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 April 3, 2022

or

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

Commission File Number 1-11430

MINERALS TECHNOLOGIES INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	(1	25-1190717 (I.R.S. Employer Identification No.)				
622 Third Avenue, New (Address of principal execu	Y York, New York 10017- utive offices, including zip					
) 878-1800 number, including area co	ode)				
Securities registered pursu	uant to Section 12(b) of th	ne Act:				
Title of each class Common Stock, \$0.10 par value	ading Symbol MTX	Name of exchange on which registered New York Stock Exchange LLC				
Indicate by check mark whether the registrant (1) has filed all reports requiring the preceding 12 months (or for such shorter period that the registrequirements for the past 90 days.						
Yes I	⊠ No □					
Indicate by check mark whether the registrant has submitted electronicall Regulation S-T (§232.405 of this chapter) during the preceding 12 months						
Yes I	⊠ No □					
Indicate by check mark whether the Registrant is a large accelerated filer, emerging growth company. See the definitions of "large accelerated file company" in Rule 12b-2 of the Exchange Act.						
Large Accelerated Filer ⊠ Non-accelerated Filer □ Emerging Growth Company □		erated Filer □ er Reporting Company □				
If an emerging growth company, indicate by check mark if the registrant h or revised financial accounting standards provided pursuant to Section 13(a		extended transition period for complying with any new				
Indicate by check mark whether the registrant is a shell company (as define	ed in Rule 12b-2 of the Ex	change Act).				
Yes [\square No \boxtimes					

As of April 20, 2022, there were 32,965,838 shares of common stock, par value of \$0.10 per share, of the registrant outstanding.

MINERALS TECHNOLOGIES INC. INDEX TO FORM 10-Q

		Page No.
PART I.	FINANCIAL INFORMATION	
Item 1.	Financial Statements:	
	Condensed Consolidated Statements of Income for the three-month periods ended April 3, 2022 and April 4, 2021 (Unaudited)	3
	Condensed Consolidated Statements of Comprehensive Income for the three-month periods ended April 3, 2022 and April 4, 2021 (Unaudited)	4
	Condensed Consolidated Balance Sheets as of April 3, 2022 (Unaudited) and December 31, 2021	5
	Condensed Consolidated Statements of Cash Flows for the three-month periods ended April 3, 2022 and April 4, 2021 (Unaudited)	6
	Condensed Consolidated Statements of Changes in Shareholders' Equity for the three-month periods ended April 3, 2022 and April 4, 2021 (Unaudited)	7
	Notes to Condensed Consolidated Financial Statements (Unaudited)	8
	Report of Independent Registered Public Accounting Firm	19
Item 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations	20
Item 3.	Quantitative and Qualitative Disclosures about Market Risk	27
Item 4.	Controls and Procedures	27
PART II.	OTHER INFORMATION	
Item 1.	<u>Legal Proceedings</u>	28
Item 1A.	Risk Factors	28
Item 2.	<u>Unregistered Sales of Equity Securities and Use of Proceeds</u>	28
Item 3.	Default Upon Senior Securities	28
Item 4.	Mine Safety Disclosures	28
Item 5.	Other Information	28
Item 6.	<u>Exhibits</u>	29
Signature		30

PART 1. FINANCIAL INFORMATION

ITEM 1. Financial Statements

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

	Three Months Ended							
(in millions of dollars, except per share data)	Apr. 3, 2022	Apr. 4, 2021						
Net sales	\$ 519.1	\$ 452.6						
Cost of goods sold	397.4	340.8						
Production margin	121.7	111.8						
Marketing and administrative expenses	48.8	48.0						
Research and development expenses Acquisition related transaction and integration costs	5.1 1.6	5.0						
Income from operations	66.2	58.8						
Interest expense, net	(9.8)	(9.9)						
Other non-operating (deductions) income, net	(0.4)	0.5						
Total non-operating deductions, net	(10.2)	(9.4)						
Income from operations before tax and equity in earnings	56.0	49.4						
Provision for taxes on income	11.2	8.9						
Equity in earnings of affiliates, net of tax	0.1	0.5						
Consolidated net income	44.9	41.0						
Less:	0.0	1 1						
Net income attributable to non-controlling interests Net income attributable to Minerals Technologies Inc.	0.8 \$ 44.1	\$ 39.9						
Earnings per share:								
Basic:								
Income from operations attributable to Minerals Technologies Inc.	\$ 1.33	\$ 1.18						
Diluted:								
Income from operations attributable to Minerals Technologies Inc.	\$ 1.33	\$ 1.17						
Cash dividends declared per common share	\$ 0.05	\$ 0.05						
Shares used in computation of earnings per share:								
Basic	33.1	33.8						
Diluted	33.2	34.0						

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

	Three Months Ended							
(millions of dollars)		apr. 3, 2022	A	Apr. 4, 2021				
Consolidated net income	\$	44.9	\$	41.0				
Other comprehensive income (loss), net of tax:								
Foreign currency translation adjustments		(8.2)		(28.9)				
Pension and postretirement plan adjustments		1.2		2.5				
Unrealized gains on cash flow hedges		3.1		4.9				
Total other comprehensive (loss) income, net of tax		(3.9)		(21.5)				
Total comprehensive income including non-controlling interests		41.0		19.5				
Comprehensive income (loss) attributable to non-controlling interests		0.9		0.6				
Comprehensive income attributable to Minerals Technologies Inc.	\$	40.1	\$	18.9				

