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

FORM 10-Q

(Mark One)
☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the quarterly period ended February 28, 2022
or
☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the transition period from _______________ to _________________

Commission File Number: 001-11038

NORTHERN TECHNOLOGIES INTERNATIONAL CORPORATION

(Exact name of registrant as specified in its charter)

Delaware	**41-0857886**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

4201 Woodland Road
P.O. Box 69
Circle Pines, Minnesota 55014
(Address of principal executive offices) (Zip Code)

(763) 225-6600
(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock, par value $0.02 per share	NTIC	Nasdaq Global Market

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

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

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

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

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

As of April 5, 2022, there were 9,221,517 shares of common stock of the registrant outstanding.

NORTHERN TECHNOLOGIES INTERNATIONAL CORPORATION
FORM 10-Q
February 28, 2022

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This quarterly report on Form 10-Q contains certain forward-looking statements that are within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, and are subject to the safe harbor created by those sections. For more information, see "Part I. Financial Information – Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations – Forward-Looking Statements."

As used in this report, references to "NTIC," the "Company," "we," "our" or "us," unless the context otherwise requires, refer to Northern Technologies International Corporation and its wholly-owned and majority-owned subsidiaries, all of which are consolidated on NTIC's consolidated financial statements.

As used in this report, references to: (1) "NTIC China" refer to NTIC's wholly-owned subsidiary in China, NTIC (Shanghai) Co., Ltd.; (2) "NTI Europe" refer to NTIC's wholly-owned subsidiary in Germany, NTIC Europe GmbH; (3) "Zerust Mexico" refer to NTIC's wholly-owned subsidiary in Mexico, ZERUST-EXCOR MEXICO, S. de R.L. de C.V; (4) "Zerust India" refer to NTIC's wholly-owned subsidiary in India effective as of September 1, 2021, Harita-NTI Limited; and (5)"NTI Asean" refer to NTIC's majority-owned holding company subsidiary, NTI Asean LLC, which holds investments in certain entities that operate in the Association of Southeast Asian Nations (ASEAN) region, including the following countries: Indonesia, South Korea, Malaysia, Philippines, Singapore, Taiwan, Thailand and Vietnam.

NTIC's consolidated financial statements do not include the accounts of any of its joint ventures. Except as otherwise indicated, references in this report to NTIC's joint ventures do not include any of NTIC's wholly-owned or majority-owned subsidiaries.

As used in this report, references to "EXCOR" refer to NTIC's joint venture in Germany, Excor Korrosionsschutz – Technologien und Produkte GmbH.

All trademarks, trade names or service marks referred to in this report are the property of their respective owners.

PART I - FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

NORTHERN TECHNOLOGIES INTERNATIONAL CORPORATION AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS AS OF FEBRUARY 28, 2022 (UNAUDITED) AND AUGUST 31, 2021 (AUDITED)

	February 28, 2022	August 31, 2021
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 7,487,811	$ 7,680,641
Available for sale securities	4,634	4,634
Receivables:		
Trade, excluding joint ventures, less allowance for doubtful accounts of $382,000 as of February 28, 2022 and August 31, 2021	12,457,917	11,128,805
Trade, joint ventures	905,961	624,808
Fees for services provided to joint ventures	1,078,702	1,505,127
Income taxes	570,483	386,574
Inventories	12,978,217	11,114,207
Prepaid expenses	3,113,898	1,302,293
Total current assets	$ 38,597,623	$ 33,747,089
PROPERTY AND EQUIPMENT, NET	$ 12,336,699	$ 11,821,458
OTHER ASSETS:		
Investments in joint ventures	21,852,070	27,623,768
Deferred income taxes	—	92,554
Patents and trademarks, net	717,805	709,572
Goodwill	4,782,376	—
Intangible asset, net	6,135,433	—
Operating lease right of use asset	528,645	376,438
Total other assets	34,016,329	28,802,332
Total assets	$ 84,950,651	$ 74,370,879
LIABILITIES AND EQUITY		
CURRENT LIABILITIES:		
Accounts payable	$ 5,948,430	$ 4,290,972
Line of credit	4,200,000	—
Income taxes payable	152,183	178,923
Accrued liabilities:		
Payroll and related benefits	1,694,506	2,879,468
Other	1,091,861	894,497
Current portion of operating lease	184,206	272,336
Total current liabilities	$ 13,271,186	$ 8,516,196
LONG-TERM LIABILITIES:		
Deferred income tax, net	1,897,259	—
Operating lease, less current portion	344,439	104,102
Total long-term liabilities	$ 2,241,698	$ 104,102
COMMITMENTS AND CONTINGENCIES (Note 14)		
EQUITY:		
Preferred stock, no par value; authorized 10,000 shares; none issued and outstanding	—	—
Common stock, $0.02 par value per share; authorized 15,000,000 shares as ofFebruary 28, 2022 and August 31, 2021; issued and outstanding 9,221,517 and 9,184,811, respectively	184,430	183,696
Additional paid-in capital	19,379,032	18,736,268
Retained earnings	50,361,066	46,973,092
Accumulated other comprehensive loss	(3,858,689)	(3,525,030)
Stockholders' equity	66,065,839	62,368,026
Non-controlling interests	3,371,928	3,382,555
Total equity	69,437,767	65,750,581
Total liabilities and equity	$ 84,950,651	$ 74,370,879

See notes to consolidated financial statements.

NORTHERN TECHNOLOGIES INTERNATIONAL CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS (UNAUDITED)
FOR THE THREE AND SIX MONTHS ENDED FEBRUARY 28, 2022 AND 2021

	Three Months Ended February 28,		Six Months Ended February 28,	
	2022	**2021**	**2022**	**2021**
NET SALES:				
Net sales, excluding joint ventures	$ 15,865,128	$ 12,255,941	$ 33,218,102	$ 24,454,749
Net sales, to joint ventures	883,511	526,941	1,723,950	1,107,245
Total net sales	16,748,639	12,782,882	34,942,052	25,561,994
Cost of goods sold	11,764,304	8,531,679	24,254,787	16,845,000
Gross profit	4,984,335	4,251,203	10,687,265	8,716,994
JOINT VENTURE OPERATIONS:				
Equity in income from joint ventures	922,832	1,920,012	2,297,581	3,745,724
Fees for services provided to joint ventures	1,246,909	1,462,684	2,505,767	2,799,245
Total joint venture operations	2,169,741	3,382,696	4,803,348	6,544,969
OPERATING EXPENSES:				
Selling expenses	2,971,391	2,832,008	6,209,149	5,573,776
General and administrative expenses	2,518,788	1,958,974	5,115,135	4,052,956
Research and development expenses	1,218,674	1,075,180	2,454,495	2,150,917
Total operating expenses	6,708,853	5,866,162	13,778,779	11,777,649
OPERATING INCOME	445,223	1,767,737	1,711,834	3,484,314
REMEASUREMENT GAIN ON ACQUISITION OF EQUITY METHOD INVESTEE	—	—	3,951,550	—
INTEREST INCOME	9,909	15,638	20,852	85,176
INTEREST EXPENSE	(7,404)	(5,249)	(10,295)	(7,617)
INCOME BEFORE INCOME TAX EXPENSE	447,728	1,778,126	5,673,941	3,561,873
INCOME TAX EXPENSE	151,743	274,660	656,123	653,250
NET INCOME	295,985	1,503,466	5,017,818	2,908,623
NET INCOME ATTRIBUTABLE TO NON-CONTROLLING INTERESTS	113,138	190,891	341,212	333,649
NET INCOME ATTRIBUTABLE TO NTIC	$ 182,847	$ 1,312,575	$ 4,676,606	$ 2,574,974
NET INCOME ATTRIBUTABLE TO NTIC PER COMMON SHARE:				
Basic	$ 0.02	$ 0.14	$ 0.51	$ 0.28
Diluted	$ 0.02	$ 0.13	$ 0.48	$ 0.26
WEIGHTED AVERAGE COMMON SHARES ASSUMED OUTSTANDING:				
Basic	9,214,817	9,104,636	9,211,858	9,104,623
Diluted	9,683,426	9,867,918	9,736,060	9,756,268
CASH DIVIDENDS DECLARED PER COMMON SHARE	$ 0.07	$ 0.065	$ 0.14	$ 0.065

See notes to consolidated financial statements.

NORTHERN TECHNOLOGIES INTERNATIONAL CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (UNAUDITED)
FOR THE THREE AND SIX MONTHS ENDED FEBRUARY 28, 2022 AND 2021

	Three Months Ended February 28,		Six Months Ended February 28,	
	2022	2021	2022	2021
NET INCOME	$ 295,985	$ 1,503,466	$ 5,017,818	$ 2,908,623
OTHER COMPREHENSIVE INCOME (LOSS) –FOREIGN CURRENCY TRANSLATION ADJUSTMENT	26,295	196,341	(382,769)	495,006
COMPREHENSIVE INCOME	322,280	1,699,807	4,635,049	3,403,629
COMPREHENSIVE INCOME (LOSS) ATTRIBUTABLE TO NON-CONTROLLING INTERESTS	(136,037)	177,117	(292,102)	387,780
COMPREHENSIVE INCOME ATTRIBUTABLE TO NTIC	$ 458,317	$ 1,522,690	$ 4,927,151	$ 3,015,849

See notes to consolidated financial statements.

NORTHERN TECHNOLOGIES INTERNATIONAL CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF EQUITY (UNAUDITED)
FOR THE THREE AND SIX MONTHS ENDED FEBRUARY 28, 2022 AND 2021

STOCKHOLDERS' EQUITY – THREE MONTHS ENDED FEBRUARY 28, 2022 AND 2021

	Common Stock		Additional Paid-in	Retained	Accumulated Other Comprehensive	Non-Controlling	Total
	Shares	Amount	Capital	Earnings	Income (Loss)	Interests	Equity
BALANCE AS OF NOVEMBER 30, 2021	9,203,446	$ 184,069	$19,146,510	$50,823,730	$ (3,862,085)	$ 3,338,620	$69,630,844
Stock options exercised	18,071	361	(361)	—	—	—	—
Stock option expense	—	—	232,883	—	—	—	232,883
Dividends paid to stockholders	—	—	—	(645,511)	—	—	(645,511)
Dividend received by non-controlling interest	—	—	—	—	—	(102,729)	(102,729)
Net income	—	—	—	182,847	—	113,138	295,985
Other comprehensive income	—	—	—	—	3,396	22,899	26,295
BALANCE AS OF FEBRUARY 28, 2022	9,221,517	$ 184,430	$19,379,032	$50,361,066	$ (3,858,689)	$ 3,371,928	$69,437,767
BALANCE AS OF NOVEMBER 30, 2020	9,104,636	$ 182,093	$17,632,811	$43,735,209	$ (3,179,678)	$ 3,255,689	$61,626,124
Stock option expense	—	—	160,835	—	—	—	160,835
Dividends paid to stockholders	—	—	—	(591,802)	—	—	(591,802)
Dividend received by non-controlling interest	—	—	—	—	—	(200,000)	(200,000)
Net income	—	—	—	1,312,575	—	190,891	1,503,466
Other comprehensive income (loss)	—	—	—	—	210,115	(13,774)	196,341
BALANCE AS OF FEBRUARY 28, 2021	9,104,636	$ 182,093	$17,793,646	$44,455,982	$ (2,969,563)	$ 3,232,806	$62,694,964

STOCKHOLDERS' EQUITY – SIX MONTHS ENDED FEBRUARY 28, 2022 AND 2021

	Common Stock		Additional Paid-in	Retained	Accumulated Other Comprehensive	Non-Controlling	Total
	Shares	Amount	Capital	Earnings	Income (Loss)	Interests	Equity
BALANCE AS OF AUGUST 31, 2021	9,184,811	$ 183,696	$18,736,268	$46,973,092	$ (3,525,030)	$ 3,382,555	$65,750,581
Stock options exercised	34,071	681	138,519	—	—	—	139,200
Stock issued for employee stock purchase plan	2,635	53	38,479	—	—	—	38,532
Stock option expense	—	—	465,766	—	—	—	465,766
Dividends paid to stockholders	—	—	—	(1,288,632)	—	—	(1,288,632)
Dividend received by non-controlling interest	—	—	—	—	—	(302,729)	(302,729)
Net income	—	—	—	4,676,606	—	341,212	5,017,818
Other comprehensive loss	—	—	—	—	(333,659)	(49,110)	(382,769)
BALANCE AS OF FEBRUARY 28, 2022	9,221,517	$ 184,430	$19,379,032	$50,361,066	$ (3,858,689)	$ 3,371,928	$69,437,767
BALANCE AS OF AUGUST 31, 2020	9,099,990	$ 182,000	$17,415,043	$42,472,810	$ (3,410,438)	$ 3,045,026	$59,704,441
Stock issued for employee stock purchase plan	4,646	93	36,099	—	—	—	36,192
Stock option expense	—	—	342,504	—	—	—	342,504
Dividends paid to stockholders	—	—	—	(591,802)	—	—	(591,802)
Dividend received by non-controlling interest	—	—	—	—	—	(200,000)	(200,000)
Net income	—	—	—	2,574,974	—	333,649	2,908,623
Other comprehensive income	—	—	—	—	440,875	54,131	495,006
BALANCE AS OF FEBRUARY 28, 2021	9,104,636	$ 182,093	$17,793,646	$44,455,982	$ (2,969,563)	$ 3,232,806	$62,694,964

See notes to consolidated financial statements.

NORTHERN TECHNOLOGIES INTERNATIONAL CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)
FOR THE SIX MONTHS ENDED FEBRUARY 28, 2022 AND 2021

	Six Months Ended February 28,	
	2022	**2021**
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net income	$ 5,017,818	$ 2,908,623
Adjustments to reconcile net income to net cash provided by operating activities:		
Stock-based compensation	465,766	342,504
Depreciation expense	430,991	451,498
Amortization expense	315,631	100,821
Change in allowance for doubtful accounts	—	10,000
Remeasurement gain on acquisition of equity method investee	(3,951,550)	—
Equity in income from joint ventures	(2,297,581)	(3,745,724)
Dividends received from joint ventures	5,362,636	3,323,503
Deferred income taxes	139,338	(3,182)
Changes in current assets and liabilities:		
Receivables:		
Trade, excluding joint ventures	321,322	(2,004,152)
Trade, joint ventures	(281,153)	27,879
Fees for services provided to joint ventures	426,425	(388,590)
Income taxes	(286,458)	(270,867)
Inventories	(990,628)	(83,028)
Prepaid expenses and other	(1,136,130)	(450,263)
Accounts payable	674,147	1,036,818
Income tax payable	(376,544)	290,252
Accrued liabilities	(1,715,302)	413,157
Net cash provided by operating activities	2,118,728	1,959,249
CASH FLOWS FROM INVESTING ACTIVITIES:		
Acquisition of Zerust India business, net of cash acquired (see Note 3)	(5,062,003)	—
Purchase of available for sale securities	—	(868,758)
Proceeds from the sale of available for sale securities	—	500,000
Purchases of property and equipment	(618,533)	(466,572)
Investments in patents	(112,297)	(75,220)
Net cash used in investing activities	(5,792,833)	(910,550)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from line of credit	4,200,000	—
Dividends paid on NTIC common stock	(1,288,632)	(591,802)
Proceeds from the exercise of stock options	139,200	—
Dividends received by non-controlling interest	(302,729)	(200,000)
Proceeds from employee stock purchase plan	38,532	36,192
Net cash provided by (used in) financing activities	2,786,371	(755,610)
EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS	694,904	92,414
NET (DECREASE) INCREASE IN CASH AND CASH EQUIVALENTS	(192,830)	385,503
CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD	7,680,641	6,403,032
CASH AND CASH EQUIVALENTS AT END OF PERIOD	$ 7,487,811	$ 6,788,535

See notes to consolidated financial statements.

