products has also caused recent paper mill closures. We expect paper consumption to be down in the next quarter as a result of the COVID-19 pandemic.

Our Refractories segment primarily serves the steel industry. Global steel production has been and will continue to be affected by volatility in the market due to the COVID-19 pandemic. We expect steel consumption to be lower due to delays in the construction and automotive industries.

Demand for our Energy Services segment's products and services is affected by the level of exploration, development, and production activity of, and the corresponding capital spending by, oil and natural gas companies, which are heavily influenced by the benchmark price of these commodities. Oil and natural gas prices decreased significantly as a result of the COVID-19 pandemic with West Texas Intermediate (WTI) oil spot prices declining from a high of \$63 per barrel in January 2020 to a low of \$13 per barrel in April 2020. We expect the current decline, if sustained, will continue to cause oil and natural gas companies to reduce their capital expenditures and production and exploration activities. This has the effect of decreasing the demand and increasing competition for the services we provide. In addition, the performance of our Energy Services segment is affected by changes in technologies, locations of customers' targeted reserves, and competition in various geographic markets.

Our Environmental Products and Building Materials products sales are predominantly derived from the commercial construction and infrastructure markets. In addition, our Processed Minerals and Specialty PCC product lines are affected by the domestic building and construction markets, as well as the automotive market.

Demand for our products is subject to trends in these markets. During periods of economic slowdown, our customers often reduce their capital expenditures and defer or cancel pending projects. Such developments occur even amongst customers that are not experiencing financial difficulties. In addition, these trends could cause our customers to face liquidity issues or bankruptcy, which could deteriorate the aging of our accounts receivable, increase our bad debt exposure and possibly trigger impairment of assets or realignment of our businesses. The Company has taken steps to reduce its exposure to variations in its customers' businesses, including by diversifying its portfolio of products and services; through geographic expansion, and by structuring most of its long-term satellite PCC contracts to provide a degree of protection against declines in the quantity of product purchased, since the price per ton of PCC generally rises as the number of tons purchased declines. In addition, many of the Company's product lines lower its customers' costs of production or increase their productivity, which should encourage them to use its products. However, there can be no assurance that these efforts will mitigate the risks of our dependence on these industries. Continued weakness in the industries we serve has had, and may in the future have, an adverse effect on sales of our products and our results of operations. A continued or renewed economic downturn in one or more of the industries or geographic regions that the Company serves, or in the worldwide economy, could cause actual results of operations to differ materially from historical and expected results.

The Company's results could be adversely affected if it is unable to effectively achieve and implement its growth initiatives.

Sales and income growth of the Company depends upon a number of uncertain events, including the outcome of the Company's strategies of increasing its penetration into geographic markets such as Brazil, Russia, India and China as well as other Asian and Eastern European countries; increasing its penetration into product markets such as the market for papercoating pigments and the market for groundwood paper pigments; increasing sales to existing PCC customers by increasing the amount of PCC used per ton of paper produced; developing, introducing and selling new products such as the FulFill® family of products for the paper industry. Difficulties, delays or failure of any of these strategies could affect the future growth rate of the Company. Our strategy also anticipates growth through future acquisitions. However, our ability to identify and consummate any future acquisitions on terms that are favorable to us may be limited by the number of attractive acquisition targets, internal demands on our resources and our ability to obtain financing. Our success in integrating newly acquired businesses will depend upon our ability to retain key personnel, avoid diversion of management's attention from operational matters, and integrate general and administrative services. In addition, future acquisitions could result in the incurrence of additional debt, costs and contingent liabilities. Integration of acquired operations may take longer, or be more costly or disruptive to our business, than originally anticipated, and it is also possible that expected synergies from future acquisitions may not materialize. We also may incur costs and divert management attention with regard to potential acquisitions that are never consummated.

Servicing the Company's debt will require a significant amount of cash. This could reduce the Company's flexibility to respond to changing business and economic conditions or fund capital expenditures or working capital needs. Our ability to generate cash depends on many factors beyond our control.