MINERALS TECHNOLOGIES INC. AND SUBSIDIARY COMPANIES CONDENSED CONSOLIDATED BALANCE SHEETS

(millions of dollars)	Apr. 3, 2022*	Dec. 31, 2021 **
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 288.0	\$ 299.5
Short-term investments	5.1	4.9
Accounts receivable, net	397.1	367.8
Inventories	333.8	297.7
Prepaid expenses and other current assets	66.3	58.6
Total current assets	1,090.3	1,028.5
Property, plant and equipment	2,309.0	2,296.4
Less accumulated depreciation and depletion	(1,262.8)	
Property, plant and equipment, net	1,046.2	1,049.1
Goodwill	905.7	907.5
Intangible assets	247.9	251.6
Deferred income taxes	22.5	23.0
Other assets and deferred charges	113.2	114.5
Total assets	\$ 3,425.8	\$ 3,374.2
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Short-term debt	\$ 110.0	\$ 80.0
Current maturities of long-term debt	0.6	0.8
Accounts payable	218.6	196.1
Other current liabilities	125.9	142.9
Total current liabilities	455.1	419.8
Long-term debt, net of unamortized discount and deferred financing costs	937.0	936.2
Deferred income taxes	189.0	188.1
Accrued pension and post-retirement benefits	111.4	114.3
Other non-current liabilities	130.3	136.3
Total liabilities	1,822.8	1,794.7
Shareholders' equity:		
Common stock	4.9	4.9
Additional paid-in capital	475.1	474.2
Retained earnings	2,211.4	2,168.9
Accumulated other comprehensive loss	(337.6)	
Less common stock held in treasury	(791.8)	(775.1
Total Minerals Technologies Inc. shareholders' equity	1,562.0	1,539.3
Non-controlling interests	41.0	40.2
Total shareholders' equity	1,603.0	1,579.5
Total liabilities and shareholders' equity	\$ 3,425.8	\$ 3,374.2

^{*} Unaudited

^{**} Condensed from audited financial statements

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

	Three Months Ended						
(millions of dollars)	Apr. 3, 2022	Apr. 4, 2021					
Operating Activities:							
Consolidated net income	\$ 44.9	\$ 41.0					
Adjustments to reconcile net income to net cash provided by operating activities:							
Depreciation, depletion and amortization	24.2	24.1					
Reduction of right of use asset	3.1	3.1					
Other non-cash items	5.9	4.1					
Net changes in operating assets and liabilities	(77.8)	(21.4)					
Net cash provided by operating activities	0.3	50.9					
Investing Activities:							
Purchases of property, plant and equipment, net	(19.0)	(17.7)					
Proceeds from sale of short-term investments	1.9	1.6					
Purchases of short-term investments	(1.2)	(2.5)					
Other investing activities	1.2	(2.5)					
Net cash used in investing activities	(17.1)	(18.6)					
Ç							
Financing Activities:							
Repayment of long-term debt	(0.3)	(0.5)					
Proceeds from short-term debt	30.0	(· · · ·)					
Purchase of common stock for treasury	(16.7)	(20.0)					
Proceeds from issuance of stock under option plan	0.9	5.8					
Excess tax benefits related to stock incentive programs	(3.3)	(2.8)					
Dividends paid to non-controlling interests	(0.1)	(0.1)					
Cash dividends paid	(1.6)	(1.7)					
Net cash provided by (used in) financing activities	8.9	(19.3)					
Effect of exchange rate changes on cash and cash equivalents	(3.6)	(9.3)					
	(11.5)	2.5					
Net increase (decrease) in cash and cash equivalents Cash and cash equivalents at beginning of period	(11.5)	3.7					
	299.5	367.7					
Cash and cash equivalents at end of period	\$ 288.0	\$ 371.4					
Supplemental disclosure of cash flow information:							
Interest paid		\$ 14.0					
Income taxes paid	\$ 8.9	\$ 8.5					
Non-cash financing activities:							
Treasury stock purchases settled after period end	\$ —	\$ 0.7					
Treating stock parentages settled after period ond	Ψ	<u> </u>					

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

Equity .	Attributable	to N	Minerals	Technolo	gies Inc.

(millions of dollars)	ommon Stock	Additional Paid-in Capital	Retained Earnings	ocumulated Other mprehensive Loss	Treasury Stock	Non- controlling Interests	Total
Balance as of December 31, 2021	\$ 4.9	\$ 474.2	\$ 2,168.9	\$ (333.6)	\$ (775.1)	\$ 40.2	\$ 1,579.5
Net income	_	_	44.1	_	_	0.8	44.9
Other comprehensive loss	_	_	_	(4.0)	_	0.1	(3.9)
Dividends declared	_	_	(1.6)	_	_	_	(1.6)
Dividends paid to non- controlling interests Issuance of shares	_	_	_	_	_	(0.1)	(0.1)
pursuant to employee stock compensation plans Purchase of common	_	0.9	_	_	_	_	0.9
stock for treasury	_	_	_	_	(16.7)	_	(16.7)
Stock-based compensation	_	2.8	_	_	_	_	2.8
Conversion of RSU's for tax withholding	 	(2.8)	_	 			(2.8)
Balance as of April 3, 2022	\$ 4.9	\$ 475.1	\$ 2,211.4	\$ (337.6)	\$ (791.8)	\$ 41.0	\$ 1,603.0

Equity	Attributable to	Minerals	Technologies Inc.

	Equity Attributable to Minerals Technologies Inc.											
(millions of dollars)	(Common Stock	1	Additional Paid-in Capital		Retained Earnings		Other omprehensive Loss	Treasury Stock	coı	Non- ntrolling	Total
Balance as of December 31, 2020	\$	4.9	\$	453.3	\$	2,011.3	\$	(308.3)	\$ (700.4)	\$	37.9	\$ 1,498.7
Net income		_		_		39.9		_	_		1.1	41.0
Other comprehensive loss		_		_		_		(21.0)	_		(0.5)	(21.5)
Dividends declared		_		_		(1.7)		`	_		`—´	(1.7)
Dividends paid to non- controlling interests		_		_		_		_	_		(0.1)	(0.1)
Issuance of shares pursuant to employee stock compensation												
plans		_		5.8		_		_	_		_	5.8
Purchase of common stock for treasury		_		_		_		_	(20.0)		_	(20.0)
Conversion of RSU's for tax withholding		_		(2.6)		_		_	_		_	(2.6)
Stock-based compensation		_		2.8		_		_	_		_	2.8
Balance as of April 4, 2021	\$	4.9	\$	459.3	\$	2,049.5	\$	(329.3)	\$ (720.4)	\$	38.4	\$ 1,502.4

See Notes to Consolidated Financial Statements, which are an integral part of these statements.

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, 2021. 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 periods ended April 3, 2022 are not necessarily indicative of the results that may be expected for the year ending December 31, 2022.

Company Operations

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

The Company has three reportable segments: Performance Materials, Specialty Minerals and Refractories.

- 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 and remediation projects as well as offers a range of patented and unpatented technologies, products and services to the upstream and downstream oil and gas sector throughout the world.
- 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.

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 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. All recently issued ASUs 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.