1. INTERIM FINANCIAL INFORMATION

In the opinion of management, the accompanying unaudited consolidated financial statements contain all necessary adjustments, which are of a normal recurring nature, and present fairly the consolidated financial position of Northern Technologies International Corporation and its subsidiaries (the Company) as of February 28, 2022 and August 31, 2021, the results of the Company's operations for the three and six months ended February 28, 2022 and 2021, the changes in stockholders' equity for the three and six months ended February 28, 2022 and 2021, and the Company's cash flows for the six months ended February 28, 2022 and 2021, in conformity with accounting principles generally accepted in the United States of America (U.S. GAAP).

These consolidated financial statements should be read in conjunction with the consolidated financial statements and related notes contained in the Company's annual report on Form 10-K for the fiscal year ended August 31, 2021. These consolidated financial statements also should be read in conjunction with the "*Management's Discussion and Analysis of Financial Condition and Results of Operations*" section appearing in this report.

Operating results for the three and six months ended February 28, 2022 are not necessarily indicative of the results that may be expected for the full fiscal year ending August 31, 2022.

The Company evaluates events occurring after the date of the consolidated financial statements requiring recording or disclosure in the consolidated financial statements.

Impact of COVID-19 Pandemic

In March 2020, the World Health Organization declared the novel coronavirus (COVID-19) outbreak a global pandemic. As a result of the COVID-19 pandemic and related government mandated restrictions on the Company's business as well as the businesses of its joint ventures, customers and suppliers, disruption to the Company's business and the manufacture and sale of its products and services has occurred in the first six months of fiscal 2022 and is expected to continue during the remainder of fiscal 2022. In the first six months of fiscal 2022, the Company was impacted by shipping issues, including freight container shortages, shipping delays, and increased costs, and supply chain issues, including longer lead times and raw material cost increases.

2. ACCOUNTING PRONOUNCEMENTS

Recently Issued Accounting Pronouncements

In June 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2016-13, Measurement of Credit Losses on Financial Instruments, which revises guidance for the accounting for credit losses on financial instruments within its scope, and in November 2018, issued ASU No. 2018-19 and in April 2019, issued ASU No. 2019-04 and in May 2019, issued ASU No. 2019-05, and in November 2019, issued ASU No. 2019-11, which amended the standard. The new standard introduces an approach, based on expected losses, to estimate credit losses on certain types of financial instruments and modifies the impairment model for available-for-sale debt securities. The new approach to estimating credit losses (referred to as the current expected credit losses model) applies to most financial assets measured at amortized cost and certain other instruments, including trade and other receivables, loans, held-to-maturity debt securities, net investments in leases and off-balance-sheet credit exposures. This ASU is effective for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years, with early adoption permitted. Entities are required to apply the standard's provisions as a cumulative-effect adjustment to retained earnings as of the beginning of the first reporting period in which the guidance is adopted. The Company is still evaluating the impact of this ASU.

Although there are several other new accounting pronouncements issued or proposed by the FASB, which the Company has adopted or will adopt, as applicable, the Company does not believe any of these accounting pronouncements has had or will have a material impact on the Company's consolidated financial position or operating results.

3. BUSINESS COMBINATION

On September 21, 2021, the Company announced that it acquired the remaining 50% ownership interest in its Indian joint venture, Harita-NTI Limited (Zerust India), for $6,250,000 in cash, effective as of September 1, 2021, the date the Company obtained control. Prior to September 1, 2021, the Company owned 50% of the outstanding capital stock of Zerust India. The Company had historically accounted for this investment under the equity method of accounting. This purchase was funded with cash on hand and borrowings under the Company's revolving line of credit. The Company undertook the acquisition to enhance its Zerust business in India.

The purchase price of $6,250,000 was funded with cash on hand and borrowings under the Company's revolving line of credit, which was increased in connection with the transaction to $5,000,000.

Because the Company increased its ownership interest in Zerust India to 100%, the acquisition of Zerust India has been accounted for in accordance with Accounting Standards Codification (ASC) 805, Business Combinations, by using the acquisition method of accounting. Effective September 1, 2021, Zerust India is now a consolidated subsidiary within the Company's financial statements.

The following table summarizes the purchase price allocation that includes the fair values of the separately identifiable assets acquired and liabilities assumed as of September 1, 2021:

Cash and cash equivalents		$	1,187,997
Trade account receivable			1,954,769
Inventories			886,650
Prepaid expenses and other			396,545
Property, plant and equipment			219,077
Operating lease, right of use asset			355,000
Customer relationships			6,347,000
Goodwill			4,782,376
Current liabilities			(1,370,314)
Deferred tax liability			(1,904,100)
Operating lease liability			(355,000)
	Net assets acquired	$	12,500,000
Less:			
	Fair value of previously held equity method investment		(1,637,362)
	Cumulative foreign currency translation		(661,088)
	Gain recognized on acquisition		(3,951,550)
			(6,250,000)
Cash paid for acquisition		$	6,250,000

The excess of the fair value of purchase consideration over the fair value of net tangible and identifiable intangible assets acquired was recorded as goodwill. The fair values assigned to tangible and identifiable intangible assets acquired and liabilities assumed are based on management's estimates and assumptions. The fair values of assets acquired and liabilities assumed may be subject to change as additional information is received.

The fair value of the intangible asset associated with customer relationships was estimated using a discounted cash flow method with the application of the multi-period excess earnings method. Under this method, an intangible asset's fair value is equal to the present value of the incremental after-tax cash flows attributable to only the subject intangible asset after deducting contributory asset charges.

The rate used to discount the estimated future net cash flows to their present values for the intangible assets was based upon a weighted average cost of capital calculation. The discount rate was determined after consideration of market rates of return on debt and equity capital, the weighted average return on invested capital and the risk associated with achieving forecasted sales related to the assets acquired from Zerust India. The weighted average discount rate used to determine the fair value of the customer relationships was 15.3%.

The amortization period for the intangible assets is 15 years. The intangible assets are being amortized on a straight-line basis, which is consistent with the pattern that the economic benefits of the intangible assets are expected to be utilized based upon estimated cash flows generated from such asset. Goodwill associated with the acquisition was primarily attributable to the expansion opportunity of the Company's ZERUST business in India.

Authoritative guidance on accounting for business combinations requires that an acquirer re-measure its previously held equity interest in the acquisition at its acquisition date fair value and recognize the resulting gain or loss in earnings. As such, since the Company acquired the remaining 50% ownership interest of Zerust India effective September 1, 2021, the Company recognized a gain of $3,951,550 during the six months ended February 28, 2022. This gain is included in "Remeasurement gain on acquisition of equity method investee" on the Company's consolidated statements of operations for the three and six months ended February 28, 2022.

The Company has included the financial results of Zerust India in the consolidated financial statements from September 1, 2021. Net revenue and net income related to Zerust India since the date of acquisition totaled $4,680,103 and $496,748, respectively. The transaction costs associated with the acquisition were approximately $65,000 and $115,000, respectively, and are recorded in general and administrative expense as incurred during the three and six months ended February 28, 2022.

Unaudited consolidated pro forma information assuming the acquisition had occurred on September 1, 2020 for the three and six months ended February 28, 2022 would have an increase in net sales $2,257,542 and $4,271,892, respectively. Unaudited pro forma net income, assuming the acquisition had occurred on September 1, 2020, for the three and six months ended February 28, 2022 was not considered material to the Company's consolidated net income. The unaudited consolidated pro forma combined financial information does not purport to be indicative of the results which would have been obtained had the acquisition been completed as of the beginning of the earliest period presented or of results that may be obtained in the future. In addition, they do not include any benefits that may result from the acquisition due to synergies that may be derived from the elimination of any duplicative costs.

4. INVENTORIES

Inventories consisted of the following:

	February 28, 2022	August 31, 2021
Production materials	$ 5,016,068	$ 4,453,688
Finished goods	7,962,149	6,660,519
	$ 12,978,217	$ 11,114,207

5. PROPERTY AND EQUIPMENT, NET

Property and equipment, net consisted of the following:

	February 28, 2022	August 31, 2021
Land	$ 310,365	$ 310,365
Buildings and improvements	14,084,196	13,149,258
Machinery and equipment	5,540,345	5,453,679
	19,934,906	18,913,302
Less accumulated depreciation	(7,598,207)	(7,091,844)
	$ 12,336,699	$ 11,821,458

6. PATENTS AND TRADEMARKS, NET

Patents and trademarks, net consisted of the following:

	February 28, 2022	August 31, 2021
Patents and trademarks	$ 3,130,803	$ 3,018,507
Less accumulated amortization	(2,412,998)	(2,308,935)
	$ 717,805	$ 709,572

7. INVESTMENTS IN JOINT VENTURES

The consolidated financial statements of the Company's foreign joint ventures are initially prepared using the accounting principles accepted in the respective joint ventures' countries of domicile. Amounts related to foreign joint ventures reported in the below tables and the accompanying consolidated financial statements have subsequently been adjusted to conform with U.S. GAAP in all material respects. All material profits on sales recorded that remain on the consolidated balance sheet from the Company to its joint ventures and from joint ventures to other joint ventures have been eliminated for financial reporting purposes.

Financial information from the audited and unaudited financial statements of the Company's joint venture in Germany, Excor Korrosionsschutz – Technologien und Produkte GmbH (EXCOR), and all the Company's other joint ventures are summarized as follows:

	As of February 28, 2022		
	Total	EXCOR	All Other
Current assets	$ 55,032,109	$ 25,447,104	$ 29,585,005
Total assets	58,525,731	27,186,903	31,338,828
Current liabilities	12,803,351	3,004,495	9,798,856
Noncurrent liabilities	1,268,334	-	1,268,334
Joint ventures' equity	44,454,046	24,182,408	20,271,638
Northern Technologies International Corporation's share of joint ventures' equity	21,852,070	12,091,206	9,760,864
Northern Technologies International Corporation's share of joint ventures' undistributed earnings	20,501,921	12,060,301	8,441,621

	Three Months Ended February 28, 2022		
	Total	EXCOR	All Other
Net sales	$ 24,601,767	$ 9,312,434	$ 15,289,334
Gross profit	9,845,002	4,658,450	5,186,553
Net income	1,851,591	1,170,187	681,404
Northern Technologies International Corporation's share of equity in income from joint ventures	922,832	589,048	333,784
Northern Technologies International Corporation's dividends received from joint ventures	320,365	—	320,365

	Six Months Ended February 28, 2022		
	Total	EXCOR	All Other
Net sales	$ 51,624,762	$ 20,612,662	$ 31,012,100
Gross profit	20,877,961	10,127,436	10,750,525
Net income	4,629,196	2,991,734	1,637,462
Northern Technologies International Corporation's share of equity in income from joint ventures	2,297,581	1,499,821	797,760
Northern Technologies International Corporation's dividends received from joint ventures	5,362,636	4,255,200	1,107,436

	As of August 31, 2021		
	Total	EXCOR	All Other(1)
Current assets	$ 69,394,796	$ 33,886,655	$ 35,508,141
Total assets	73,814,402	36,211,520	37,602,882
Current liabilities	16,366,398	5,386,377	10,980,021
Noncurrent liabilities	1,455,524	—	1,455,524
Joint ventures' equity	55,992,480	30,825,144	25,167,336
Northern Technologies International Corporation's share of joint ventures' equity	27,623,768	15,412,574	12,211,194
Northern Technologies International Corporation's share of joint ventures' undistributed earnings	24,702,778	14,697,490	10,005,288

	Three Months Ended February 28, 2021		
	Total	EXCOR	All Other(1)
Net sales	$ 29,058,402	$ 10,542,097	$ 18,516,306
Gross profit	13,079,478	6,099,187	6,980,291
Net income	3,838,007	2,262,321	1,575,686
Northern Technologies International Corporation's share of equity in income from joint ventures	1,920,012	1,132,578	787,434
Northern Technologies International Corporation's dividends received from joint ventures	2,198,142	1,809,900	388,242

	Six Months Ended February 28, 2021		
	Total	EXCOR	All Other(1)
Net sales	$ 55,835,745	$ 20,093,580	$ 35,742,165
Gross profit	25,521,239	11,798,194	13,723,045
Net income	7,489,431	4,283,395	3,206,036
Northern Technologies International Corporation's share of equity in income from joint ventures	3,745,724	2,143,115	1,602,609
Northern Technologies International Corporation's dividends received from joint ventures	3,323,503	1,809,900	1,513,603

(1) Includes Zerust India since Zerust India was not a consolidated subsidiary of the Company as of August 31, 2021 or February 28, 2021. See Note 3 entitled "Business Combination."

8. INTANGIBLE ASSET, NET

Intangible asset, net consisted of the following as of February 28, 2022:

	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Customer relationships	$ 6,347,000	$ (211,567)	$ 6,135,433

The customer relationships was established as a part of purchase accounting related to our Zerust India acquisition. See Note 3 entitled "Business Combination." The Company amortizes the intangible asset related to the customer relationships using the straight-line method over the estimated useful lives of the asset, which is 15 years. Total amortization expense was $143,567 and $211,567 for the three and six months ended February 28, 2022, respectively. Amortization expense is estimated to be $423,000 in each of the next five fiscal years.

9. CORPORATE DEBT

The Company has a revolving line of credit with PNC Bank, National Association (PNC Bank) of $5,000,000 as of February 28, 2022. On August 31, 2021, in connection with the Company's acquisition of Zerust India, the Company and PNC Bank entered into an Amended and Restated Revolving Line of Credit Note, which increased the Company's line of credit from $3,000,000 to $5,000,000 until February 22, 2022. Additionally, on January 4, 2022, the Company and PNC Bank entered into an Amended and Restated Revolving Line of Credit Note, which extended the maturity date to January 7, 2023 and revised the rate at which amounts outstanding under the line of credit bear interest to equal a per annum rate equal to the daily Bloomberg Short-Term Bank Yield Index plus 250 basis points (2.50%) and maintained the line of credit's capacity at $5,000,000 during the period from January 4, 2022 until February 22, 2022 and $3,000,000 at all other times. Subsequently, to maintain future financial flexibility, the Company and PNC Bank agreed to keep the line of credit at $5,000,000. A 30-day extension was provided by PNC Bank on February 23, 2022 in order to ensure line of credit capacity between February 23, 2022 and March 1, 2022. On March 1, 2022, the Company and PNC Bank entered into an Amended and Restated Revolving Line of Credit Note, which established a line of credit of $5,000,000 during the period from February 23, 2022 until April 23, 2022 and $3,000,000 at all other times. The other material terms of the line of credit were not affected by these amendments.

Borrowings of $4,200,000 were outstanding under the line of credit as of February 28, 2022 and no amounts were outstanding as of August 31, 2021. The weighted average interest rate during each of the three and six months ended February 28, 2022 was 2.57%.