At June 28, 2020, on an as adjusted basis after giving effect to the transactions connected with our issuance of our 5.0% Senior Notes due 2028, the Company would have had \$1,063.3 million aggregate principal amount of total indebtedness (consisting primarily of \$658.0 million aggregate principal amount of loans under the fixed rate tranche of our term facility and \$400.0 million aggregate principal amount of notes) and an additional \$290.6 million of borrowing capacity under the revolving credit facility (after giving effect to \$9.4 million of outstanding letters of credit). Our outstanding indebtedness will require a significant amount of cash to make interest payments. Further, the interest rate on a significant portion of our borrowings under our senior secured credit facility is based on LIBOR interest rates, which could result in higher interest expense in the event of an increase in interest rates. In addition, since these borrowings under our senior secured credit facility extend beyond 2021, the interest rates for these obligations might be subject to change based on the United Kingdom's Financial Conduct Authority's intention to phase out LIBOR by the end of 2021. Our ability to pay interest on our debt and to satisfy our other debt obligations will depend in part upon our future financial and operating performance and upon our ability to renew or refinance borrowings. Prevailing economic conditions and financial, business, competitive, regulatory and other factors, many of which are beyond our control, will affect our ability to make these payments. We cannot guarantee that our business will generate sufficient cash flow from operations or that future borrowings will be available to us in an amount sufficient to enable us to fund our liquidity needs. If we are unable to generate sufficient cash flow to meet our debt service obligations, we will have to pursue one or more alternatives, such as reducing or delaying capital or other expenditures, refinancing debt, selling assets, or raising equity capital. Further, the requirement to make significant interest payments may reduce the Company's flexibility to respond to changing business and economic conditions or fund capital expenditure or working capital needs and may increase the Company's vulnerability to adverse economic conditions.

The agreements and instruments governing our debt contain various covenants that could significantly impact our ability to operate our business.

The agreement governing our senior secured credit facility and the indenture that governs our 5.0% Senior Notes due 2028 contain a number of significant covenants that, among other things, limit our ability to: incur or guarantee additional indebtedness, pay dividends or make other distributions or repurchase or redeem capital stock, prepay, redeem or repurchase certain debt, issue certain preferred stock or similar equity securities, make loans and investments, sell or otherwise dispose of assets, incur liens, enter into transactions with affiliates, enter into agreements restricting our subsidiaries' ability to pay dividends and consolidate, merge or sell all or substantially all of our assets. In addition, our revolving credit facility, if used, requires us to comply with specific financial ratios, including a maximum net leverage ratio, under which we are required to achieve specific financial results. Our ability to comply with these provisions may be affected by events beyond our control. A breach of any of these covenants would result in a default under the applicable agreements. In the event of any default under our senior secured credit facility, our lenders could elect to declare all amounts borrowed under the credit agreement, together with accrued interest thereon, to be due and payable. In such an event, we cannot assure you that we would have sufficient assets to pay debt then outstanding under the credit agreement, the indenture governing our notes, and any other agreements governing our debt. Any future refinancing of the senior secured credit facility is likely to contain similar restrictive covenants. We may also incur future debt obligations that might subject us to additional restrictive covenants that could affect our financial and operational flexibility. We cannot assure you that we will be granted waivers or amendments to these agreements if for any reason we are unable to comply with these agreements or that we will be able to refinance our debt on terms acceptable to us, or at all.

The Company's sales of PCC could be adversely affected by our failure to renew or extend long term sales contracts for our satellite operations.

The Company's sales of PCC to paper customers are typically pursuant to long-term evergreen agreements, initially ten years in length, with paper mills where the Company operates satellite PCC plants. Sales pursuant to these contracts represent a significant portion of our worldwide Paper PCC sales,

which were \$364.9 million in 2019, or approximately 20% of the Company's net sales. The terms of many of these agreements have been extended or renewed in the past, often in connection with an expansion of the satellite plant. However, failure of a number of the Company's customers to renew or extend existing agreements on terms as favorable to the Company as those currently in effect, or at all, could have a substantial adverse effect on the Company's results of operations, and could also result in impairment of the assets associated with the PCC plant.

The Company's sales could be adversely affected by consolidation in customer industries, principally paper, foundry and steel.