Note 2. Revenue from Contracts with Customers

The following table disaggregates our revenue by major source (product line) for the three-month periods ended April 3, 2022 and April 4, 2021:

(millions of dollars)	Three Months Ended						
Net Sales		Apr. 3, 2022	Apr. 4, 2021				
Household, Personal Care & Specialty Products	\$	142.5	\$	109.4			
Metalcasting		80.2		81.7			
Environmental Products		35.9		26.0			
Building Materials		13.5		13.8			
Performance Materials		272.1		230.9			
Paper PCC		96.8		89.6			
Specialty PCC		24.2		20.4			
Ground Calcium Carbonate		26.5		24.0			
Talc		15.6		13.8			
Specialty Minerals		163.1		147.8			
		,					
Refractory Products		64.8		58.8			
Metallurgical Products		19.1		15.1			
Refractories		83.9		73.9			
Total	\$	519.1	\$	452.6			

Note 3. Acquisitions

On July 26, 2021, the Company completed the acquisition of Normerica Inc., a leading North American supplier of premium pet care products. Normerica has production facilities in Canada, the U.S. and Thailand. As a leader in the pet product industry, Normerica provides premium products, both branded and private label to world-class retailers. Its product portfolio consists primarily of bentonite-based cat litter products which are supplied from a network of strategically located manufacturing facilities in Canada and the United States. The results of Normerica are included within our Household, Personal Care & Specialty Products product line in our Performance Materials segment. The fair value of the total consideration transferred, net of cash acquired, was \$187.5 million.

The acquisition has been accounted for using the acquisition method of accounting, which requires, among other things, that we recognize the assets acquired and liabilities assumed at their respective fair values as of the acquisition date. As of April 3, 2022, the purchase price allocation remains preliminary as the Company completes its assessment of property, certain reserves, legal and tax matters, obligations, intangible assets and deferred taxes, as well as completes its review of Normerica's existing accounting policies.

The following table summarizes the Company's preliminary purchase price allocation for the Normerica acquisition as of previously reported on the Company's Form 10-K for the year ended December 31, 2021. There have been no changes to the purchase price allocation during the period ended April 3, 2022.

(millions of dollars)	Preliminary Allocation Previously Reported on Form 10-K as of April 3, 2022
Accounts receivable	\$ 8.4
Inventories	5.1
Other current assets	1.4
Property, plant and equipment	21.2
Goodwill	104.5
Intangible assets	68.1
Total assets acquired	208.7
Accounts payable	12.8
Accrued expenses	8.4
Total liabilities assumed	21.2
Net assets acquired	\$ 187.5

The Company used the income, market, or cost approach (or a combination thereof) for the valuation and used valuation inputs and analyses that were based on market participant assumptions. Market participants are considered to be buyers and sellers unrelated to the Company in the principal or most advantageous market for the asset or liability. For certain items, the carrying value was determined to be a reasonable approximation of fair value based on the information available.

Goodwill was calculated as the excess of the consideration transferred over the assets acquired and represents the estimated future economic benefits arising from other assets acquired that could not be individually identified and separately recognized. The goodwill is primarily attributable to fair value of expected synergies from combining the MTI and Normerica businesses and will be allocated to the Performance Materials segment. The allocation is expected to be completed during the third quarter of 2022.

Intangible assets acquired mainly include tradenames and customer relationships. Tradenames have an estimated useful life of approximately 15 years and customer relationships have an estimated useful life of approximately 20 years.

The Company incurred \$1.6 million of acquisition related transaction and integration costs during the three-month periods ended April 3, 2022, which are reflected within the acquisition-related expense line of the Condensed Consolidated Statements of Income.

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:

	Three Months Ended						
(in millions, except per share data)		pr. 3, 2022		Apr. 4, 2021			
Net income attributable to Minerals Technologies Inc.	\$	44.1	\$	39.9			
Weighted average shares outstanding		33.1		33.8			
Dilutive effect of stock options and stock units		0.1		0.2			
Weighted average shares outstanding, adjusted		33.2		34.0			
Basic earnings per share attributable to Minerals Technologies Inc.	\$	1.33	\$	1.18			
Diluted earnings per share attributable to Minerals Technologies Inc.	\$	1.33	\$	1.17			

Of the options outstanding of 1,536,887 and 1,499,373 for the three-month periods ended April 3, 2022 and April 4, 2021, respectively, options to purchase 732,874 shares and 558,734 shares of common stock for the three-month periods ending April 3, 2022 and April 4, 2021, 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

At April 3, 2022, the Company had \$2.1 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 2022.

The following table is a reconciliation of our restructuring liability balance as of April 3, 2022:

(millions of dollars)	
Restructuring liability, December 31, 2021	\$ 2.2
Additional provision	_
Cash payments	 (0.1)
Restructuring liability, April 3, 2022	\$ 2.1

Note 6. Income Taxes

Provision for taxes was \$11.2 million and \$8.9 million during the three-month periods ended April 3, 2022 and April 4, 2021, respectively. The effective tax rate was 20.0% for the three months ended April 3, 2022 as compared with 18.0% for the three months ended April 4, 2021. The higher tax rate was primarily due to higher withholding tax on dividends as compared to the prior year.

As of April 3, 2022, the Company had approximately \$4.9 million of total unrecognized income tax benefits. Included in this amount were a total of \$3.4 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 reversal of approximately \$0.1 million during the three-month period ended April 3, 2022 and an accrued balance of \$1.1 million of interest and penalties as of April 3, 2022.

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 2015.

Note 7. Inventories

The following is a summary of inventories by major category:

(millions of dollars)	Apr. 3, 2022		Dec. 31, 2021
Raw materials	\$ 156.6	\$	136.6
Work-in-process	13.6		10.7
Finished goods	111.4		99.4
Packaging and supplies	52.2		51.0
Total inventories	\$ 333.8	\$	297.7

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 \$905.7 million and \$907.5 million as of April 3, 2022 and December 31, 2021, respectively. The net change in goodwill from December 31, 2021 to April 3, 2022 is primarily attributable to the effects of foreign exchange.