The line of credit is governed under an Amended and Restated Loan Agreement dated August 31, 2021. The obligations of the Company under the loan agreement are secured by a lien on all of the Company's personal property, excepting certain liens consented to in writing by PNC. The loan agreement contains covenants, including affirmative financial covenants, such as the maintenance of a minimum fixed charge coverage ratio of 1.10:1.00, and negative covenants, which, among other things, limit the incurrence of additional indebtedness, loans and equity investments, disposition of assets, mergers and consolidations and other matters customarily restricted in such agreements. As of February 28, 2022, the Company was in compliance with all debt covenants.

As of February 28, 2022 and August 31, 2021, the Company did not have any letters of credit outstanding with respect to the letter of credit sub-facility available under the revolving line of credit with PNC Bank. As of February 28, 2022 and August 31, 2021, the Company had $72,418 of letters of credit with JP Morgan Chase Bank that are performance based and set to expire between 2021 and 2022.

10. STOCKHOLDERS' EQUITY

During the six months ended February 28, 2022, the Company's Board of Directors declared cash dividends on the following dates in the following amounts to the following holders of the Company's common stock:

Declaration Date	Amount		Record Date	Payable Date
October 20, 2021	$	0.07	November 3, 2021	November 17, 2021
January 21, 2022	$	0.07	February 2, 2022	February 16, 2022

During the six months ended February 28, 2022 and 2021, the Company repurchased no shares of its common stock.

During the six months ended February 28, 2022, the Company granted stock options under the Northern Technologies International Corporation 2019 Stock Incentive Plan (as amended, the 2019 Plan) to purchase an aggregate of 174,840 shares of its common stock to various employees and directors. The weighted average per share exercise price of the stock options is $16.97. The exercise price of the stock options is equal to the fair market value of the Company's common stock on the date of grant. During the six months ended February 28, 2022, stock options to purchase an aggregate of 43,218 shares of common stock were exercised at a weighted average exercise price of $6.45 per share, resulting in the net issuance of 34,071 shares of common stock since some of the options were exercised on a net cashless exercise basis.

During the six months ended February 28, 2021, the Company's Board of Directors declared a cash dividend of $0.065 per share of the Company's common stock, payable on February 17, 2021 to stockholders of record on February 3, 2021. Prior to such time, the Company had suspended its quarterly cash dividend on April 23, 2020 pending clarity on the financial impact of COVID-19 on the Company.

During the six months ended February 28, 2021, the Company granted stock options under the 2019 Plan to purchase an aggregate of 419,874 shares of its common stock to various employees and directors. The weighted average per share exercise price of the stock options is $8.24. The exercise price of the stock options is equal to the fair market value of the Company's common stock on the date of grant. During the six months ended February 28, 2021, no stock options to purchase common stock were exercised.

The Company issued 2,636 and 4,646 shares of common stock on September 1, 2021 and 2020, respectively, under the Northern Technologies International Corporation Employee Stock Purchase Plan (ESPP). As of February 28, 2022, 72,186 shares of common stock remained available for sale under the ESPP.

11. NET INCOME PER COMMON SHARE

Basic net income per common share is computed by dividing net income by the weighted average number of common shares outstanding. Diluted net income per share assumes the exercise of stock options using the treasury stock method, if dilutive.

The following is a reconciliation of the net income per share computation for the three and six months ended February 28, 2022 and 2021:

	Three Months Ended February 28,		Six Months Ended February 28,	
Numerator:	**2022**	**2021**	**2022**	**2021**
Net income attributable to NTIC	$ 182,847	$ 1,312,575	$ 4,676,606	$ 2,574,974
Denominator:				
Basic – weighted shares outstanding	9,214,817	9,104,636	9,211,858	9,104,623
Weighted shares assumed upon exercise of stock options	468,609	763,282	524,202	651,645
Diluted – weighted shares outstanding	9,683,426	9,867,918	9,736,060	9,756,268
Basic net income per share:	$ 0.02	$ 0.14	$ 0.51	$ 0.28
Diluted net income per share:	$ 0.02	$ 0.13	$ 0.48	$ 0.26

The dilutive impact summarized above relates to the periods when the average market price of the Company's common stock exceeded the exercise price of the potentially dilutive option securities granted. Net income per common share was based on the weighted average number of common shares outstanding during the periods when computing basic net income per share. When dilutive, stock options are included as equivalents using the treasury stock market method when computing the diluted net income per share. Excluded from the computation of diluted net income per share for the three and six months ended February 28, 2022 were options outstanding to purchase 311,061 shares of common stock. Excluded from the computation of diluted net income per share for the three and six months ended February 28, 2021, were options outstanding to purchase 136,221 shares of common stock.

12. STOCK-BASED COMPENSATION

The Company has three stock-based compensation plans under which stock options or other stock-based awards have been granted: the Northern Technologies International Corporation Amended and Restated 2019 Stock Incentive Plan, the Northern Technologies International Corporation Amended and Restated 2007 Stock Incentive Plan (2007 Plan) and the Northern Technologies International Corporation Employee Stock Purchase Plan. The 2019 Plan replaced the 2007 Plan with respect to future grants; and, therefore, no further awards may be made under the 2007 Plan. The Compensation Committee of the Board of Directors and the Board of Directors administer these plans.

The 2019 Plan provides for the grant of incentive stock options, non-statutory stock options, stock appreciation rights, restricted stock, stock unit awards, performance awards, and stock bonuses to eligible recipients to enable the Company and its subsidiaries to attract and retain qualified individuals through opportunities for equity participation in the Company and to reward those individuals who contribute to the achievement of the Company's economic objectives. On January 15, 2021, the Company's stockholders approved certain amendments to the 2019 Plan, including an increase in the number of shares of common stock available for issuance under the plan by an additional 800,000 shares. Subject to adjustment as provided in the 2019 Plan, up to a maximum of 1,600,000 shares of the Company's common stock are issuable under the 2019 Plan. Options granted generally have a term of ten years and become exercisable over a one- or three- year period beginning on the one-year anniversary of the date of grant. Options are granted at per share exercise prices equal to the market value of the Company's common stock on the date of grant. The Company issues new shares upon the exercise of options. As of February 28, 2022, options to purchase an aggregate of 895,484 shares of the Company's common stock were outstanding under the 2019 Plan and 704,516 shares of the Company's common stock remain available for grant under the 2019 Plan. As of February 28, 2022, options to purchase an aggregate of 662,789 shares of the Company's common stock were outstanding under the 2007 Plan.

The Company granted options to purchase an aggregate of 174,840 and 419,874 shares of its common stock during the six months ended February 28, 2022 and 2021, respectively. The fair value of option grants is determined at the date of grant using the Black-Scholes option pricing model with the assumptions listed below. The Company recognized compensation expense of $133,334 and $266,668 during the three and six months ended February 28, 2022, respectively, and compensation expense of $66,667 and $133,334 during the three and six months ended February 28, 2021, respectively, related to the options that vested during such time period. As of February 28, 2022, the total compensation cost for non-vested options not yet recognized in the Company's consolidated statements of operations was $1,475,485. Stock-based compensation expense of $465,766 is expected through the remainder of fiscal year 2022 and $671,526 and $338,193 is expected to be recognized during fiscal 2023 and fiscal 2024, respectively, based on outstanding options as of February 28, 2022. Future option grants will impact the compensation expense recognized. Stock-based compensation expense is included in general and administrative expense on the consolidated statements of operations.

The fair value of each option grant is estimated on the grant date using the Black-Scholes option pricing model with the following assumptions and results for the grants:

	Three and Six Months Ended February 28,	
	2022	2021
Dividend yield	1.65%	2.37%
Expected volatility	45.4%	45.6%
Expected life of option (in years)	10	10
Average risk-free interest rate	0.77%	0.28%

The weighted average per share fair value of options granted during the six months ended February 28, 2022 and 2021 was $7.29 and $3.12, respectively. The weighted average remaining contractual life of the options outstanding as of February 28, 2022 and 2021 was 6.25 years and 6.65 years, respectively.

13. SEGMENT AND GEOGRAPHIC INFORMATION

Segment Information

The Company's chief operating decision maker is its Chief Executive Officer. The Company's business is organized into two reportable segments: ZERUST® and Natur-Tec®. The Company has been selling its proprietary ZERUST® rust and corrosion inhibiting products and services to the automotive, electronics, electrical, mechanical, military and retail consumer markets for over 45 years and, more recently, has targeted and expanded into the oil and gas industry. The Company also sells a portfolio of bio-based and compostable (fully biodegradable) polymer resins and finished products under the Natur-Tec® brand.

The following table sets forth the Company's net sales for the three and six months ended February 28, 2022 and 2021 by segment:

	Three Months Ended February 28,		Six Months Ended February 28,	
	2022	2021	2022	2021
ZERUST® net sales	$ 13,117,777	$ 10,284,116	$ 27,541,562	$ 20,504,667
Natur-Tec® net sales	3,630,862	2,498,766	7,400,490	5,057,327
Total net sales	$ 16,748,639	$ 12,782,882	$ 34,942,052	$ 25,561,994

The following table sets forth the Company's cost of goods sold for the three and six months ended February 28, 2022 and 2021 by segment:

	Three Months Ended February 28,				Six Months Ended February 28,			
	2022	% of Product Sales*	2021	% of Product Sales*	2022	% of Product Sales*	2021	% of Product Sales*
Direct cost of goods sold								
ZERUST®	$ 8,151,274	62.1%	$ 6,065,963	59.0%	$16,857,941	61.2%	$11,837,052	57.7%
Natur-Tec®	2,775,436	76.4%	1,684,180	67.4%	5,697,533	77.0%	3,451,810	68.3%
Indirect cost of goods sold	837,594	—	781,536	—	1,699,313	—	1,556,138	—
Total net cost of goods sold	$11,764,304		$ 8,531,679		$24,254,787		$16,845,000	

* The percent of segment sales is calculated by dividing the direct cost of goods sold for each individual segment category by the net sales for each segment category.

The Company utilizes product net sales and direct and indirect cost of goods sold for each product in reviewing the financial performance of a product type. Further allocation of Company expenses or assets, aside from amounts presented in the tables above, is not utilized in evaluating product performance, nor does such allocation occur for internal financial reporting.

Geographic Information

Net sales by geographic location for the three and six months ended February 28, 2022 and 2021 were as follows:

	Three Months Ended February 28,		Six Months Ended February 28,	
	2022	2021	2022	2021
Inside the U.S.A. to unaffiliated customers	$ 5,115,963	$ 4,619,130	$ 11,272,285	$ 9,480,485
Outside the U.S.A. to:				
Joint ventures in which the Company is a shareholder directly and indirectly	883,513	526,942	1,723,952	1,107,246
Unaffiliated customers	10,749,163	7,636,810	21,945,815	14,974,262
	$ 16,748,639	$ 12,782,882	$ 34,942,052	$ 25,561,994

Net sales by geographic location are based on the location of the customer.

Fees for services provided to joint ventures by geographic location as a percentage of total fees for services provided to joint ventures during the three and six months ended February 28, 2022 and 2021 were as follows:

	Three Months Ended February 28,			
	2022	% of Total Fees for Services Provided to Joint Ventures	2021	% of Total Fees for Services Provided to Joint Ventures
Germany	$ 216,992	17.4%	$ 231,917	15.9%
Poland	172,700	13.9%	210,943	14.4%
Japan	151,933	12.2%	181,493	12.4%
France	115,663	9.3%	97,638	6.7%
Sweden	99,178	8.0%	146,896	10.0%
United Kingdom	86,736	7.0%	71,759	4.9%
Thailand	87,918	7.1%	107,377	7.3%
Finland	85,426	6.9%	71,496	4.9%
Czech Republic	69,386	5.6%	89,538	6.1%
South Korea	64,173	5.1%	78,220	5.3%
Other	96,804	7.5%	175,407	12.0%
	$ 1,246,909	100.0%	$ 1,462,684	100.0%

	Six Months Ended February 28,			
	2022	% of Total Fees for Services Provided to Joint Ventures	2021	% of Total Fees for Services Provided to Joint Ventures
Germany	$ 435,422	17.4%	$ 460,744	16.5%
Poland	349,626	14.0%	400,353	14.3%
Japan	318,740	12.7%	361,455	12.9%
France	231,958	9.3%	203,545	7.3%
Sweden	207,248	8.3%	237,385	8.5%
Thailand	181,663	7.2%	133,674	4.8%
South Korea	175,472	7.0%	197,309	7.0%
Finland	165,599	6.6%	147,779	5.3%
Czech Republic	139,483	5.6%	158,891	5.7%
United Kingdom	126,800	5.1%	163,298	5.8%
Other	173,756	6.8%	334,811	12.0%
	$ 2,505,767	100.0%	$ 2,799,245	100.0%

The geographical distribution of total property and equipment and net sales is as follows:

	As of February 28, 2022	As of August 31, 2021
China	$ 5,615,383	$ 5,110,071
Other	655,837	453,199
United States	6,783,284	6,967,761
Total property and equipment and intangible assets, net	$ 13,054,504	$ 12,531,031

	Three Months Ended February 28,	
	2022	2021
China	$ 4,163,741	$ 4,443,656
Brazil	936,089	804,569
India	4,068,781	1,295,006
Other	2,464,066	1,620,521
United States	5,115,962	4,619,130
Total net sales	$ 16,748,639	$ 12,782,882

	Six Months Ended February 28,	
	2022	2021
China	$ 8,221,593	$ 8,987,634
Brazil	2,232,306	1,518,422
India	8,545,765	2,495,474
Other	4,670,103	3,079,978
United States	11,272,285	9,480,486
Total net sales	$ 34,942,052	$ 25,561,994

Long-lived assets consist of property and equipment and intangible assets. These assets are periodically reviewed to assure the net realizable value from the estimated future production based on forecasted sales exceeds the carrying value of the assets.

Sales to the Company's joint ventures are included in the foregoing segment and geographic information; however, sales by the Company's joint ventures to other parties are not included. The foregoing segment and geographic information represents only sales recognized directly by the Company and sold in that geographic territory.

All joint venture operations, including equity in income, fees for services and related dividends, are primarily related to ZERUST® products and services.

14. COMMITMENTS AND CONTINGENCIES

Annual Bonus Plan

On August 26, 2021, the Compensation Committee of the Board of Directors of the Company approved the material terms of an annual bonus plan for the Company's executive officers as well as certain officers and employees for the fiscal year ending August 31, 2022. For fiscal 2022, as in past years, the total amount available under the bonus plan for all plan participants, including executive officers, is dependent upon the Company's earnings before interest, taxes, and other income (EBITOI), as adjusted to take into account amounts to be paid under the bonus plan and certain other adjustments (Adjusted EBITOI). Each plan participant's percentage of the overall bonus pool is based upon the number of plan participants, the individual's annual base salary, and the individual's position and level of responsibility within the Company. In the case of each of the Company's executive officer participants, 75% of the amount of their individual bonus payout will be determined based upon the Company's actual EBITOI for fiscal 2022 compared to a pre-established target EBITOI for fiscal 2022, and 25% of the payout will be determined based upon such executive officer's achievement of certain pre-established individual performance objectives. The payment of bonuses under the plan is discretionary, and bonuses may be paid to executive officer participants in both cash and shares of the Company's common stock, the exact amount and percentages of which are determined by the Company's Board of Directors, upon recommendation of the Compensation Committee, after the completion of the Company's consolidated financial statements for fiscal 2022. There was $666,668 recognized for management bonuses for the six months ended February 28, 2022, compared to $1,033,334 recognized for management bonuses for the six months ended February 28, 2021.