Several consolidations in the paper industry have taken place in recent years and such consolidation could continue in the future. These consolidations could result in partial or total closure of some paper mills where the Company operates PCC satellites. Such closures would reduce the Company's sales of PCC, except to the extent that they resulted in shifting paper production and associated purchases of PCC to another location served by the Company. Similarly, consolidations have occurred in the foundry and steel industries. Such consolidations in the major industries we serve concentrate purchasing power in the hands of a smaller number of manufacturers, enabling them to increase pressure on suppliers, such as the Company. This increased pressure could have an adverse effect on the Company's results of operations in the future.

The Company is subject to stringent regulation in the areas of environmental, health and safety, and tax, and may incur unanticipated costs or liabilities arising out of claims for various legal, environmental and tax matters or product stewardship issues.

The Company's operations are subject to international, federal, state and local governmental environmental, health and safety, tax and other laws and regulations. We have expended, and may be required to expend in the future, substantial funds for compliance with such laws and regulations. In addition, future events, such as changes to or modifications of interpretations of existing laws and regulations, or enforcement policies, or further investigation or evaluation of the potential environmental impacts of operations or health hazards of certain products, may affect our mining rights or give rise to additional compliance and other costs that could have a material adverse effect on the Company. Government action taken in response to the COVID-19 pandemic, including government-imposed restrictions on the movement of people and goods, and other new legal rights and obligations, could also have an adverse effect on the Company. Further, certain of our customers are subject to various federal and international laws and regulations relating to environmental and health and safety matters, especially our Energy Services customers who are subject to drilling permits, waste water disposal and other regulations. To the extent that these laws and regulations affecting our customers change, demand for our products and services could also change and thereby affect our financial results. State, national, and international governments and agencies have been evaluating climate-related legislation and regulation that would restrict emissions of greenhouse gases in areas in which we conduct business, and some such legislation and regulation have already been enacted or adopted. Enactment of climate-related legislation or adoption of regulation that restrict emissions of greenhouse gases in areas in which we conduct business could have an adverse effect on our operations or demand for our products. Our manufacturing processes, particularly the manufacturing process for PCC, use a significant amount of energy and, should energy prices increase as a result of such legislation or regulation, we may not be able to pass these increased costs on to purchasers of our products. We cannot predict if or when currently proposed or additional laws and regulations regarding climate change or other environmental or health and safety concerns will be enacted or adopted.

The Company is also subject to income tax laws and regulations in the United States and various foreign jurisdictions. Significant judgment is required in evaluating and estimating our provision and accruals for these taxes. Our income tax liabilities are dependent upon the location of earnings among these different jurisdictions. Our income tax provision and income tax liabilities could be adversely affected by the jurisdictional mix of earnings, changes in valuation of deferred tax assets and liabilities and changes in tax treaties, laws and regulations.

The Company is currently a party in various litigation matters and tax and environmental proceedings and faces risks arising from various unasserted litigation matters, including, but not limited to, product liability, patent infringement, antitrust claims, and claims for third party property damage or personal injury stemming from alleged environmental torts. Failure to appropriately manage safety, human health, product liability and environmental risks associated with the Company's products and production processes could adversely impact the Company's employees and other stakeholders, the Company's reputation and its results of operations. Public perception of the risks associated with the Company's products and production processes could impact product acceptance and influence the regulatory environment in which the Company operates. While the Company has procedures and controls to manage these risks, carries liability insurance, which it believes to be appropriate to its businesses, and has provided reserves for current matters, which it believes to be adequate, an unanticipated liability, arising out of a current matter or proceeding or from the other risks described above, could have a material adverse effect on the Company's financial condition or results of operations.

Delays or failures in new product development could adversely affect the Company's operations.

The Company's future business success will depend in part upon its ability to maintain and enhance its technological capabilities, to respond to changing customer needs, and to successfully anticipate or respond to technological changes on a cost-effective and timely basis. The Company is engaged in a continuous effort to develop new products and processes in all of its product lines. Difficulties, delays or failures in the development, testing, production, marketing or sale of such new products could cause actual results of operations to differ materially from our expected results.