Intangible assets subject to amortization as of April 3, 2022 and December 31, 2021 were as follows:

			April 3, 2022				December	r 31,	, 2021
(millions of dollars)	Weighted Average Useful Life (Years)		Gross Carrying Accumulated Amount Amortization		Accumulated		Gross Carrying Amount		ccumulated mortization
Tradenames	34	\$	221.5	\$	46.8	\$	221.6	\$	44.9
Technology	13		18.8		11.6		18.8		11.2
Patents and trademarks	19		6.4		6.4		6.4		6.4
Customer relationships	21		74.8		8.8		75.2		7.9
	29	\$	321.5	\$	73.6	\$	322.0	\$	70.4

The weighted average amortization period for acquired intangible assets subject to amortization is approximately 29 years. Estimated amortization expense is \$9.5 million for the remainder of 2022, \$50.4 million for 2023–2026 and \$188.0 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.

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 \$1.6 million at April 3, 2022 and is recorded in other non-current liabilities on the Condensed Consolidated Balance Sheet. This interest rate swap is designated as a cash flow hedge. As a result, the gains and losses associated with this interest rate swap is 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 \$10.0 million at April 3, 2022 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.

Note 10. Long-Term Debt and Commitments

The following is a summary of long-term debt:

(millions of dollars)	Apr. 3, 2022			
Term Loan Facility-Variable Tranche due February 14, 2024, net of unamortized discount and deferred financing costs				
of \$7.8 million and \$8.8 million	\$	540.2	\$	539.2
Senior Notes due 2028, net of unamortized deferred financing costs of \$5.2 million and \$5.4 million		394.7		394.6
Netherlands Term Loan due 2022		_		0.2
Japan Loan Facilities		2.7		3.0
Total		937.6	_	937.0
Less: Current maturities		0.6		0.8
Total long-term debt	\$	937.0	\$	936.2

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, 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 fixed rate tranche of the Term Facility were repaid in full in June 2020. 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 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 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. As of April 3, 2022, there were \$110.0 million in loans and \$10.0 million in letters of credit outstanding under the Revolving Facility. The Company is in compliance with all the covenants associated with the Revolving Facility throughout the period covered by this report.

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% 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.

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 matured in the third quarter of 2020 and the other of which matured in the first quarter of 2022. During the first quarter of 2022, the Company repaid the remaining \$0.2 million on this loan.

The Company has a committed loan facility in Japan. As of April 3, 2022, \$2.7 million was outstanding under this loan facility. Principal will be repaid in accordance with the payment schedule ending in 2026. The Company repaid \$0.2 million on this facility during the first three months of 2022.

As of April 3, 2022, the Company had \$25.8 million in uncommitted short-term bank credit lines, of which none were in use.

Note 11. Benefit Plans

The Company and its subsidiaries have pension plans covering 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 22% of our total benefit obligation.

Components of Net Periodic Benefit Cost

		Pension Bene							
	_	Three Months End							
(millions of dollars)		Apr. 3, 2022	Apr. 4, 2021						
Service cost	\$	1.8	\$ 2.0						
Interest cost		2.4	2.0						
Expected return on plan assets		(5.7)	(5.4)						
Amortization:									
Prior service cost		0.1	0.1						
Recognized net actuarial loss		1.5	3.4						
Net periodic benefit cost	\$	0.1	\$ 2.1						
	15								

		Other Benefits						
	7	Three Months	Ended					
(millions of dollars)		or. 3, 022	Apr. 4, 2021					
Service cost	\$	— \$	_					
Interest cost		_	_					
Amortization:								
Recognized net actuarial (gain)		(0.1)	(0.2)					
Net periodic benefit cost	\$	(0.1) \$	(0.2)					

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 \$10.1 million to its pension plans and \$0.5 million to its other postretirement benefit plans in 2022. As of April 3, 2022, approximately \$1.0 million has been contributed to the pension plans and \$0.1 million contributions to the other postretirement benefit plans.

Note 12. Comprehensive Income

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

	Three Months Ended					
(millions of dollars)		3,		Apr. 4, 2021		
Amortization of pension items:						
Pre-tax amount	\$	1.5	\$	3.3		
Tax		(0.3)		(0.8)		
Net of tax	\$	1.2	\$	2.5		

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)	Cu Tra	oreign irrency nslation ustment	ecognized sion Costs	(l on D	t Gain Loss) erivative ruments	 Total
Balance as of December 31, 2021	\$	(269.8)	\$ (69.6)	\$	5.8	\$ (333.6)
Other comprehensive income (loss) before reclassifications Amounts reclassified from AOCI		(8.3)	<u> </u>		3.1	(5.2) 1.2
Net current period other comprehensive income (loss) Balance as of April 3, 2022	\$	(8.3) (278.1)	\$ 1.2 (68.4)	\$	3.1 8.9	\$ (4.0)

Note 13. 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 asbestos containing materials related to our talc products and operations. As of April 3, 2022, we had 342 open asbestos cases, which is an increase in volume from previous years. These claims typically allege various theories of liability, including negligence, gross negligence and strict liability and seek compensatory and, in some cases, punitive damages, but 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. 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. While the cost to the Company for the defense of these cases has increased concurrently with the volume, the majority of these costs, excluding cases against our subsidiaries AMCOL International Corporation or American Colloid Company, which we acquired in 2014, 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 liabilities related to sales prior to the initial public offering. 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.

Note 14. Segment and Related Information

The Company has three reportable segments: Performance Materials, Specialty Minerals and Refractories. See Note 1 to the Condensed Consolidated Financial Statements. Segment information for the three-month periods ended April 3, 2022 and April 4, 2021 is as follows:

		Three Months Ended					
(millions of dollars)		Apr. 3, 2022		Apr. 4, 2021			
Net Sales							
Performance Materials	\$	272.1	\$	230.9			
Specialty Minerals		163.1		147.8			
Refractories		83.9		73.9			
Total	\$	519.1	\$	452.6			
Income from Operations							
Performance Materials	\$	33.7	\$	29.8			
Specialty Minerals		18.4		21.1			
Refractories		16.5		12.0			
Total	\$	68.6	\$	62.9			

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

	Three Months Ended						
(millions of dollars)		pr. 3, 2022	Apı 20				
Income from operations for reportable segments	\$	68.6	\$	62.9			
Acquisition related transaction and integration costs		(1.6)		_			
Unallocated and other corporate expenses		(0.8)		(4.1)			
Consolidated income from operations		66.2		58.8			
Non-operating deductions, net		(10.2)		(9.4)			
Income from operations before tax and equity in earnings	\$	56.0	\$	49.4			