Concentrations

One joint venture (the Company's joint venture in South Korea) accounted for 33.8% of the Company's trade joint venture receivables as of February 28, 2022, and three joint ventures (consisting of the Company's joint ventures in India, USA and Thailand) accounted for 72.1% of the Company's trade joint venture receivables as of February 28, 2021.

Legal Matters

From time to time, the Company is subject to various other claims and legal actions in the ordinary course of its business. The Company records a liability in its consolidated financial statements for costs related to claims, including future legal costs, settlements and judgments, where the Company has assessed that a loss is probable, and an amount could be reasonably estimated. If the reasonable estimate of a probable loss is a range, the Company records the most probable estimate of the loss or the minimum amount when no amount within the range is a better estimate than any other amount. The Company discloses a contingent liability even if the liability is not probable or the amount is not estimable, or both, if there is a reasonable possibility that material loss may have been incurred. In the opinion of management, as of February 28, 2022, the amount of liability, if any, with respect to these matters, individually or in the aggregate, will not materially affect the Company's consolidated results of operations, financial position or cash flows.

15. FAIR VALUE MEASUREMENTS

Assets and liabilities that are measured at fair value on a recurring basis primarily relate to marketable equity securities. These items are marked-to-market at each reporting period, and the Company estimates that market value approximates costs.

The following tables provide information by level for assets and liabilities that are measured at fair value on a recurring basis:

		Fair Value Measurements Using Inputs Considered as		
	Fair value as of February 28, 2022	**Level 1**	**Level 2**	**Level 3**
Available for sale securities	$ 4,634	$ 4,634	$ —	$ —

		Fair Value Measurements Using Inputs Considered as		
	Fair value as of August 31, 2021	**Level 1**	**Level 2**	**Level 3**
Available for sale securities	$ 4,634	$ 4,634	$ —	$ —

There were no transfers between Level 1, Level 2, or Level 3 during the three and six months ended February 28, 2022 and 2021.

16. SUPPLEMENTAL CASH FLOW INFORMATION

Supplemental disclosures of cash flow information consisted of:

	Three Months Ended February 28,		Six Months Ended February 28,	
	2022	2021	2022	2021
Cash paid for interest	$ 7,404	$ 5,249	$ 10,295	$ 7,617

17. INCOME TAXES

Income tax expense for the three and six months ended February 28, 2022 was $151,743 and $656,123, respectively, compared to $274,660 and $653,250, respectively, for the three and six months ended February 28, 2021. The expense was largely due to foreign operations. The Company has federal and state tax credit carry forwards, net operating loss carry forwards and foreign tax carry forwards. The Company has recorded a full valuation allowance against the U.S. deferred tax assets as of February 28, 2022 and August 31, 2021.

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

This Management's Discussion and Analysis provides material historical and prospective disclosures intended to enable investors and other users to assess NTIC's financial condition and results of operations. Statements that are not historical are forward-looking and involve risks and uncertainties discussed under the heading "*Part I. Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations—Forward-Looking Statements*" in this report and under "*Part 1. Item 1A. Risk Factors*" in our annual report on Form 10-K for the fiscal year ended August 31, 2021. The following discussion of the results of the operations and financial condition of NTIC should be read in conjunction with NTIC's consolidated financial statements and the related notes thereto included under the heading "*Part I. Item 1. Financial Statements*."

Business Overview

NTIC develops and markets proprietary, environmentally-beneficial products and services in over 65 countries either directly or via a network of subsidiaries, joint ventures, independent distributors, and agents. NTIC's primary business is corrosion prevention marketed mainly under the ZERUST® brand. NTIC has been selling its proprietary ZERUST® products and services to the automotive, electronics, electrical, mechanical, military, and retail consumer markets for over 45 years and, in recent years, has targeted and expanded into the oil and gas industry. NTIC also markets and sells a portfolio of bio-based and certified compostable (fully biodegradable) polymer resin compounds and finished products under the Natur-Tec® brand. These products are intended to reduce NTIC's customers' carbon footprint and provide environmentally sound waste disposal options.

NTIC's ZERUST® rust and corrosion inhibiting products include plastic and paper packaging, liquids, coatings, rust removers, cleaners, and diffusers as well as engineered solutions designed specifically for the oil and gas industry. NTIC also offers worldwide, on-site, technical consulting for rust and corrosion prevention issues. NTIC's technical service consultants work directly with the end users of NTIC's ZERUST® rust and corrosion inhibiting products to analyze their specific needs and develop systems to meet their performance requirements. In North America, NTIC sells its ZERUST® corrosion prevention solutions through a network of independent distributors and agents supported by a direct sales force.

Internationally, NTIC sells its ZERUST® corrosion prevention solutions through its wholly-owned subsidiary in China, NTIC (Shanghai) Co., Ltd. (NTIC China), starting September 1, 2021 its wholly-owned subsidiary in India, Harita-NTI Ltd. (Zerust India), its majority-owned joint venture holding company for NTIC's joint venture investments in the Association of Southeast Asian Nations (ASEAN) region, NTI Asean LLC (NTI Asean), certain majority-owned and wholly-owned subsidiaries, and joint venture arrangements in North America, Europe, and Asia. NTIC also sells products directly to its European joint venture partners through its wholly-owned subsidiary in Germany, NTIC Europe GmbH (NTI Europe).

One of NTIC's strategic initiatives is to expand into and penetrate other markets for its ZERUST® corrosion prevention technologies. Consequently, for the past several years, NTIC has focused significant sales and marketing efforts on the oil and gas industry, as the infrastructure that supports that industry is typically constructed using metals that are highly susceptible to corrosion. NTIC believes that its ZERUST® corrosion prevention solutions will minimize maintenance downtime on critical oil and gas industry infrastructure, extend the life of such infrastructure, and reduce the risk of environmental pollution due to leaks caused by corrosion.

NTIC markets and sells its ZERUST® rust and corrosion prevention solutions to customers in the oil and gas industry across several countries either directly, through its subsidiaries, or through its joint venture partners and other strategic partners. The sale of ZERUST® corrosion prevention solutions to customers in the oil and gas industry typically involves long sales cycles, often including multi-year trial periods with each customer and a slow integration process thereafter.

Natur-Tec® bio-based and compostable plastics are manufactured using NTIC's patented and/or proprietary technologies and are intended to replace conventional petroleum-based plastics. The Natur-Tec® biopolymer resin compound portfolio includes formulations that have been optimized for a variety of applications, including blown-film extrusion, extrusion coating, injection molding, and engineered plastics. These resin compounds are certified to be fully biodegradable in a composting environment and are currently being used to produce finished products, including can liners, shopping and grocery bags, lawn and leaf bags, branded apparel packaging bags and accessories, and various foodservice items, such as disposable cutlery, drinking straws, food-handling gloves, and coated paper products. In North America, NTIC markets its Natur-Tec® resin compounds and finished products primarily through a network of regional and national distributors as well as independent agents. NTIC continues to see significant opportunities for finished bioplastic products and, therefore, continues to strengthen and expand its North American distribution network for finished Natur-Tec® bioplastic products.

Internationally, NTIC sells its Natur-Tec® resin compounds and finished products both directly and through its wholly-owned subsidiary in China and majority-owned subsidiaries in India and Sri Lanka, and through distributors and certain joint ventures.

Acquisition of Zerust India

On September 21, 2021, NTIC announced that it acquired the remaining 50% ownership interest in its Indian joint venture, Zerust India, for $6,250,000 in cash, effective as of September 1, 2021.

As a result of the acquisition of Zerust India, NTIC's revenues and operating expenses increased and its equity in income from joint ventures decreased during the three and six months ended February 28, 2022 as compared to the three and six months ended February 28, 2021 and it is anticipated that the acquisition will continue to have these effects on NTIC's financial results during the remainder of fiscal 2022.

See Note 3 to NTIC's consolidated financial statements for a discussion of Zerust India.

NTIC's Subsidiaries and Joint Venture Network

NTIC has ownership interests in 10 operating subsidiaries in North America, South America, Europe, and Asia. The following table sets forth a list of NTIC's operating subsidiaries as of February 28, 2022, the country in which the subsidiary is organized, and NTIC's ownership percentage in each subsidiary:

Subsidiary Name	Country	NTIC Percent (%) Ownership
NTIC (Shanghai) Co., Ltd	China	100%
NTI Asean LLC	United States	60%
Zerust Prevenção de Corrosão S.A.	Brazil	85%
ZERUST-EXCOR MEXICO, S. de R.L. de C.V	Mexico	100%
Harita-NTI Limited	India	100%
Natur-Tec India Private Limited	India	75%
Natur Tec Lanka (Pvt) Ltd	Sri Lanka(1)	75%
NTIC Europe GmbH	Germany	100%
Zerust Singapore Pte Ltd	Singapore(2)	60%
Zerust Vietnam Co. Ltd	Vietnam(2)	60%

(1) Natur Tec Lanka (Pvt) Ltd. is 100% owned by Natur-Tec India Private Limited and, therefore, indirectly owned by NTIC.
(2) Zerust Singapore Pte Ltd and Zerust Vietnam Co. Ltd are 100% owned by NTI Asean LLC and, therefore, indirectly owned by NTIC.

The results of these subsidiaries are fully consolidated in NTIC's consolidated financial statements, including Zerust India, which has been consolidated since September 1, 2021.

NTIC participates in 17 active joint venture arrangements in North America, Europe and Asia. Each of these joint ventures generally manufactures and markets products in the geographic territory to which it is assigned. While most of NTIC's joint ventures exclusively sell rust and corrosion inhibiting products, some of the joint ventures also sell NTIC's Natur-Tec® resin compounds. NTIC has historically funded its investments in joint ventures with cash generated from operations.

The following table sets forth a list of NTIC's operating joint ventures as of February 28, 2022, the country in which the joint venture is organized, and NTIC's ownership percentage in each joint venture:

Joint Venture Name	Country	NTIC Percent (%) Ownership
TAIYONIC LTD.	Japan	50%
ACOBAL SAS	France	50%
EXCOR KORROSIONSSCHUTZ – TECHNOLOGIEN UND PRODUKTE GMBH	Germany	50%
ZERUST AB	Sweden	50%
MOSTNIC-ZERUST	Russia	50%
ZERUST OY	Finland	50%
ZERUST (U.K.) LTD.	United Kingdom	50%
EXCOR-ZERUST S.R.O.	Czech Republic	50%
EXCOR SP. Z.O.O.	Poland	50%
ZERUST A.Ş.	Turkey	50%
ZERUST CONSUMER PRODUCTS, LLC	United States	50%
ZERUST – DNEPR	Ukraine	50%
KOREA ZERUST CO., LTD.	South Korea(1)	30%
ZERUST-NIC (TAIWAN) CORP.	Taiwan(1)	30%
PT. CHEMINDO – NTIA	Indonesia(1)	30%
ZERUST SPECIALTY TECH CO. LTD.	Thailand(1)	30%
CHONG WAH-NTIA SDN. BHD.	Malaysia(1)	30%

(1) Indirect ownership interest through NTI Asean.

NTIC receives funds from its joint ventures as fees received for services that NTIC provides to its joint ventures and as dividend distributions. The fees for services provided to joint ventures are determined based on either a flat fee or a percentage of sales depending on local laws and tax regulations. With respect to NTIC's joint venture in Germany (EXCOR), NTIC recognizes an agreed upon quarterly fee for services. NTIC recognizes equity income from each joint venture based on the overall profitability of the joint venture. Such profitability is subject to variability from quarter to quarter, which, in turn, subjects NTIC's earnings to variability from quarter to quarter. The profits of each joint venture are shared by the respective joint venture owners in accordance with their respective ownership percentages. NTIC typically directly or indirectly owns 50% or less of each of its joint venture entities and, thus, does not control the decisions of these entities regarding whether dividends are paid and, if so, what amount is paid in a given year. The payment of a dividend by an entity is determined by a joint vote of the owners and is not at the sole discretion of NTIC.

NTIC accounts for the investments and financial results of its joint ventures in its financial statements utilizing the equity method of accounting.

NTIC considers EXCOR to be individually significant to NTIC's consolidated assets and income as of February 28, 2022. Therefore, NTIC provides certain additional information regarding EXCOR in the notes to NTIC's consolidated financial statements and in this section of this report.

Impact of the COVID-19 Pandemic

In March 2020, the World Health Organization declared the novel coronavirus (COVID-19) outbreak a global pandemic. The COVID-19 pandemic has negatively impacted the global economy, disrupted global supply chains and shipping, created significant volatility and disruption in financial markets and has resulted in an economic recession. The outbreak and continuing rapid spread of COVID-19 has resulted in a substantial curtailment of business activities worldwide and is causing weakened economic conditions, both in the United States and abroad.

As part of efforts to contain the spread of COVID-19, federal, state, local and foreign governments imposed various restrictions on the conduct of business and travel, some of which remain in place in whole or in part and some of which have been or may be reinstated. Government restrictions, such as stay-at-home orders, quarantines and worker absenteeism as a result of COVID-19, led to a significant number of business closures and slowdowns. These business closures and slowdowns adversely impacted and may continue to adversely impact NTIC directly and caused some of NTIC's customers and suppliers to operate at a fraction of their capacities or wholly lock down, which disrupted and may continue to disrupt NTIC's sales and production.

As the events surrounding the COVID-19 pandemic unfolded, NTIC's primary focus was, and continues to be, the health, safety and wellbeing of its employees, customers and suppliers. In order to continue its operations, as permitted by respective state, local and foreign governments, NTIC has adopted numerous safety measures in accordance with U.S. Centers for Disease Control and Prevention, World Health Organization, and federal, state, local and foreign guidance in order to protect its employees, customers and suppliers. These safety measures include, but are not limited to, adhering to social distancing protocols, enabling the majority of its employees to work from home, suspending non-essential travel, disinfecting facilities and workspaces extensively and frequently, suspending all non-essential visitors and requiring employees who must be present at NTIC's facilities to wear face coverings. NTIC expects to continue such safety measures for the foreseeable future and may take further actions, or adapt these existing policies, as government authorities may require or recommend or as it may determine to be in the best interests of its employees, customers and suppliers.

NTIC has been balancing its safety-focused approach with the needs of its customers. Government mandated measures resulting in the substantial curtailment of business activities generally have excluded certain essential businesses and services, including certain manufacturing. With the exception of the temporary closures of NTIC's facilities in China and India during the COVID-19 pandemic in 2020 and again sporadically during 2021 and 2022, NTIC's manufacturing activities are generally considered part of the "critical sector" with respect to state and local government orders. This has allowed NTIC to continue to receive orders and provide uninterrupted order fulfillment to its customers. However, its facilities have been operating at a reduced capacity in order to abide by local government requirements and recommendations, such as social distancing practices, and in response to reduced demand. During the first six months of fiscal 2022, certain of NTIC's facilities continued to be impacted by reduced levels of production, manufacturing inefficiencies due to the reconfiguration of certain of its manufacturing processes in order to implement social distancing protocols and reduced demand. NTIC has engaged and continues to engage in communications with its suppliers in an attempt to identify and mitigate supply chain risks and shipping delays and proactively manage inventory levels in order to align production with demand. While domestic and international governmental measures may be modified or extended, NTIC currently expects that its global facilities will remain operational, although operating at reduced production capacity at certain of its facilities. However, such expectation is dependent upon future governmental actions and demand for NTIC's products, the stability of its global supply chain and the ability of carriers to transport supplies to its facilities and products to its customers.