The Company's ability to compete is dependent upon its ability to defend its intellectual property against inappropriate disclosure, theft and infringement.

The Company's ability to compete is based in part upon proprietary knowledge, both patented and unpatented. The Company's ability to achieve anticipated results depends in part on its ability to defend its intellectual property against inappropriate disclosure and theft as well as against infringement. In addition, development by the Company's competitors of new products or technologies that are more effective or less expensive than those the Company offers could have a material adverse effect on the Company's financial condition or results of operations.

The Company's operations could be impacted by the increased risks of doing business abroad.

The Company does business in many areas internationally. Approximately 46% of our sales in 2019 were derived from outside the United States and we have significant production facilities which are located outside of the United States. We have in recent years expanded our operations in emerging markets, and we plan to continue to do so in the future, particularly in China, India, Brazil, the Middle East, and Eastern Europe. Some of our operations are located in areas that have experienced political or economic instability, including Indonesia, Malaysia, Nigeria, Egypt, Russia, Saudi Arabia, Turkey, Brazil, Thailand, China and South Africa. The UK's decision to exit the European Union (referred to as Brexit) has caused additional volatility in the markets and currency exchange rates. Market conditions and exchange rates could continue to be volatile in the near term as this decision is implemented. As the Company expands its operations overseas, it faces increased risks of doing business abroad, including inflation, fluctuation in interest rates, changes in applicable laws and regulatory requirements, export and import restrictions, tariffs, nationalization, expropriation, limits on repatriation of funds, civil unrest, terrorism, unstable governments and legal systems, and other factors. We are also subject to increased risks of natural disasters, public health crises,

including the occurrence of a contagious disease or illness, such as COVID-19, and other catastrophic events in such countries. Many of these risks are beyond our control and can lead to sudden, and potentially prolonged, changes in demand for our products, difficulty in enforcing agreements, and losses in the realizability of our assets. Adverse developments in any of the areas in which we do business could cause actual results to differ materially from historical and expected results. In addition, a significant portion of our raw material purchases and sales outside the United States are denominated in foreign currencies, and liabilities for non-U.S. operating expenses and income taxes are denominated in local currencies. Accordingly, reported sales, net earnings, cash flows and fair values have been and, in the future, will be affected by changes in foreign currency exchange rates. Our overall success as a global business depends, in part, upon our ability to succeed in differing legal, regulatory, economic, social and political conditions. We cannot assure you that we will implement policies and strategies that will be effective in each location where we do business.

The Company's operations are dependent on the availability of raw materials and access to ore reserves at its mining operations. Increases in costs of raw materials, energy, or shipping could adversely affect our financial results.

The Company depends in part on having an adequate supply of raw materials for its manufacturing operations, particularly lime and carbon dioxide for the PCC product line, and magnesia and alumina for its Refractory operations. Purchase prices and availability of these critical raw materials are subject to volatility. At any given time, we may be unable to obtain an adequate supply of these critical raw materials on a timely basis, on price and other terms, or at all. While most such raw materials are readily available, the Company has purchased approximately 41% of its magnesia requirements from sources in China over the past five years. The price and availability of magnesia have fluctuated in the past and they may fluctuate in the future. Price increases for certain other of our raw materials, including petrochemical products, as well as increases in energy prices, have also affected our business. Our production processes consume a significant amount of energy, primarily electricity, diesel fuel, natural gas and coal. We use diesel fuel to operate our mining and processing equipment and our freight costs are heavily dependent upon fuel prices and surcharges. Energy costs also affect the cost of raw materials. On a combined basis, these factors represent a large exposure to petrochemical and energy products which may be subject to significant price fluctuations. The contracts pursuant to which we construct and operate our satellite PCC plants generally adjust pricing to reflect the pass-through of increases in costs resulting from inflation, including energy. However, there is a time lag before such price adjustments can be implemented. The Company and its customers will typically negotiate reasonable price adjustments in order to recover these escalating costs, but there can be no assurance that we will be able to recover increasing costs through such negotiations.

The Company also depends on having adequate access to ore reserves of appropriate quality at its mining operations. There are numerous uncertainties inherent in estimating ore reserves including subjective judgments and determinations that are based on available geological, technical, contract and economic information.