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

	Three Months Ended						
(millions of dollars)		Apr. 3, 2022	Apr. 4, 2021				
Household, Personal Care & Specialty Products	\$	142.5	\$	109.4			
Metalcasting		80.2		81.7			
Environmental Products		35.9		26.0			
Building Materials		13.5		13.8			
Paper PCC		96.8		89.6			
Specialty PCC		24.2		20.4			
Ground Calcium Carbonate		26.5		24.0			
Talc		15.6		13.8			
Refractory Products		64.8		58.8			
Metallurgical Products		19.1		15.1			
Total	\$	519.1	\$	452.6			

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 April 3, 2022, the related condensed consolidated statements of income and comprehensive income for the three-month periods ended April 3, 2022 and April 4, 2021, the related condensed consolidated statements of cash flows for the three-month periods ended April 3, 2022 and April 4, 2021, the related condensed consolidated statements of changes in shareholders' equity for the three-month periods ended April 3, 2022 and April 4, 2021, 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, 2021, 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 18, 2022, 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, 2021, 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 April 29, 2022

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

Executive Summary

Our consolidated sales for the first quarter of 2022 were \$519.1 million, an increase of 15% as compared with \$452.6 million in the prior year. Included in sales for the first quarter of 2022 were \$27.7 million in sales related to our Normerica acquisition in the third quarter of 2021. Foreign exchange had an unfavorable impact on sales of approximately \$16 million, or 4 percentage points as compared with prior year. Income from operations was \$66.2 million and represented 12.8% of sales, as compared with \$58.8 million and 13.0% of sales in the prior year. Included in income from operations for the first quarter of 2022, were \$1.6 million of acquisition-related expenses. Net income was \$44.1 million, as compared to \$39.9 million in the first quarter of 2021. Diluted earnings in the first quarter ended April 3, 2022 were \$1.33 per share, as compared with \$1.17 per share in the first quarter of 2021.

First quarter 2022 results were strong with sales and operating income growth in each of our segments as demand in many of our end markets continue to improve. The Company continued to deliver on its strategic growth initiatives driven by multi-year advancements in new product development, geographic penetration and growth from acquisitions.

Our balance sheet continues to be strong. Cash, cash equivalents and short-term investments were \$293.1 million as of April 3, 2022 and the Company had more than \$450 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 Company will also continue to focus on innovation and new product development and other opportunities for sales growth from our existing businesses in 2022, 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 FLUORO-SORB® products which remediate contamination of Per-and polyflouroalkyl substances (PFAS) and Perflouroctane sulfanate (PFOS).
- 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.
- Continue the development of our proprietary products for agricultural applications worldwide.
- 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.
- 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 April 3, 2022 as compared with three months ended April 4, 2021

Consolidated Income Statement Review

		Three Months Ended					
(millions of dollars)	_	Apr. 3, 2022	Apr. 4, 2021	% Change			
Net sales	\$	519.1	6 452.6	15%			
Cost of sales		397.4	340.8	17%			
Production margin		121.7	111.8	9%			
Production margin %		23.4%	24.7%				
Marketing and administrative expenses		48.8	48.0	2%			
Research and development expenses		5.1	5.0	2%			
Acquisition related transaction and integration costs		1.6	_	*			
Income from operations		66.2	58.8	13%			
Operating margin %		12.8%	13.0%				
Interest expense, net		(9.8)	(9.9)	(1)%			
Other non-operating (deductions) income, net		(0.4)	0.5	*			
Total non-operating deductions, net		(10.2)	(9.4)	9%			
Income from operations before tax and equity in earnings		56.0	49.4	13%			
Provision for taxes on income		11.2	8.9	26%			
Effective tax rate		20.0%	18.0%				
Equity in earnings of affiliates, net of tax		0.1	0.5	(80)%			
Net income		44.9	41.0	10%			
Net income attributable to non-controlling interests		0.8	1.1	(27)%			
Net income attributable to Minerals Technologies Inc.	\$	44.1	39.9	11%			

^{*} Not meaningful

Net Sales

		Three Mon Apr. 3,			7	Three Mont Apr. 4,	
(millions of dollars)	N	et Sales	% of Total Sales	% Change	Net	t Sales	% of Total Sales
U.S.	\$	269.7	52.0%	19%	\$	227.5	50.3%
International		249.4	48.0%	11%		225.1	49.7%
Total sales	\$	519.1	100.0%	15%	\$	452.6	100.0%
Performance Materials Segment	\$	272.1	52.4%	18%	\$	230.9	51.0%
Specialty Minerals Segment		163.1	31.4%	10%		147.8	32.7%
Refractories Segment		83.9	16.2%	14%		73.9	16.3%
Total sales	\$	519.1	100.0%	15%	\$	452.6	100.0%
		21					

Worldwide net sales increased 15% to \$519.1 million in the first quarter from \$452.6 million in the prior year. Included in the net sales in the quarter are \$27.7 million of net sales of Normerica. Foreign exchange had an unfavorable impact on sales of \$16 million or 4 percentage points. The increase in sales was primarily due to strong demand across all segments and continued pricing actions.

Net sales in the United States were \$269.7 million in the first quarter of 2022, as compared to \$227.5 million in the prior year, an increase of 19%. International sales increased 11% to \$249.4 million from \$225.1 million in the prior year.

Operating Costs and Expenses

Cost of sales was \$397.4 million and represented 76.6% of sales for the three month period ended April 3, 2022, as compared with \$340.8 million and 75.3% of sales in the prior year. The increase in cost of sales was primarily due to higher raw material, energy, and other manufacturing costs. Production margin decreased from 24.7% of sales in the prior year to 23.4% of sales in the first quarter of 2022. Margin was impacted by the timing of pricing actions relative to cost increases.

Marketing and administrative costs were \$48.8 million and 9.4% of sales for the three months ended April 3, 2022, as compared to \$48.0 million and 10.6% of sales in the prior year.

Research and development expenses were \$5.1 million and represented 1.0% of sales for the three months ended April 3, 2022, as compared with \$5.0 million and 1.1% of sales in the prior year.

The Company recorded \$1.6 million of acquisition related transaction and integration costs during the three months ended April 3, 2022.