As a result of the global economic slowdown caused by the COVID-19 pandemic, NTIC experienced softened demand in various regions and markets during the six months ended February 28, 2022, which had an adverse effect on NTIC's operating results and financial condition. NTIC expects this softness in sales to continue through at least the third quarter of fiscal 2022. In addition, NTIC has experienced supply shortages and price increases on raw materials and increased labor costs, which have adversely affected its margins. NTIC has also experienced increased shipping costs and shipping delays as a result of freight container shortages. These issues have persisted into the third quarter of fiscal 2022 and are expected to continue to persist throughout fiscal 2022. Due to the international reach of COVID-19, NTIC's international joint ventures have also been adversely impacted. It is not possible to predict how long the pandemic will last or the time that it will take for economic activity to return to prior pre-pandemic levels for all business units.

Any of these events could materially adversely affect NTIC's business, operating results and financial condition.

Worldwide Supply Chain Disruptions

Worldwide supply chain disruptions, which were initially brought about by the impact of the COVID-19 pandemic, have persisted despite the recovery in the global economy and financial markets. These issues continued in the second quarter of fiscal 2022 and are expected to continue throughout the remainder of fiscal 2022. NTIC has experienced longer lead times for raw materials, has been forced to find new suppliers of certain raw materials, and has experienced raw material cost increases compared to prior fiscal quarters. Additionally, NTIC has experienced significantly longer shipping times and significant price increases per shipping container compared to prior fiscal quarters due to ocean freight capacity issues resulting from increased demand for shipping and reduced capacity and equipment. These and other issues resulting from worldwide supply chain disruptions are expected to continue throughout the remainder of fiscal 2022 and could continue to have a material adverse effect on NTIC's business, operating results and financial condition. The precise financial impact and duration, however, cannot be reasonably estimated at this time.

Financial Overview

NTIC's management, including its chief executive officer, who is NTIC's chief operating decision maker, reports and manages NTIC's operations in two reportable business segments based on products sold, customer base and distribution center: Zerust® products and services and Natur-Tec® products.

Highlights of NTIC's second quarter of fiscal 2022 financial results include:

- NTIC's consolidated net sales increased 31.0% and 36.7% during the three and six months ended February 28, 2022, respectively, compared to the three and six months ended February 28, 2021. NTIC's consolidated net sales for the three and six months ended February 28, 2022 were positively affected by incremental sales as a result of the Zerust India acquisition and to a lesser extent increased demand.

- During the three and six months ended February 28, 2022, 78.3% and 78.8% of NTIC's consolidated net sales, respectively, were derived from sales of ZERUST® products and services, which increased 27.6% and 34.3% to $13,117,777 and $27,541,562, respectively, compared to $10,284,116 and $20,504,667 during the three and six months ended February 28, 2021, respectively. These increases were due to incremental sales as a result of the Zerust India acquisition and increased sales to new and existing customers due to increased global demand. NTIC's consolidated net sales for the six months ended February 28, 2022 included $1,549,737 of sales made to customers in the oil and gas industry compared to $923,763 for the six months ended February 28, 2021.

- Net sales of Natur-Tec® products increased 45.3% and 46.3% during the three and six months ended February 28, 2022, respectively, compared to the three and six months ended February 28, 2021 primarily due to an increase in finished product sales in North America and at NTIC's majority-owned subsidiary in India, Natur-Tec India Private Limited.

- Cost of goods sold as a percentage of net sales increased to 70.2% during the three months ended February 28, 2022, compared to 66.7% during the three months ended February 28, 2021, and increased to 69.4% during the six months ended February 28, 2022, compared to 65.9% during the prior fiscal year period primarily as a result of price increases on raw materials used in NTIC's products, as well as increased labor and shipping costs, partially offset by increased net sales.

- NTIC's equity in income from joint ventures decreased 51.9% and 38.7% during the three and six months ended February 28, 2022, respectively, to $922,832 and $2,297,581, respectively, compared to $1,920,012 and $3,745,724 during the three and six months ended February 28, 2021, respectively. These decreases were primarily due to the fact that Zerust India is now a consolidated subsidiary within NTIC's financial statements and an increase in operating expenses and a decrease in gross margins at the joint ventures.

- Net sales at the joint ventures decreased 15.3% and 7.5% to $24,601,767 and $51,624,762 during the three and six months ended February 28, 2022, respectively, compared to $29,058,402 and $55,835,745 during the three and six months ended February 28, 2021, respectively. These decreases were primarily a result of decreased demand during the current year periods and the Zerust India acquisition and its sales being included in NTIC's net sales in the prior fiscal year periods.

- NTIC's total operating expenses increased 14.4% and 17.0% to $6,708,853 and $13,778,779 during the three and six months ended February 28, 2022, respectively, compared to $5,866,162 and $11,777,649 for the three and six months ended February 28, 2021. These increases were primarily due to $520,864 and $1,079,201 during the three and six months ended February 28, 2022, respectively in incremental expenses due to the Zerust India acquisition and increased personnel, travel, and research and development expenses.

- Since NTIC acquired the remaining 50% ownership interest of Zerust India effective September 1, 2021, NTIC recognized a gain of $3,951,550 during the three and six months ended February 28, 2022, which is included in “Remeasurement gain on acquisition of equity method investee” on NTIC’s consolidated statements of operations.

- NTIC incurred net income attributable to NTIC of $182,847, or $0.02 per diluted common share, for the three months ended February 28, 2022, compared to $1,312,575, or $0.13 per diluted common share, for the three months ended February 28, 2021. NTIC incurred net income attributable to NTIC of $4,676,606 or $0.48 per diluted common share, for the six months ended February 28, 2022, compared to $2,574,974, or $0.26 per diluted common share, for the six months ended February 28, 2021. Of this increase, $3,951,550 was due to the gain from the Zerust India acquisition.

Results of Operations

The following table sets forth NTIC’s results of operations for the three and six months ended February 28, 2022 and 2021.

	Three Months Ended February 28,					
	2022	**% of Net Sales**	**2021**	**% of Net Sales**	**$ Change**	**% Change**
Net sales, excluding joint ventures	$ 15,865,128	94.7%	$ 12,255,941	95.9%	$ 3,609,187	29.4%
Net sales, to joint ventures	883,511	5.3%	526,941	4.1%	356,570	67.7%
Cost of goods sold	11,764,304	70.2%	8,531,679	66.7%	3,232,625	37.9%
Equity in income from joint ventures	922,832	5.5%	1,920,012	15.0%	(997,180)	(51.9)%
Fees for services provided to joint ventures	1,246,909	7.4%	1,462,684	11.4%	(215,775)	(14.8)%
Selling expenses	2,971,391	17.7%	2,832,008	22.2%	139,383	4.9%
General and administrative expenses	2,518,788	15.0%	1,958,974	15.3%	559,814	28.6%
Research and development expenses	1,218,674	7.3%	1,075,180	8.4%	143,494	13.3%

	Six Months Ended February 28,					
	2022	**% of Net Sales**	**2021**	**% of Net Sales**	**$ Change**	**% Change**
Net sales, excluding joint ventures	$ 33,218,102	95.1%	$ 24,454,749	95.7%	$ 8,763,353	35.8%
Net sales, to joint ventures	1,723,950	4.9%	1,107,245	4.3%	616,705	55.7%
Cost of goods sold	24,254,787	69.4%	16,845,000	65.9%	7,409,787	44.0%
Equity in income from joint ventures	2,297,581	6.6%	3,745,724	14.7%	(1,448,143)	(38.7)%
Fees for services provided to joint ventures	2,505,767	7.2%	2,799,245	11.0%	(293,478)	(10.5)%
Selling expenses	6,209,149	17.8%	5,573,776	21.8%	635,373	11.4%
General and administrative expenses	5,115,135	14.6%	4,052,956	15.9%	1,062,179	26.2%
Research and development expenses	2,454,495	7.0%	2,150,917	8.4%	303,578	14.1%

Net Sales. NTIC’s consolidated net sales increased 31.0% and 36.7% to $16,748,639 and $34,942,052 during the three and six months ended February 28, 2022, respectively, compared to the three and six months ended February 28, 2021. NTIC’s consolidated net sales to unaffiliated customers excluding NTIC’s joint ventures increased 29.4% and 35.8% to $15,865,128 and $33,218,102 during the three and six months ended February 28, 2022, respectively, compared to the same respective periods in fiscal 2021. These increases were primarily a result of $2,227,291 and $4,680,103, respectively, in incremental sales as a result of the Zerust India acquisition during the three and six months ended February 28, 2022, and increased demand across all market segments.

The following table sets forth NTIC's net sales by product segment for the three and six months ended February 28, 2022 and 2021 by segment:

	Three Months Ended February 28,		Six Months Ended February 28,	
	2022	**2021**	**2022**	**2021**
Total ZERUST® sales	$ 13,117,777	$ 10,284,116	$ 27,541,562	$ 20,504,667
Total Natur-Tec® sales	3,630,862	2,498,766	7,400,490	5,057,327
Total net sales	$ 16,748,639	$ 12,782,882	$ 34,942,052	$ 25,561,994

During the three and six months ended February 28, 2022, 78.3% and 78.8% of NTIC's consolidated net sales, respectively, were derived from sales of ZERUST® products and services, which increased 27.6% and 34.3% to $13,117,777 and $27,541,562, respectively, compared to $10,284,116 and $20,504,667 during the three and six months ended February 28, 2021, respectively. These increases were due to incremental sales as a result of the Zerust India acquisition and increased sales to new and existing customers due to increased global demand.

The following table sets forth NTIC's net sales of ZERUST® products for the three and six months ended February 28, 2022 and 2021:

	Three Months Ended February 28,			
	2022	**2021**	**$ Change**	**% Change**
ZERUST® industrial net sales	$ 11,656,345	$ 9,396,105	$ 2,260,240	24.1%
ZERUST® joint venture net sales	883,511	526,941	356,570	67.7%
ZERUST® oil & gas net sales	577,921	361,070	216,851	60.1%
Total ZERUST® net sales	$ 13,117,777	$ 10,284,116	$ 2,833,661	27.6%

	Six Months Ended February 28,			
	2022	**2021**	**$ Change**	**% Change**
ZERUST® industrial net sales	$ 24,267,875	$ 18,473,659	$ 5,794,216	31.4%
ZERUST® joint venture net sales	1,723,950	1,107,245	616,705	55.7%
ZERUST® oil & gas net sales	1,549,737	923,763	625,974	67.8%
Total ZERUST® net sales	$ 27,541,562	$ 20,504,667	$ 7,036,895	34.3%

NTIC's total ZERUST® net sales increased during the three and six months ended February 28, 2022, compared to the prior fiscal year periods, primarily due to $2,227,291 and $4,680,103, respectively, in incremental sales as a result of the Zerust India acquisition during the three and six months ended February 28, 2022. Additionally, there was an overall increased demand for ZERUST® industrial products and services. Overall, demand for ZERUST® products and services depends heavily on the overall health of the markets in which NTIC sells its products, including the automotive, oil and gas, agriculture, and mining markets in particular.

ZERUST® oil and gas net sales increased 60.1% and 67.8% during the three and six months ended February 28, 2022 compared to the prior fiscal year periods primarily as a result of new opportunities with new customers compared to the prior fiscal year periods. NTIC anticipates that its sales of ZERUST® products and services into the oil and gas industry will continue to remain subject to significant volatility from quarter to quarter as sales are recognized, specifically due to the volatility of oil prices. Demand for oil and gas products around the world depends primarily on market acceptance and the reach of NTIC's distribution network. Because of the typical size of individual orders and overall size of NTIC's net sales derived from sales of oil and gas products, the timing of one or more orders can materially affect NTIC's quarterly sales compared to prior fiscal year quarters.

During the three and six months ended February 28, 2022, 21.7% and 21.2% of NTIC's consolidated net sales, respectively, were derived from sales of Natur-Tec® products, which increased 45.3% and 46.3% to $3,630,862 and $7,400,490 during the three and six months ended February 28, 2022, respectively, compared to the three and six months ended February 28, 2021 as a result of increased global demand. The COVID-19 pandemic has adversely impacted demand for Natur-Tec® products from across the apparel industry, as well as many large users of bioplastics, including college campuses, stadiums, arenas, restaurants, and corporate office complexes. NTIC has experienced a recovery in many of these areas to pre-pandemic levels, but still expects some of these customers will be the last businesses to fully re-open and operate at full pre-pandemic capacities, and accordingly, anticipates that the COVID-19 pandemic will continue to adversely affect sales of Natur-Tec® products during the remainder of fiscal 2022.

Cost of Goods Sold. Cost of goods sold increased 37.9% and 44.0% for the three and six months ended February 28, 2022, respectively, compared to the three and six months ended February 28, 2021 primarily as a result of the increase in net sales, as described above, and price increases on raw materials used in NTIC's products, as well as increased labor and shipping costs. Cost of goods sold as a percentage of net sales increased to 70.2% and 69.4% during the three and six months ended February 28, 2022, compared to 66.7% and 65.9% during the three and six months ended February 28, 2021 primarily due to price increases on raw materials used in NTIC's products, as well as increased labor and shipping costs, partially offset by the increase in net sales. Although NTIC intends to take certain actions to address inflationary pressures and pass on as much of the related cost increases on to its customers as possible, it expects these inflationary pressures to persist into the third quarter of fiscal 2022 and does not expect to realize benefits from its actions until the second half of fiscal 2022.

Equity in Income from Joint Ventures. NTIC's equity in income from joint ventures decreased 51.9% to $922,832 and 38.7% to $2,297,581 during the three and six months ended February 28, 2022, respectively, compared to $1,920,012 and $3,745,724 during the three and six months ended February 28, 2021, respectively. These decreases were primarily due to the fact that Zerust India is now a consolidated subsidiary within NTIC's financial statements and an increase in operating expenses and a decrease in gross margins at the joint ventures. NTIC's equity in income from joint ventures fluctuates based on net sales and profitability of the joint ventures during the respective periods. Of the total equity in income from joint ventures, NTIC had equity in income from joint ventures of $1,499,821 attributable to EXCOR during the six months ended February 28, 2022, compared to $2,143,115 during the six months ended February 28, 2021. NTIC had equity in income from all other joint ventures of $797,760 during the six months ended February 28, 2022, compared to $1,602,609 during the six months ended February 28, 2021.

Fees for Services Provided to Joint Ventures. NTIC recognized fee income for services provided to joint ventures of $1,246,909 and $2,505,767 during the three and six months ended February 28, 2022, respectively, compared to $1,462,684 and $2,799,245 during the three and six months ended February 28, 2021, respectively, representing decreases of 14.8% and 10.5%, respectively. Fee income for services provided to joint ventures is traditionally a function of the sales made by NTIC's joint ventures; however, at various joint ventures, the fee income for services is a fixed amount that does not fluctuate with the amount of sales experienced by certain joint ventures. Total net sales of NTIC's joint ventures decreased to $24,601,767 and $51,624,762 during the three and six months ended February 28, 2022, respectively, compared to $29,058,402 and $55,835,745 during the three and six months ended February 28, 2021, respectively, representing decreases of 15.3% and 7.5%, respectively. These decreases were primarily a result of decreased demand during the current fiscal year periods and the Zerust India acquisition and its sales being included in NTIC's net sales in the prior fiscal year periods. Net sales of NTIC's joint ventures are not included in NTIC's product sales and are not included in NTIC's consolidated financial statements. Of the total fee income for services provided to joint ventures, fees of $435,422 were attributable to EXCOR during the six months ended February 28, 2022, compared to $460,744 attributable to EXCOR during the six months ended February 28, 2021.