The Company relies on shipping bulk cargos of bentonite from the United States, Turkey and China to customers, as well as our own subsidiaries, and we are sensitive to our ability to recover these shipping costs. In the last few years, bulk cargo shipping rates have been very volatile, and, to a lesser extent, the availability of bulk cargo containers have been suspect. If we cannot secure our container requirements or offset additional shipping costs with price increases to customers, our profitability could be impacted. We are also subject to other shipping risks. In particular, rail service interruptions have affected our ability to ship, and the availability of rail service, and our ability to recover increased rail costs, may be beyond our control. During the COVID-19 pandemic, our ability to ship our products has been, and may in the future be, affected by government mandates in certain jurisdictions in which we operate.

The Company operates in very competitive industries, which could adversely affect our profitability.

The Company has many competitors. Some of our principal competitors have greater financial and other resources than we have. Accordingly, these competitors may be better able to withstand economic downturns and changes in conditions within the industries in which we operate and may have significantly greater operating and financial flexibility than we do. We also face competition for some of our products from alternative products, and some of the competition we face comes from competitors in lower-cost production countries like China and India. As a result of the competitive environment in the markets in which we operate, we currently face and will continue to face pressure on the sales prices of our products from competitors, which could reduce profit margins.

Production facilities are subject to operating risks and capacity limitations that may adversely affect the Company's financial condition or results of operations.

The Company is dependent on the continued operation of its production facilities. During the COVID-19 pandemic, our facilities have been, and may in the future be, temporary closed in response to government mandates in certain jurisdictions in which we operate or for the safety of our employees in response to positive diagnoses for COVID-19. Production facilities are subject to hazards associated with the manufacturing, handling, storage, and transportation of chemical materials and products, including pipeline leaks and ruptures, explosions, fires, inclement weather and natural disasters, mechanical failure, unscheduled downtime, labor difficulties, transportation interruptions, and environmental risks. We maintain property, business interruption and casualty insurance but such insurance may not cover all risks associated with the hazards of our business and is subject to limitations, including deductibles and maximum liabilities covered. We may incur losses beyond the limits, or outside the coverage, of our insurance policies. Further, from time to time, we may experience capacity limitations in our manufacturing operations. In addition, if we are unable to effectively forecast our customers' demand, it could affect our ability to successfully manage operating capacity limitations. These hazards, limitations, disruptions in supply and capacity constraints could adversely affect financial results.

Operating results for some of our segments are seasonal.

Our Energy Services Segment and certain product lines within our Performance Materials segment are affected by seasonal weather patterns. A majority of our Energy Services revenues are derived from the Gulf of Mexico and surrounding states, which are susceptible to hurricanes that typically occur June 1st through November 30th. Actual or threatened hurricanes can result in volatile demand for services provided by our Energy Services segment. Our Environmental Products and Building Materials product lines within our Performance Materials segment are affected by weather patterns which determine the feasibility of construction activities. Typically, less construction activity occurs in winter months and thus this segment's revenues tend to be greatest in the second and third quarters when weather patterns in our geographic markets are more conducive to construction activities. Our Processed Minerals product line is subject to similar seasonal patterns.

Our operations are subject to cyber-attacks that could have a material adverse impact on our business, consolidated results of operations, and consolidated financial condition.

Our operations are becoming increasingly dependent on digital technologies and services. We use these technologies for internal purposes, including data storage, processing, and transmissions, as well as in our manufacturing operations and in our interactions with customers and suppliers. Digital technologies are subject to the risk of cyber-attacks. If our systems for protecting against cybersecurity risks prove not to be sufficient, we could be adversely affected by, among other things: loss of or damage to intellectual property, proprietary or confidential information, or customer, supplier, or employee data; interruption of our business operations; and increased costs required to prevent, respond to, or mitigate cybersecurity attacks. These risks could harm our reputation and our relationships with customers, suppliers, employees, and other third parties, and may result in claims against us. In addition, these risks could have a material adverse effect on our business, consolidated results of operations, and consolidated financial condition.