Income from Operations

The Company recorded income from operations of \$66.2 million as compared to \$58.8 million in the prior year. Operating income during the three months ended April 3, 2022 includes \$1.6 million of acquisition-related expenses.

Other Non-Operating Income (Deductions), net

In the first quarter of 2022, non-operating deductions were \$10.2 million, as compared with \$9.4 million in the prior year. Included in other non-operating deductions in the first quarter of 2022 was net interest expense of \$9.8 million, as compared to \$9.9 million in the prior year.

Provision for Taxes on Income

Provision for taxes on income was \$11.2 million and \$8.9 million for the three months ended April 3, 2022 and April 4, 2021, respectively. The effective tax rate was 20.0% and 18.0% for the three months ended April 3, 2022 and April 4, 2021, respectively.

Consolidated Net Income Attributable to MTI Shareholders

Consolidated net income was \$44.1 million for the three months ended April 3, 2022, as compared with \$39.9 million in the prior year.

Segment Review

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

	Three Months Ended				
Performance Materials Segment	 Apr. 3, 2022		Apr. 4, 2021	% Change	
	(millions	of doll	ars)		
Net Sales					
Household, Personal Care & Specialty Products	\$ 142.5	\$	109.4	30%	
Metalcasting	80.2		81.7	(2)%	
Environmental Products	35.9		26.0	38%	
Building Materials	13.5		13.8	(2)%	
Total net sales	\$ 272.1	\$	230.9	18%	
Income from operations	\$ 33.7	\$	29.8	13%	
% of net sales	12.4%	,)	12.9%		

Net sales in the Performance Materials segment increased 18% to \$272.1 million from \$230.9 million in the prior year. Household, Personal Care & Specialty Products sales increased 30% to \$142.5 million, as compared with \$109.4 million in the prior year on continued strong demand for consumer-oriented products and as a result of the Normerica acquisition. Included in the net sales in the quarter are \$27.7 million of net sales of Normerica. Sales in Metalcasting decreased 2% from prior year primarily due to temporarily reduced demand in China. Environmental Products sales increased 38%, on higher levels of project activity. Building Materials sales declined 2%, primarily due to construction project labor availability in the Northwest U.S.

Income from operations was \$33.7 million and 12.4% of sales, as compared to \$29.8 million and 12.9% of sales in the prior year. Margin was impacted by the timing of pricing actions relative to cost increases and operational efficiencies.

		Three Months Ended					
Specialty Minerals Segment			pr. 3, 2022	Apr. 4, 2021		% Change	
			(millions	of doll:	ars)		
Net Sales							
Paper PCC		\$	96.8	\$	89.6	8%	
Specialty PCC			24.2		20.4	19%	
PCC Products		\$	121.0	\$	110.0	10%	
Ground Calcium Carbonate		\$	26.5	\$	24.0	10%	
Talc			15.6		13.8	13%	
Processed Minerals Products		\$	42.1	\$	37.8	11%	
Total net sales		\$	163.1	\$	147.8	10%	
Income from operations		\$	18.4	\$	21.1	(13)%	
% of net sales			11.3%	,)	14.3%		
	23						

Worldwide sales in the Specialty Minerals segment were \$163.1 million, as compared with \$147.8 million in the prior year, an increase of 10%.

Worldwide net sales of PCC, which is primarily used in the manufacturing process of the paper industry, increased 10% to \$121.0 million from \$110.0 million in the prior year on continued strong demand and higher pricing for paper, packaging, and specialty PCC applications. Paper PCC sales increased 8% to \$96.8 million from \$89.6 million in the prior year. Sales of Specialty PCC increased 19% to \$24.2 million from \$20.4 million in the prior year.

Net sales of Processed Minerals products increased 11% to \$42.1 million due to continued strong demand for construction and consumer products as well as higher pricing. Ground Calcium Carbonate sales increased 10% to \$26.5 million for the three month periods ending April 3, 2022 as compared to \$24.0 million in the prior year. Tale sales increased 13% to \$15.6 million as compared with \$13.8 million in the prior year.

Income from operations for Specialty Minerals was \$18.4 million as compared with \$21.1 million in the prior year and represented 11.3% of sales as compared with 14.3% of sale in the prior year. Operating margins were impacted by the timing of contractual and negotiated price increases relative to continued inflationary cost increases.

	 Three Months Ended				
Refractories Segment	Apr. 3, 2022		Apr. 4, 2021	% Change	
	 (millions o	of dolla	rs)		
Net Sales					
Refractory Products	\$ 64.8	\$	58.8	10%	
Metallurgical Products	19.1		15.1	26%	
Total net sales	\$ 83.9	\$	73.9	14%	
		-			
Income from operations	\$ 16.5	\$	12.0	38%	
% of net sales	19.7%		16.2%		

Net sales in the Refractories segment increased 14% to \$83.9 million from \$73.9 million in the prior year driven by the ramp up of new business as well as stable steel market conditions in Europe and North America. Sales of refractory products and systems to steel and other industrial applications increased 10% to \$64.8 million and sales of metallurgical products increased 26% to \$19.1 million.

Income from operations was \$16.5 million and 19.7% of sales as compared with \$12.0 million and 16.2% of sales in the prior year. Operating margins were strong, primarily driven by pricing actions and operational efficiencies.

Liquidity and Capital Resources

Cash provided from operations during the three months ended April 3, 2022, was approximately \$0.3 million. First quarter cash from operations was significantly lower than prior year driven by a deliberate, strategic inventory build and the impact of higher pricing on accounts receivable. Cash flows provided from operations during the first three months of 2022 were principally used to 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 2022 - \$0.4 million; 2023 - \$0.6 million; 2024 - \$548.6 million; 2025 - \$0.6 million; 2026 - \$0.4 million; thereafter - \$400.0 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 (if any) and commitments under the Revolving Facility will mature and terminate, as the case may be, on April 18, 2023. Loans under the fixed rate tranche of the Term Facility were repaid in full in June 2020. 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 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 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% 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. As of April 3, 2022, there were \$\$110.0 million in loans and \$10.0 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 matured in the third quarter of 2020 and the other of which matured in the first quarter of 2022. The Company repaid \$0.2 million remaining on these loans during the first three months of 2022.

The Company has a committed loan facility in Japan. As of April 3, 2022, \$2.7 million was outstanding under this loan facility. Principal will be repaid in accordance with the payment schedule ending in 2026. The Company repaid \$0.2 million on this facility during the first three months of 2022.