Selling Expenses. NTIC's selling expenses increased 4.9% and 11.4% for the three and six months ended February 28, 2022, respectively, compared to the same respective periods in fiscal 2021 due primarily to incremental expenses due to the Zerust India acquisition, as well as an increase in travel and personnel expenses compared to the expenses incurred during three and six months ended February 28, 2021. Selling expenses as a percentage of net sales decreased to 17.7% and 17.8% for the three and six months ended February 28, 2022, respectively, from 22.2% and 21.8% for the three and six months ended February 28, 2021, respectively, primarily due to the net sales increases, and partially offset by the increased selling expenses, as previously described.

General and Administrative Expenses. NTIC's general and administrative expenses increased 28.6% and 26.2% for the three and six months ended February 28, 2022, respectively, compared to the same respective periods in fiscal 2021 primarily due to incremental expenses due to the Zerust India acquisition and transaction expenses incurred to complete the acquisition, as well as increased travel and personnel expenses compared to the expenses incurred during the three and six months ended February 28, 2021. As a percentage of net sales, general and administrative expenses decreased to 15.0% and 14.6% for the three and six months ended February 28, 2022, respectively, from 15.3% and 15.9% for the same respective periods in fiscal 2021, respectively, primarily due to the net sales increases, and partially offset by increased general and administrative expenses, as previously described.

Research and Development Expenses. NTIC's research and development expenses increased 13.3% and 14.1% for the three and six months ended February 28, 2022, respectively, compared to the same respective periods in fiscal 2021 primarily due to increased personnel and development efforts.

Interest Income. NTIC's interest income decreased to $9,909 and $20,852 during the three and six months ended February 28, 2022, respectively, compared to $15,638 and $85,176 during the three and six months ended February 28, 2021, respectively, primarily due to changes in the invested cash balances.

Interest Expense. NTIC's interest expense increased to $7,404 and $10,295 during the three and six months ended February 28, 2022, respectively, compared to $5,249 and $7,617 during the three and six months ended February 28, 2021, respectively, due primarily to increased outstanding borrowings under the line of credit during the current fiscal year period.

Remeasurement Gain on Acquisition of Equity Method Investee. Authoritative guidance on accounting for business combinations requires that an acquirer re-measure its previously held equity interest in the acquisition at its acquisition date fair value and recognize the resulting gain or loss in earnings. As such, since NTIC acquired the remaining 50% ownership interest of Zerust India effective September 1, 2021, NTIC recognized a gain of $3,951,550 during the six months ended February 28, 2022. This gain is included in "Remeasurement gain on acquisition of equity method investee" on NTIC's consolidated statements of operations.

Income Before Income Tax Expense. NTIC had income before income tax expense of $447,728 and $5,673,941 for the three and six months ended February 28, 2022, respectively, compared to $1,778,126 and $3,561,873 for the three and six months ended February 28, 2021, respectively.

Income Tax Expense. Income tax expense was $151,743 and $656,123 for the three and six months ended February 28, 2022, respectively, compared to income tax expense of $274,660 and $653,250 during the three and six months ended February 28, 2021, respectively. Income tax expense was calculated based on management's estimate of NTIC's annual effective income tax rate.

NTIC considers the earnings of certain foreign joint ventures to be indefinitely invested outside the United States on the basis of estimates that NTIC's future domestic cash generation will be sufficient to meet future domestic cash needs. As a result, U.S. income and foreign withholding taxes have not been recognized on the cumulative undistributed earnings of $19,637,099 and $24,702,778 as of February 28, 2022, and August 31, 2021, respectively. To the extent undistributed earnings of NTIC's joint ventures are distributed in the future, they are not expected to result in any material additional income tax liability after the application of foreign tax credits.

Net Income Attributable to NTIC. Net income attributable to NTIC decreased to $182,847, or $0.02 per diluted common share, for the three months ended February 28, 2022, compared to $1,312,575, or $0.13 per diluted common share, for the three months ended February 28, 2021. Net income attributable to NTIC increased to $4,676,606, or $0.48 per diluted common share, for the six months ended February 28, 2022, compared to $2,574,974, or $0.26 per diluted common share, for the six months ended February 28, 2021. The decrease for the three-month comparison was primarily due to a significant increase in cost of goods sold, a decrease in joint venture operations and an increase in operating expenses in the current fiscal year period. The increase for the six-month comparison was primarily due to the remeasurement gain related to the acquisition of Zerust India of $3,951,550 included in "Remeasurement gain on acquisition of equity method investee" on NTIC's consolidated statements of operations, which was partially offset by a significant increase in cost of goods sold, a decrease in joint venture operations and an increase in operating expenses in the current fiscal year period.

NTIC anticipates that its earnings for the remainder of fiscal 2022 will continue to be adversely affected by both the COVID-19 pandemic and worldwide supply disruptions, among other factors. Additionally, NTIC anticipates that its quarterly net income will continue to remain subject to significant volatility primarily due to the financial performance of its subsidiaries and joint ventures, sales of its ZERUST® products and services into the oil and gas industry, and sales of its Natur-Tec® bioplastics products, which sales fluctuate more on a quarterly basis than the traditional ZERUST® business.

Other Comprehensive Income - Foreign Currency Translations Adjustment. The changes in the foreign currency translations adjustment were due to the fluctuation of the U.S. dollar compared to the Euro and other foreign currencies during the three and six months ended February 28, 2022 compared to the same periods in fiscal 2021.

Liquidity and Capital Resources

Sources of Cash and Working Capital. NTIC's working capital, defined as current assets less current liabilities, was $25,326,437 as of February 28, 2022, including $7,487,811 in cash and cash equivalents and $4,634 in available for sale securities, compared to $25,230,893 as of August 31, 2021, including $7,680,641 in cash and cash equivalents and $4,634 in available for sale securities.

NTIC has a revolving line of credit with PNC Bank of $5,000,000, which was increased from $3,000,000 effective as of August 31, 2021. As of February 28, 2022, $4,200,000 was outstanding under the revolving line of credit, compared to no borrowings as of August 31, 2021. Outstanding advances under the line of credit bear interest at the daily Bloomberg Short-Term Bank Yield Index rate plus 250 basis points (2.50%). The line of credit originally was scheduled to mature on February 22, 2022 but was extended to January 7, 2023. The line of credit also was scheduled to be decreased back to $3,000,000 on February 22, 2022 but was recently revised to maintain the borrowing amount at $5,000,000 to allow for future financial flexibility. The line of credit is governed under an Amended and Restated Loan Agreement dated August 31, 2021. The loan agreement contains standard covenants, including affirmative financial covenants, such as the maintenance of a minimum fixed charge coverage ratio, and negative covenants, which, among other things, limit the incurrence of additional indebtedness, loans and equity investments, disposition of assets, mergers and consolidations and other matters customarily restricted in such agreements. Under the loan agreement, NTIC is subject to a minimum fixed charge coverage ratio of 1.10:1.00. As of February 28, 2022, NTIC was in compliance with all debt covenants under the Amended and Restated Loan Agreement. As of February 28, 2022, NTIC did not have any letters of credit outstanding with respect to the letter of credit sub-facility available under the revolving line of credit with PNC Bank.

NTIC believes that a combination of its existing cash and cash equivalents, available for sale securities, forecasted cash flows from future operations, anticipated distributions of earnings, anticipated fees to NTIC for services provided to its joint ventures, and funds available through existing or anticipated financing arrangements will be adequate to fund its existing operations, investments in new or existing joint ventures or subsidiaries, capital expenditures, debt repayments, cash dividends, and any stock repurchases for at least the next 12 months. During the remainder of fiscal 2022 and in fiscal 2023, NTIC expects to continue to invest directly and through its use of working capital in Zerust India, NTIC China, Zerust Mexico, NTI Europe, its joint ventures, research and development, marketing efforts, resources for the application of its corrosion prevention technology in the oil and gas industry, and its Natur-Tec® bio-plastics business, although the amounts of these various investments are not known at this time. NTIC also expects to use some of its capital resources to continue to transition some of its joint ventures as needed or appropriate, which may include additional acquisitions by NTIC of the remaining ownership interests of joint ventures not owned by NTIC or dissolutions or liquidations of one or more of its joint ventures, including in particular its joint venture in Russia, which NTIC is currently in the process of terminating. Although no assurance can be provided, NTIC currently believes the termination of its joint venture in Russia will not have a material adverse effect on NTIC's results of operations or financial condition or its joint venture operations given the immateriality of the operations of this joint venture. NTIC traditionally has used the cash generated from its operations, distributions of earnings from joint ventures and fees for services provided to its joint ventures to fund NTIC's new technology investments and capital contributions to new and existing subsidiaries and joint ventures. NTIC's joint ventures traditionally have operated with little or no debt and have been self-financed with minimal initial capital investment and minimal additional capital investment from their respective owners. Therefore, NTIC believes there is limited exposure by NTIC's joint ventures that could materially impact their respective operations and/or liquidity.

In order to take advantage of new product and market opportunities to expand its business and increase its revenues and assist with joint venture transitions, NTIC may decide to finance such opportunities by additional borrowings under its revolving line of credit or raising additional financing through the issuance of debt or equity securities. There is no assurance that any financing transaction will be available on terms acceptable to NTIC or at all or that any financing transaction will not be dilutive to NTIC's current stockholders.

Uses of Cash and Cash Flows. Net cash provided by operating activities during the six months ended February 28, 2022 was $2,118,728, which resulted principally from NTIC's net income, dividends received from joint ventures, deferred income tax, depreciation and amortization expense, and stock-based compensation, partially offset by the remeasurement gain on acquisition of equity method investee and equity in income from joint ventures. Net cash provided by operating activities during the six months ended February 28, 2021 was $1,959,249, which resulted principally from NTIC's net income, dividends received from joint ventures, stock based compensation, depreciation, amortization, and an increase in accounts payable and accrued liabilities, partially offset by NTIC's equity in income from joint ventures, an increase in accounts receivable, inventories, prepaid expenses and other.

NTIC's cash flows from operations are impacted by significant changes in certain components of NTIC's working capital, including inventory turnover and changes in receivables and payables. NTIC considers internal and external factors when assessing the use of its available working capital, specifically when determining inventory levels and credit terms of customers. Key internal factors include existing inventory levels, stock reorder points, customer forecasts and customer requested payment terms. Key external factors include the availability of primary raw materials and sub-contractor production lead times. NTIC's typical contractual terms for trade receivables, excluding joint ventures, are traditionally 30 days and 90 days for trade receivables from its joint ventures. Before extending unsecured credit to customers, excluding NTIC's joint ventures, NTIC reviews customers' credit histories and will establish an allowance for uncollectible accounts based upon factors surrounding the credit risk of specific customers and other information. Accounts receivable over 30 days are considered past due for most customers. NTIC does not accrue interest on past due accounts receivable. If accounts receivables in excess of the provided allowance are determined uncollectible, they are charged to selling expense in the period that the determination is made. Accounts receivable are deemed uncollectible based on NTIC exhausting reasonable efforts to collect. NTIC's typical contractual terms for receivables for services provided to its joint ventures are 90 days. NTIC records receivables for services provided to its joint ventures on an accrual basis, unless circumstances exist that make the collection of the balance uncertain, in which case the fee income will be recorded on a cash basis until there is consistency in payments. This determination is handled on a case-by-case basis.

NTIC experienced an increase in trade receivables and inventory as of February 28, 2022, compared to August 31, 2021. Trade receivables, excluding joint ventures, as of February 28, 2022, increased $321,322 compared to August 31, 2021, primarily related to an increase in sales.

Outstanding trade receivables, excluding joint ventures balances as of February 28, 2022 increased 2 days to an average of 71 days from balances outstanding from these customers as of August 31, 2021.

Outstanding trade receivables from joint ventures as of February 28, 2022 decreased $281,153 compared to August 31, 2021, primarily due to the timing of payments. Outstanding balances from trade receivables from joint ventures increased an average of 5 days to an average of 92 days from balances outstanding from these customers compared to August 31, 2021. The average days outstanding of trade receivables from joint ventures as of February 28, 2022 were primarily due to the receivables balances at various NTIC's joint ventures.

Outstanding receivables for services provided to joint ventures as of February 28, 2022 increased $426,425 compared to August 31, 2021, and the average days to pay decreased an average of 10 days to an average of 78 days compared to August 31, 2021.

Net cash used in investing activities for the six months ended February 28, 2022 was $5,792,833, which was primarily the result of the purchase of the remaining 50% ownership interest in Zerust India, purchases of property and equipment, and investments in patents. Net cash used in investing activities for the six months ended February 28, 2021 was $910,550, which was primarily the result of the purchase of available for sale securities, additions to property and equipment, and additions to patents, partially offset by the proceeds from the sales of available for sale securities.

Net cash used in financing activities for the six months ended February 28, 2022 was $2,786,371, which resulted from borrowings under the line of credit and proceeds from NTIC's employee stock purchase plan and the exercise of stock options, partially offset by dividends paid to shareholders and dividends received by non-controlling interests. Net cash used in financing activities for the six months ended February 28, 2021 was $755,610, which resulted from dividends paid on NTIC common stock and dividends received by non-controlling interest, partially offset by proceeds from NTIC's employee stock purchase plan.

Share Repurchase Plan. On January 15, 2015, NTIC's Board of Directors authorized the repurchase of up to $3,000,000 in shares of NTIC common stock through open market purchases or unsolicited or solicited privately negotiated transactions. This program has no expiration date but may be terminated by NTIC's Board of Directors at any time. No repurchases occurred during the six months ended February 28, 2022. As of February 28, 2022, up to $2,640,548 in shares of NTIC common stock remained available for repurchase under NTIC's stock repurchase program.

Cash Dividends. On April 23, 2020, the Company announced the temporary suspension of its quarterly cash dividend pending clarity on the financial impact of COVID-19 on the Company. Therefore, the Company did not declare a cash dividend during the three months ended November 30, 2020. However, on January 15, 2021, the Company announced the reinstatement of its quarterly cash dividend and declared a cash dividend of $0.065 per share of NTIC's common stock, payable on February 17, 2021 to stockholders of record on February 3, 2021. On October 20, 2021, the Company's Board of Directors declared a cash dividend of $0.07 per share of NTIC's common stock, payable on November 17, 2021 to stockholders of record on November 3, 2021. On January 21, 2022, the Company's Board of Directors declared a cash dividend of $0.07 per share of NTIC's common stock, payable on February 16, 2022 to stockholders of record on February 2, 2022. The declaration of future dividends is not guaranteed and will be determined by NTIC's Board of Directors in light of conditions then existing, including NTIC's earnings, financial condition, cash requirements, restrictions in financing agreements, business conditions, and other factors, including without limitation the effect of COVID-19 on NTIC's business, operating results and financial condition.

Capital Expenditures and Commitments. NTIC spent $618,533 on capital expenditures during the six months ended February 28, 2022, which related primarily to the purchase of new equipment and facility improvements. NTIC expects to spend an aggregate of approximately $2,200,000 to $2,500,000 on capital expenditures during fiscal 2022, which it expects will relate primarily to anticipated renovation and equipment costs.

Contractual Obligations

There has been no material change to NTIC's contractual obligations as provided in "*Part II. Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations—Contractual Obligations*," included in NTIC's annual report on Form 10-K for the fiscal year ended August 31, 2021.

Off-Balance Sheet Arrangements

NTIC does not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which are established for the purpose of facilitating off-balance sheet financial arrangements. As such, NTIC is not materially exposed to any financing, liquidity, market or credit risk that could arise if NTIC had engaged in such arrangements.