As of April 3, 2022, the Company had \$25.8 million in uncommitted short-term bank credit lines, of which none were 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 2022 should be between \$80 million and \$85 million, principally related to the construction of PCC plants and other opportunities that meet our strategic growth objectives.

During 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 instrument at April 3, 2022 is a liability of \$1.6 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. The fair value of this instrument at April 3, 2022 is an asset of \$10.0 million. 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%.

On October 20, 2021, 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 April 3, 2022, 405,405 shares have been repurchased under this program for \$28.5 million, or an average price of approximately \$70.29 per share.

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 three months ended April 3, 2022, there were no material changes in the Company's contractual obligations.

At the current time, we are operating without any material impacts from the COVID-19 pandemic, and the pandemic is not having a materially negative impact to our consolidated results. However, as we cannot predict the duration or scope of the COVID-19 pandemic and its impact on our customers and suppliers, we cannot reasonably estimate any negative financial impact to our results in future periods. We continue to generate operating cash flows to meet our short-term liquidity needs and continue to maintain access to capital markets. See "Item 1A — Risk Factors" in the Company's Annual Report on Form 10-K for the year ended December 31, 2021, and in Exhibit 99 to this Quarterly Report on Form 10-Q, for additional risks to the Company related to the COVID-19 pandemic.

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 cyclicality 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 compete in very competitive industries; consolidation in customer industries, principally paper, foundry and steel; our ability to renew or extend long term sales contracts for our PCC satellite operations; our ability to service our debt; the effects of changes to the LIBOR interests rates upon which certain of our borrowings are based; our ability to comply with the covenants in the agreements governing our debt; our ability to effectively achieve and implement our growth initiatives; 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; 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; 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, 2021, 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. All recently issued ASUs 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.

Critical Accounting Policies and Estimates

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.

There have been no material changes to the critical accounting estimates that our accounting policies require us to make in the preparation of our consolidated financial statements, as described in the 2021 Annual Report on Form 10-K.

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 \$1.3 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.

During 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 instrument at April 3, 2022 is a liability of \$1.6 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. The fair value of this instrument at April 3, 2022 is an asset of \$10.0 million. 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%.

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

During 2021, we closed on the acquisition of Normerica and we excluded Normerica from the scope of management's report on internal control over financial reporting for the year ended December 31, 2021. We are in the process of integrating Normerica to our overall internal control over financial reporting and will include them in scope for the year ending December 31, 2022. This process may result in additions or changes to our internal control over financial reporting.

There were no other changes in the Company's internal controls over financial reporting during the quarter ended April 3, 2022 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 involved in the legal and environmental proceedings described in Note 13 to the condensed consolidated financial statements included elsewhere in this report, which disclosure is incorporated herein by reference. From time to time, the Company and its subsidiaries are also the subject of various routine legal actions and claims arising in the ordinary course of their businesses. The Company does not anticipate that the individual or aggregate liability arising out of litigation pending or claims known to be threatened against the Company and its subsidiaries will have a material adverse effect on the Company's results of operations, cash flows or financial condition.

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 2021 Annual Report on Form 10-K.

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

				Total Number of		Dollar Value of	
				Shares Purchased as		hares that May	
Period	Total Number of Shares Purchased		verage Price id Per Share	Part of the Publicly Announced Program		et be Purchased der the Program	
1 CHOU	Shares I dichased	1 a	iu i ci Sharc	Announced Frogram	Oli	der the Frogram	
January 1 - January 30	81,463	\$	72.23	246,345	\$	57,330,215	
January 31 - February 27	88,927	\$	69.54	335,272	\$	51,146,157	
February 28 - April 3	70,133	\$	66.19	405,405	\$	46,503,890	
Total	240,523	\$	69.47				

On October 20, 2021, 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 April 3, 2022, 405,405 shares have been repurchased under this program for \$28.5 million, or an average price of approximately \$70.29 per share.

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

Regarding Unaudited Interim Financial Information.
a-14(a)/15d-14(a) Certification executed by the Company's principal executive officer.
a-14(a)/15d-14(a) Certification executed by the Company's principal financial officer.
1350 Certifications.
ation concerning Mine Safety Violations
ctors
Instance Document (the instance document does not appear in the Interactive Data File because its XBRL tags are embedded
he Inline XBRL document).
XBRL Taxonomy Extension Schema
XBRL Taxonomy Extension Calculation Linkbase
XBRL Taxonomy Extension Definition Linkbase
XBRL Taxonomy Extension Label Linkbase
XBRL Taxonomy Extension Presentation Linkbase
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

April 29, 2022

ACCOUNTANTS' ACKNOWLEDGEMENT

April 29, 2022

Minerals Technologies Inc. New York, New York

Re: Registration Statement Nos. 333-160002, 333-59080, 333-62739, 333-138245, 333-206244 and 333-249761

With respect to the subject registration statements, we acknowledge our awareness of the use therein of our report dated April 29, 2022 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

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.;
- 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: April 29, 2022

/: /s/Douglas T. Dietrich

Douglas T. Dietrich

Chairman of the Board and 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.;
- 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: April 29, 2022

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 April 3, 2022 (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: April 29, 2022

By: /s/Douglas T. Dietrich

Douglas T. Dietrich

Chairman of the Board and Chief Executive Officer

Date: April 29, 2022

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 January 1, 2022 to April 3, 2022:

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 ssessments (F)	Fatalities (G)
Lucerne Valley, CA 04-00219	2	0	0	0		\$	0	0
Canaan, CT	2	0	0	0	0	Ф	10.050	0
06-00019 Adams, MA	3	0	0	0	0	\$	10,373	0
19-00035	1	0	0	0	0	\$	0	0
Barretts Mill, Dillon, MT								
24-00157	0	0	0	0	0	\$	963	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	\$	0	0
Belle Fourche Mill, SD								
39-00049	0	0	0	0	0	\$	125	0
Colony East, WY 48-00594	0	0	0	0	0	\$	0	0
Colony West, WY								
48-00245 Gascoyne, ND	0	0	0	0	0	\$	0	0
32-00459	0	0	0	0	0	\$	399	0
Lovell, WY								
48-00057	8	0	0	0	0	\$	8,407	0
Sandy Ridge, AL 01-00093	0	0	0	0	0	\$	0	0
Yellowtail, WY	0	0	0	0	0	ď	0	0
48-00607 Ste. Genevieve, MO	0	0	0	0	0	\$	0	0
23-02564	1	0	0	0	0	\$	0	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 January 1, 2022 to April 3, 2022, 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 January 1, 2022 to April 3, 2022:

Mine	Legal Actions Pending as of Last Day of Period	Legal Actions Initiated During Period	Legal Actions Resolved During Period
Lucerne Valley, CA	0	0	0
Canaan, CT	0	0	0
Adams, MA	0	0	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	0	0	0
Colony West, WY	0	0	0
Gascoyne, ND	0	0	0
Lovell, WY	0	0	0
Sandy Ridge, AL	0	0	0
Yellowtail, WY	0	0	0
Ste. Genevieve, MO	0	0	0

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, 2021, and this Quarterly Report on Form 10-Q.