Inflation and Seasonality

Although inflation in the United States and abroad historically has had little effect on NTIC, inflationary pressures adversely affected NTIC's gross margins during the first six months of fiscal 2022 and are expected to persist into at least the third quarter of fiscal 2022. NTIC believes there is some seasonality in its business. NTIC's net sales in the second fiscal quarter were adversely affected by the long Chinese New Year, the North American holiday season and overall less corrosion taking place at lower winter temperatures worldwide.

Market Risk

NTIC is exposed to some market risk stemming from changes in foreign currency exchange rates, commodity prices and interest rates.

Because the functional currency of NTIC's foreign operations and investments in its foreign joint ventures is the applicable local currency, NTIC is exposed to foreign currency exchange rate risk arising from transactions in the normal course of business. NTIC's principal exchange rate exposure is with the Euro, the Japanese Yen, the Indian Rupee, the Chinese Renminbi, the South Korean Won, and the English Pound against the U.S. Dollar. NTIC's fees for services provided to joint ventures and dividend distributions from these foreign entities are paid in foreign currencies and, thus, fluctuations in foreign currency exchange rates could result in declines in NTIC's reported net income. Since NTIC's investments in its joint ventures are accounted for using the equity method, any changes in foreign currency exchange rates would be reflected as a foreign currency translation adjustment and would not change NTIC's equity in income from joint ventures reflected in its consolidated statements of operations. NTIC does not hedge against its foreign currency exchange rate risk.

Some raw materials used in NTIC's products are exposed to commodity price changes. The primary commodity price exposures are with a variety of plastic resins.

Any outstanding advances under NTIC's revolving line of credit with PNC Bank bear interest at an annual rate based on daily LIBOR plus 2.50%. As of February 28, 2022, NTIC had borrowings of $4,200,000 under the line of credit that existed as of that date.

Critical Accounting Policies and Estimates

There have been no material changes to NTIC's critical accounting policies and estimates from the information provided in "*Part II. Item 7, Management*'*s Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies*" included in NTIC's annual report on Form 10-K for the fiscal year ended August 31, 2021, other than the new critical accounting policy below in light of NTIC's Zerust India acquisition.

Business Combinations

When applicable, NTIC accounts for the acquisition of a business in accordance with the accounting standards codification guidance for business combinations, whereby the total consideration transferred is allocated to the assets acquired and liabilities assumed, including amounts attributable to non-controlling interests, when applicable, based on their respective estimated fair values as of the date of acquisition. Goodwill represents the excess of consideration transferred over the estimated fair value of the net assets acquired in a business combination.

Assigning estimated fair values to the net assets acquired requires the use of significant estimates, judgments, inputs, and assumptions regarding the fair value of intangible assets that are separately identifiable from goodwill, inventory, and property, plant, and equipment. While the ultimate responsibility for determining estimated fair values of the acquired net assets resides with management, for material acquisitions NTIC may retain the services of certified valuation specialists to assist with assigning estimated fair values to certain acquired assets and assumed liabilities, including intangible assets that are separately identifiable from goodwill, inventory, and property, plant, and equipment. Estimated fair values of acquired intangible assets that are separately identifiable from goodwill, inventory, and property, plant, and equipment are generally based on available historical information, future expectations, available market data, and assumptions determined to be reasonable but are inherently uncertain with respect to future events, including economic conditions, competition, technological obsolescence, the useful life of the acquired assets, and other factors. These significant estimates, judgments, inputs, and assumptions include, when applicable, the selection of an appropriate valuation method depending on the nature of the respective asset, such as the income approach, the market or sales comparison approach, or the cost approach; estimating future cash flows based on projected revenues and/or margins that NTIC expects to generate subsequent to the acquisition; applying an appropriate discount rate to estimate the present value of those projected cash flows NTIC expects to generate; selecting an appropriate terminal growth rate and/or royalty rate or estimating a customer attrition or technological obsolescence factor where necessary and appropriate given the nature of the respective asset; assigning an appropriate contributory asset charge where needed; determining an appropriate useful life and the related depreciation or amortization method for the respective asset; and assessing the accuracy and completeness of other historical financial metrics of the acquiree used as standalone inputs or as the basis for determining estimated projected inputs such as margins, customer attrition, and costs to hold and sell product.

In determining the estimated fair value of intangible assets that are separately identifiable from goodwill, NTIC typically utilizes the income approach, which discounts the projected future cash flows using a discount rate that appropriately reflects the risks associated with the projected cash flows. Generally, NTIC estimates the fair value of acquired customer relationships using the relief from royalty method under the income approach, which is based on the hypothetical royalty stream that would be received if NTIC were to license the acquired trade name. For most other acquired intangible assets, NTIC estimates fair value using the excess earnings method under the income approach, which is typically applied when cash flows are not directly generated by the asset, but rather, by an operating group that includes the particular asset. In certain instances, particularly in relation to developed technology or patents, NTIC may utilize the cost approach depending on the nature of the respective intangible asset and the recency of the development or procurement of such technology. The useful lives and amortization methods for the acquired intangible assets that are separately identifiable from goodwill are generally determined based on the period of expected cash flows used to measure the fair value of the acquired intangible assets and the nature of the use of the respective acquired intangible asset, adjusted as appropriate for entity-specific factors including legal, regulatory, contractual, competitive, economic, and/or other factors such as customer attrition rates and product or order lifecycles that may limit the useful life of the respective acquired intangible asset. In determining the estimated fair value of acquired inventory, NTIC typically utilizes the cost approach for raw materials and the sales comparison approach for work in process, finished goods, and service parts. In determining the estimated fair value of acquired property, plant, and equipment, NTIC typically utilizes the sales comparison approach or the cost approach depending on the nature of the respective asset and the recency of the construction or procurement of such asset.

NTIC may refine the estimated fair values of assets acquired and liabilities assumed, if necessary, over a period not to exceed one year from the date of acquisition by taking into consideration new information that, if known as of the date of acquisition, would have affected the estimated fair values ascribed to the assets acquired and liabilities assumed. The judgments made in determining the estimated fair value assigned to assets acquired and liabilities assumed, as well as the estimated useful life and depreciation or amortization method of each asset, can materially impact the net earnings of the periods subsequent to an acquisition through depreciation and amortization, and in certain instances through impairment charges, if the asset becomes impaired in the future. During the measurement period, any purchase price allocation changes that impact the carrying value of goodwill will affect any measurement of goodwill impairment taken during the measurement period, if applicable. If necessary, purchase price allocation revisions that occur outside of the measurement period are recorded within cost of sales, selling expenses or general and administrative expenses within NTIC’s consolidated statements of operations depending on the nature of the adjustment.

Recent Accounting Pronouncements

See Note 2 to NTIC's consolidated financial statements for a discussion of recent accounting pronouncements.

Forward-Looking Statements

This quarterly report on Form 10-Q contains not only historical information, but also forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These forward-looking statements are subject to the safe harbor created by those sections. In addition, NTIC or others on NTIC's behalf may make forward-looking statements from time to time in oral presentations, including telephone conferences and/or web casts open to the public, in press releases or reports, on NTIC's Internet web site, or otherwise. All statements other than statements of historical facts included in this report or expressed by NTIC orally from time to time that address activities, events, or developments that NTIC expects, believes, or anticipates will or may occur in the future are forward-looking statements, including, in particular, the statements about NTIC's plans, objectives, strategies, and prospects regarding, among other things, NTIC's financial condition, results of operations and business, the anticipated effect of COVID-19 and its recent acquisition of Zerust India on NTIC's business, operating results and financial condition, the outcome of contingencies, such as legal proceedings. NTIC has identified some of these forward-looking statements in this report with words like "believe," "can," "may," "could," "would," "might," "forecast," "possible," "potential," "project," "will," "should," "expect," "intend," "plan," "predict," "anticipate," "estimate," "approximate," or "continue" or the negative of these words or other words and terms of similar meaning. The use of future dates is also an indication of a forward-looking statement. Forward-looking statements may be contained in the notes to NTIC's consolidated financial statements and elsewhere in this report, including under the heading "*Management's Discussion and Analysis of Financial Condition and Results of Operations*."

Forward-looking statements are based on current expectations about future events affecting NTIC and are subject to uncertainties and factors that affect all businesses operating in a global market as well as matters specific to NTIC. These uncertainties and factors are difficult to predict, and many of them are beyond NTIC's control. The following are some of the uncertainties and factors known to us that could cause NTIC's actual results to differ materially from what NTIC has anticipated in its forward-looking statements:

- The effect of COVID-19 on NTIC's business, operating results and financial condition, including disruption to our customers, suppliers and subcontractors, as well as the global economy and financial markets;

- The effect of worldwide disruption in supply issues on NTIC's business, operating results and financial condition, which will likely continue through the remainder of fiscal year 2022, regardless of the status of the COVID-19 pandemic;

- The effect of current worldwide economic conditions and any turmoil and disruption in the global credit and financial markets on NTIC's business, including in particular as a result of the ongoing conflict between Russia and Ukraine;

- Variability in NTIC's sales of ZERUST® products and services to the oil and gas industry and Natur-Tec® products and NTIC's equity income of joint ventures, which variability in sales and equity in income from joint ventures, in turn, subject NTIC's earnings to quarterly fluctuations;

- Risks associated with NTIC's international operations and exposure to fluctuations in foreign currency exchange rates, import duties, taxes, and tariffs;

- The effect of the United Kingdom's process to exit the European Union on NTIC's operating results, including, in particular, future net sales of NTIC's European and other joint ventures;

- The effect of the health of the U.S. automotive industry on NTIC's business;

- NTIC's dependence on the success of its joint ventures and fees and dividend distributions that NTIC receives from them;

- Risks associated with NTIC's acquisition of the remaining 50% ownership interest in its Indian joint venture, Zerust India;

- Risks associated with the anticipated termination of NTIC's joint venture in Russia;

- NTIC's relationships with its joint ventures and its ability to maintain those relationships, especially in light of anticipated succession planning issues, and risks associated with possible future acquisitions of the remaining ownership interests of certain joint ventures;

- Fluctuations in the cost and availability of raw materials, including resins and other commodities, including supply chain disruptions and weather related impacts;

- The success of and risks associated with NTIC's emerging new businesses and products and services, including in particular NTIC's ability and the ability of NTIC's joint ventures to sell ZERUST® products and services to the oil and gas industry and Natur-Tec® products and the often lengthy and extensive sales process involved in selling such products and services;

- NTIC's ability to introduce new products and services that respond to changing market conditions and customer demand;

- Market acceptance of NTIC's existing and new products, especially in light of existing and new competitive products;

- Maturation of certain existing markets for NTIC's ZERUST® products and services and NTIC's ability to grow market share and succeed in penetrating other existing and new markets;

- Increased competition, especially with respect to NTIC's ZERUST® products and services, and the effect of such competition on NTIC's and its joint ventures' pricing, net sales, and margins;

- NTIC's reliance upon and its relationships with its distributors, independent sales representatives, and joint ventures;

- NTIC's reliance upon suppliers;

- Oil prices, which may affect sales of NTIC's ZERUST® products and services to the oil and gas industry, and which may be impacted by the recent action of Russian military forces in Ukraine;

- NTIC's operations in China, and the risks associated therewith;

- The costs and effects of complying with laws and regulations and changes in tax, fiscal, government, and other regulatory policies, including rules relating to environmental, health, and safety matters;
- Unforeseen product quality or other problems in the development, production, and usage of new and existing products;
- Unforeseen production expenses incurred in connection with new customers and new products;
- Loss of or changes in executive management or key employees;
- Ability of management to manage around unplanned events;
- Pending and future litigation;
- NTIC's reliance on its intellectual property rights and the absence of infringement of the intellectual property rights of others;
- NTIC's ability to maintain effective internal control over financial reporting, especially in light of its joint venture arrangements;
- Changes in applicable laws or regulations and NTIC's failure to comply with applicable laws, rules, and regulations;
- Changes in generally accepted accounting principles and the effect of new accounting pronouncements;
- Fluctuations in NTIC's effective tax rate;
- The effect of extreme weather conditions on NTIC's operating results; and
- NTIC's reliance upon its management information systems.

For more information regarding these and other uncertainties and factors that could cause NTIC's actual results to differ materially from what NTIC has anticipated in its forward-looking statements or otherwise could materially adversely affect its business, financial condition or operating results, see NTIC's annual report on Form 10-K for the fiscal year ended August 31, 2021 under the heading "*Part I. Item 1A. Risk Factors*."

All forward-looking statements included in this report are expressly qualified in their entirety by the foregoing cautionary statements. NTIC wishes to caution readers not to place undue reliance on any forward-looking statement that speaks only as of the date made and to recognize that forward-looking statements are predictions of future results, which may not occur as anticipated. Actual results could differ materially from those anticipated in the forward-looking statements and from historical results due to the uncertainties and factors described above and others that NTIC may consider immaterial or does not anticipate at this time. Although NTIC believes that the expectations reflected in its forward-looking statements are reasonable, NTIC does not know whether its expectations will prove correct. NTIC's expectations reflected in its forward-looking statements can be affected by inaccurate assumptions NTIC might make or by known or unknown uncertainties and factors, including those described above. The risks and uncertainties described above are not exclusive, and further information concerning NTIC and its business, including factors that potentially could materially affect its financial results or condition, may emerge from time to time. NTIC assumes no obligation to update, amend, or clarify forward-looking statements to reflect actual results or changes in factors or assumptions affecting such forward-looking statements. NTIC advises you, however, to consult any further disclosures NTIC makes on related subjects in its annual reports on Form 10-K, quarterly reports on Form 10-Q, and current reports on Form 8-K that NTIC files with or furnishes to the Securities and Exchange Commission.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

NTIC is exposed to some market risk stemming from changes in foreign currency exchange rates, commodity prices and interest rates.

Because the functional currency of NTIC's foreign operations and investments in its foreign joint ventures is the applicable local currency, NTIC is exposed to foreign currency exchange rate risk arising from transactions in the normal course of business. NTIC's principal exchange rate exposure is with the Euro, the Japanese Yen, the Indian Rupee, the Chinese Renminbi, the South Korean Won, and the English Pound against the U.S. Dollar. NTIC's fees for services provided to joint ventures and dividend distributions from these foreign entities are paid in foreign currencies, and, thus, fluctuations in foreign currency exchange rates could result in declines in NTIC's reported net income. Since NTIC's investments in its joint ventures are accounted for using the equity method, any changes in foreign currency exchange rates would be reflected as a foreign currency translation adjustment and would not change NTIC's equity in income from joint ventures reflected in its consolidated statements of operations. NTIC does not hedge against its foreign currency exchange rate risk.

Some raw materials used in NTIC's products are exposed to commodity price changes. The primary commodity price exposures are with a variety of plastic resins.