COVID-19 Pandemic Risk

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

The COVID-19 pandemic continues to affect nearly all regions around the world. Governments around the world have taken preventative measures to contain or mitigate the COVID-19 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 may 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.
- We have experienced, and may experience in the future, disruptions to our supply chain, logistics, and service providers. If we are unable to secure raw materials and supplies for our facilities, our operations could be materially adversely affected.
- Significant disruption of global financial markets could have a negative impact on our ability to access capital in the future.

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 and the significance of new variants of COVID-19, travel restrictions, business and workforce disruptions, and the effectiveness of vaccination and other actions taken to contain and treat the disease. The effects on our business, sales, liquidity, financial condition and results of operations could be material.

Industry and Market Risks

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 may 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.

A significant portion of our Performance Materials segment's sales are 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 may 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 resulted in closures and conversions of mill in both North America and Europe. We expect paper consumption to remain similar to prior year levels in both regions.

Our Refractories segment primarily serves the steel industry. Global steel production has seen volatility in the market due to COVID-19. We expect steel consumption to be similar or slightly better than 2021 levels.

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 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.

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'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 \$349.7 million in 2021, or approximately 19% 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.

Financial Risks

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 April 3, 2022, the Company had \$1,060.7 million aggregate principal amount of total indebtedness (consisting primarily of \$548.0 million aggregate principal amount of loans under our term facility, \$400.0 million aggregate principal amount of notes and \$110.0 million outstanding under our revolving credit facility) and an additional \$180 million of borrowing capacity under the revolving credit facility (after giving effect to \$10.0 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. 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 interest rate of certain of our term loan borrowings is based on LIBOR interest rates, which is subject to change.

The interest rates on a significant portion of our borrowings under our senior secured credit facility is based on LIBOR interest rates. These rates might be subject to change based on the United Kingdom's Financial Conduct Authority's intention to phase out LIBOR. In March 2021, the ICE Benchmark Administration Limited, the administrator of LIBOR, extended the transition dates of certain LIBOR tenors to June 30, 2023, after which LIBOR reference rates will cease to be provided. Despite this deferral, the LIBOR administrator has advised that no new contracts using U.S. Dollar LIBOR should be entered into after December 31, 2021. Regulators, industry groups and certain committees, such as the Alternative Reference Rates Committee (ARRC) have, among other things, published recommended fallback language for LIBOR-linked financial instruments, identified recommended alternatives for certain LIBOR rates, such as the Secured Overnight Financing Rate (SOFR) as the recommended alternative to U.S. Dollar LIBOR, and proposed implementations of the recommended alternatives in floating rate financial instruments. It is currently unknown the extent to which these recommendations and proposals will be broadly accepted, whether they will continue to evolve, and what the effect of their implementation may be on the markets for floating-rate financial instruments. At this time, it is not possible to predict the effect that these developments or any discontinuance, modification or other reforms may have on LIBOR, other benchmarks or floating-rate debt instruments, including our floating-rate debt. If LIBOR ceases to exist prior to the maturity of our term facility, we will be required to substitute an index such as the Prime Rate or renegotiate our senior secured credit facility, and substitute an index to replace LIBOR with the new standard that is established. If we borrow under the Prime Rate, we will see increased borrowing costs until the agreements are amended or renegotiated to incorporate the new SOFR borrowing rate or a

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.

Technology, Development and Growth Risks

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, 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 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.

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 48% of our sales in 2021 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, Saudi Arabia, Turkey, Brazil, Thailand, China and South Africa. 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, war, unstable governments and legal systems, and other factors. In late February 2022, Russian military forces launched significant military action against Ukraine, which has continued through the date of this report. We have ceased our sales to Russia. Our sales in Russia and Ukraine have not been significant historically. Nevertheless, the outbreak of war between Russia and Ukraine and the resulting sanctions by U.S. and European governments, together with any additional future sanctions by them, could have an impact that expands into other geographies where we do business, including our supply chain, business partners, and customers in those markets. Any increased trade barriers or restrictions on global trade or retaliatory trade measures taken by Russia or other countries in response could affect our operating results. 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 46% 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. In addition, mining permits, leases and other rights are, or may be, required for certain of the Company's mining operations. Such permits, leases and other rights are subject to modification, renewal and revocation. Our ability to maintain such mining permits, leases and other rights has been, and may continue to be, affected by changes in laws, regulations and governmental actions, particularly in emerging markets such as Turkey and China. We cannot assure you that we will be able to maintain such mining permits, leases and other rights to the extent we currently maintain them or at all.

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.

Operational Risks

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 polices, 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 customers of our Energy Services business within the Environmental Products product line, 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 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 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.

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, temporarily 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.

Certain product lines within our Performance Materials segment are affected by seasonal weather patterns. A majority of revenues from our Energy Services business within the Environmental Products product line is 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 business. Our other Environmental Products businesses and our Building Materials product line 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 have been and will continue to be 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. Increased use of remote working arrangements has only increased our reliance on these technologies. Digital technologies are subject to the risk of cyberattacks. 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.

In October 2020, we detected a ransomware attack impacting certain of our information technology systems. The risks associated with the October 2020 incident or future incidents could harm our reputation and our relationships with customers, suppliers, employees, and other third parties, and may result in claims against us. In addition, although the October 2020 incident has not had a material impact on us, there can be no assurance that this incident or future incidents will not have a material adverse effect on our business, consolidated results of operations, and consolidated financial condition.