Any outstanding advances under NTIC's revolving line of credit with PNC Bank bear interest at an annual rate based on daily LIBOR plus 2.50%. As of February 28, 2022, NTIC had borrowings of $4,200,000 under the line of credit that existed as of that date.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

NTIC maintains disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended) that are designed to provide reasonable assurance that information required to be disclosed by NTIC in the reports it files or submits under the Securities Exchange Act of 1934, as amended, is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms and that such information is accumulated and communicated to NTIC's management, including NTIC's principal executive officer and principal financial officer, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. NTIC's management evaluated, with the participation of its Chief Executive Officer and its Chief Financial Officer, the effectiveness of the design and operation of NTIC's disclosure controls and procedures as of the end of the period covered in this report. Based on that evaluation, NTIC's Chief Executive Officer and Chief Financial Officer concluded that NTIC's disclosure controls and procedures were effective as of the end of such period to provide reasonable assurance that information required to be disclosed in the reports that NTIC files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to NTIC's management, including NTIC's Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

Changes in Internal Control over Financial Reporting

There was no change in NTIC's internal control over financial reporting that occurred during the quarter ended February 28, 2022 that has materially affected or is reasonably likely to materially affect NTIC's internal control over financial reporting, other than changes implemented to continue integrating Zerust India's internal controls with NTIC's internal controls.

PART II - OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

See Note 14 to NTIC's consolidated financial statements in *Part I. Item 1. Financial Statements* of this report.

ITEM 1A. RISK FACTORS

Although Item 1A. is inapplicable to NTIC as a smaller reporting company, NTIC hereby discloses the following new risk factor and revised risk factor described in its annual report on Form 10-K for the fiscal year ended August 31, 2021:

The ongoing conflict between Russia and Ukraine may adversely affect our business and results of operations.

Given the nature of our business and our global operations, political, economic, and other conditions in foreign countries and regions, including geopolitical risks such as the current conflict between Russia and Ukraine, may adversely affect our business and results of operations. We have limited operations in Russia and Ukraine, which have been adversely affected by the ongoing conflict between Russia and Ukraine, though these losses are not expected to have a material impact on our operating results. We are also in the process of terminating our joint venture in Russia, which we believe will not have an adverse effect on our results of operations or financial condition given the immateriality of the joint venture. The broader consequences of this conflict, which may include additional international sanctions, embargoes, regional instability, and geopolitical shifts; increased tensions between the United States and countries in which we operate; and the extent of the conflict's effect on our business and results of operations as well as the global economy, cannot be predicted.

To the extent the current conflict between Russia and Ukraine adversely affects our business, it may also have the effect of heightening many other risks disclosed in our annual report on Form 10-K for the fiscal year ended August 31, 2021, any of which could materially and adversely affect our business and results of operations. Such risks include, but are not limited to, adverse effects on macroeconomic conditions, including inflation, demand for our products and potential recessionary economic conditions; increased cyber security threats; adverse changes in trade policies, taxes, government regulations, and tariffs; our ability to maintain or increase our prices in response to rising shipping costs; our ability to implement and execute our business strategy, particularly with regard to our joint ventures; disruptions in global supply chains; our exposure to foreign currency fluctuations; and constraints, volatility, or disruption in the capital markets.

The sale of ZERUST® rust and corrosion inhibiting products into the oil and gas industry is somewhat seasonal and dependent upon oil prices.

In the past, NTIC has experienced some seasonality with respect to the sale of its ZERUST® rust and corrosion inhibiting products into the oil and gas industry, with sales during parts of the second and third fiscal quarters being adversely affected by winter in the United States. Although the price of crude oil is close to an all-time high, the sale of NTIC's ZERUST® rust and corrosion inhibiting products into the oil and gas industry, particularly in the United States, has historically been hampered by low global crude oil prices. Low global crude oil prices have been and may continue to be caused by oversupply, price wars between Saudi Arabia and Russia, and the impact of the COVID-19 pandemic. NTIC believes low global crude oil prices constrain capital improvement budgets of its existing and prospective customers and may result in personnel turnover at its oil and gas customers or prospects. The ongoing conflict between Russia and Ukraine has escalated tensions between Russia and other countries, some of which have imposed sanctions and taken other economic actions that have contributed to, and are expected to continue to contribute to, rising global crude oil prices, which prices had already risen substantially due to ongoing inflationary pressures. Additional international sanctions against Russia may be imposed, which could further increase these costs. NTIC believes the ongoing conflict between Russia and Ukraine and the continued impact of high rates of inflation may create uncertainty among its existing and prospective customers, which may cause them to halt oil and gas projects or elect to decrease capital improvement budgets, either of which could harm NTIC's ability to sell its products into the oil and gas industry.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

Recent Sales of Unregistered Equity Securities

During the three months ended February 28, 2022, NTIC did not issue any shares of its common stock or other equity securities of NTIC that were not registered under the Securities Act of 1933, as amended.

Issuer Purchases of Equity Securities

The following table shows NTIC's second quarter of fiscal 2022 stock repurchase activity.

Period	Total Number of Shares (or Units) Purchased	Average Price Paid Per Share (or Unit)	Total Number of Shares (or Units) Purchased As Part of Publicly Announced Plans or Programs	Maximum Number of Shares (or Units) that May Yet Be Purchased Under the Plans or Programs
December 1, 2021, through December 31, 2021	0	$ 0	0	(1)
January 1, 2022, through January 31, 2022	0	$ 0	0	(1)
February 1, 2022, through February 28, 2022	0	$ 0	0	(1)
				)
Total	0	$ 0	0	(1(2)

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(1) On January 15, 2015, NTIC's Board of Directors authorized the repurchase of up to $3,000,000 in shares of NTIC common stock through open market purchases or unsolicited or solicited privately negotiated transactions. This program has no expiration date but may be terminated by NTIC's Board of Directors at any time.

(2) As of February 28, 2022, up to $2,640,548 in shares of NTIC common stock remained available for repurchase under NTIC's stock repurchase program.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

Not applicable.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

On August 31, 2021, in connection with NTIC's acquisition of Zerust India, NTIC and PNC Bank, National Association ("PNC Bank") increased NTIC's line of credit from $3,000,000 to $5,000,000. This increase in the line of credit was subsequently scheduled to terminate on February 22, 2022. To maintain future financial flexibility, NTIC and PNC Bank agreed to keep the line of credit at $5,000,000. A 30-day extension was provided by PNC Bank on February 23, 2022 in order to ensure funding between February 23, 2022 and March 1, 2022. On March 1, 2022, NTIC and PNC Bank entered into an Amended and Restated Revolving Line of Credit Note, which established a line of credit of $5,000,000 during the period from February 23, 2022 until April 23, 2022 and $3,000,000 at all other times. Except as described above, the other material terms of the Line of Credit, Loan Agreement and Security Agreement with PNC Bank and other related documents were not affected by the foregoing described amendment.

The foregoing description is qualified in its entirety by reference to the Amended Note, which is filed as Exhibit 10.1 to this Quarterly Report on Form 10-Q and incorporated by reference herein.

ITEM 6. EXHIBITS

The following exhibits are being filed or furnished with this quarterly report on Form 10-Q:

Exhibit No.	Description	Method of Filing
10.1	Amended and Restated Revolving Line of Credit Note dated as of March 1, 2022 issued by Northern Technologies International Corporation to PNC Bank, National Association	Filed herewith
31.1	Certification of President and Chief Executive Officer pursuant to SEC Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	Filed herewith
31.2	Certification of Chief Financial Officer pursuant to SEC Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	Filed herewith
32.1	Certification of President and Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Furnished herewith
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Furnished herewith

Exhibit No.	Description	Method of Filing
101	The following materials from NTIC's Quarterly Report on Form 10-Q for the fiscal quarter ended February 28, 2022, formatted in Inline XBRL (Extensible Business Reporting Language): (i) the unaudited Consolidated Balance Sheets, (ii) the unaudited Consolidated Statements of Operations, (iii) the unaudited Consolidated Statements of Comprehensive Income, (iv) the unaudited Consolidated Statements of Equity, (v) the unaudited Consolidated Statements of Cash Flows, and (vi) Notes to Consolidated Financial Statements	Filed herewith
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)	Filed herewith

SIGNATURES

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

NORTHERN TECHNOLOGIES INTERNATIONAL CORPORATION

	/s/ Matthew C. Wolsfeld
Date: April 8, 2022	Matthew C. Wolsfeld, CPA Chief Financial Officer (Principal Financial and Accounting Officer and Duly Authorized to Sign on Behalf of the Registrant)

Amended and Restated Revolving Line of Credit Note
(Daily BSBY)

$5,000,000.00 March 1, 2022

FOR VALUE RECEIVED, **NORTHERN TECHNOLOGIES INTERNATIONAL CORPORATION** (the "**Borrower**"), with an address at 4201 WOODLAND ROAD, CIRCLE PINES, MINNESOTA 55014-1794,

promises to pay to the order of **PNC BANK, NATIONAL ASSOCIATION** (the "**Bank**"), in lawful money of the United States of America in immediately available funds at its offices located at 1900 E 9TH ST, CLEVELAND, OHIO 44114, or at such other location as the Bank may designate from time to time, the principal sum of
$5,000,000.00 (the "**Facility**") or such lesser amount as may be advanced to or for the benefit of the Borrower hereunder, together with interest accruing on the outstanding principal balance from the date hereof, all as provided below.

1. Revolving Line of Credit Advances. This Note evidences a revolving line of credit. The Borrower may borrow, repay and reborrow and the Bank may advance and readvance under this Note from time to time (each an "advance" and together the "advances") hereunder until the Expiration Date, subject to the terms and conditions of this Note and the Loan Documents (as defined herein) in an aggregate amount at any time outstanding not to exceed the Maximum Amount. The "**Maximum Amount**" means: (a) $5,000,000.00 during the period from February 23, 2022 until the Expiration Date, and (b) $3,000,000.00 at all other times. The "**Expiration Date**" shall mean April 23, 2022, or such later date as may be designated by the Bank by written notice from the Bank to the Borrower. The Borrower acknowledges and agrees that in no event will the Bank be under any obligation to extend or renew the Facility or this Note beyond the Expiration Date. In no event shall the aggregate unpaid principal amount of advances under this Note exceed the face amount of this Note.

2. Interest Rate and Payments. Amounts outstanding under this Note will bear interest at a rate per annum which is equal to the sum of (A) the Daily BSBY Rate (as defined below) plus (B) 250 basis points (2.50%). Accrued interest will be due and payable on the same day of each month, beginning with the payment due on March 10, 2022. The outstanding principal balance and any accrued but unpaid interest shall be due and payable on the Expiration Date. In addition, if at any time the outstanding principal balance of this Note exceeds the Maximum Amount of the Facility in effect on such date, the Borrower shall immediately be required to repay the principal by the amount necessary to reduce the outstanding principal balance to such Maximum Amount.

3. Certain Definitions. If the following terms are used in this Note, such terms shall have the meanings set forth below:

"Alternate Rate" shall mean the Base Rate.

"Base Rate" shall mean the higher of (A) the Prime Rate, and (B) the sum of the Overnight Bank Funding Rate plus 50 basis points (0.50%); provided, however, if the Base Rate as determined above would be less than zero, then such rate shall be deemed to be zero. If and when the Base Rate as determined above changes, the rate of interest with respect to any amounts hereunder to which the Base Rate applies will change automatically without notice to the Borrower, effective on the date of any such change.

“Bloomberg” shall mean Bloomberg Index Services Limited (or a successor administrator of BSBY).

“BSBY” shall mean the Bloomberg Short-Term Bank Yield Index rate administered by Bloomberg and published by Bloomberg or another commercially available source providing such quotations as may be designated by the Bank from time to time.

“BSBY Reserve Percentage” shall mean, as of any day, the maximum effective percentage in effect on such day, if any, as prescribed by the Board of Governors of the Federal Reserve System (or any successor) for determining the reserve requirements (including, without limitation, supplemental, marginal and emergency reserve requirements) with respect to BSBY funding.

“Business Day” shall mean any day other than a Saturday or Sunday or a legal holiday on which commercial banks are authorized or required by law to be closed for business in Pittsburgh, Pennsylvania; provided that, when used in connection with an amount that bears interest at a rate based on BSBY or any direct or indirect calculation or determination of BSBY, the term “Business Day” means any such day that is also a U.S. Government Securities Business Day.

“Daily BSBY Rate” shall mean, for any day, the rate per annum determined by the Bank by dividing (the resulting quotient rounded upwards, at the Bank’s discretion, to the nearest 1/100th of 1%) (A) the Published Rate for such day, by (B) a number equal to 1.00 minus the BSBY Reserve Percentage; provided, however, if the Daily BSBY Rate determined as provided above would be less than the Floor, then such rate shall be deemed to be the Floor. The rate of interest will be adjusted automatically as of each Business Day based on changes in the Daily BSBY Rate without notice to the Borrower.

“Default Rate” shall mean the rate per annum equal to the lesser of (A) the sum of 3% plus the interest rate otherwise in effect from time to time under this Note and (B) the Maximum Rate.

“Floor” means a rate of interest per annum equal to 50 basis points (0.50%) or, if the preceding blanks are not completed, then zero.

“Maximum Rate” shall mean the maximum rate of interest allowed by applicable law. “**NYFRB**” shall mean the Federal Reserve Bank of New York.

“Overnight Bank Funding Rate” shall mean, for any day, the rate comprised of both overnight federal funds and overnight Eurocurrency borrowings by U.S.-managed banking offices of depository institutions, as such composite rate shall be determined by the NYFRB, as set forth on its public website from time to time, and as published on the next succeeding Business Day as the overnight bank funding rate by the NYFRB (or by such other recognized electronic source (such as Bloomberg) selected by the Bank for the purpose of displaying such rate); provided, that if such day is not a Business Day, the Overnight Bank Funding Rate for such day shall be such rate on the immediately preceding Business Day; provided, further, that if such rate shall at any time, for any reason, no longer exist, a comparable replacement rate determined by the Bank at such time (which determination shall be conclusive absent manifest error). If the Overnight Bank Funding Rate determined as above would be less than zero, then such rate shall be deemed to be zero. The rate of interest charged shall be adjusted as of each Business Day based on changes in the Overnight Bank Funding Rate without notice to the Borrower.

“Prime Rate” shall mean the rate publicly announced by the Bank from time to time as its prime rate. The Prime Rate is determined from time to time by the Bank as a means of pricing some loans to its borrowers.

The Prime Rate is not tied to any external rate of interest or index and does not necessarily reflect the lowest rate of interest actually charged by the Bank to any particular class or category of customers.

"Published Rate" shall mean the 1-month BSBY.

"U.S. Government Securities Business Day" means any day except for (A) a Saturday or Sunday or (B) a day on which the Securities Industry and Financial Markets Association recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in United States government securities.

4. Advance Procedures. If permitted by the Bank, a request for advance may be made by telephone or electronic mail, or delivered in accordance with the Bank's security procedures through any automated platform or electronic service provided by the Bank, with such confirmation or verification (if any) as the Bank may require in its discretion from time to time. A request for advance by any Borrower shall be binding upon Borrower, jointly and severally. The Borrower authorizes the Bank to accept telephonic, email, automated and electronic requests for advances, and the Bank shall be entitled to rely upon the authority of any person providing such instructions. The Borrower hereby indemnifies and holds the Bank harmless from and against any and all damages, losses, liabilities, costs and expenses (including reasonable attorneys' fees and expenses) which may arise or be created by the acceptance of such telephonic, email, automated and electronic requests or by the making of such advances. The Bank will enter on its books and records, which entry when made will be presumed correct, the date and amount of each advance, as well as the date and amount of each payment made by the Borrower.

5. Interest Calculation; Maximum Rate. Interest will be calculated based on the actual number of days that principal is outstanding over a year of 360 days. In no event will the rate of interest hereunder exceed the Maximum Rate. Regardless of any other provision of this Note or the other Loan Documents, if for any reason the effective interest rate should exceed the Maximum Rate, the effective interest rate shall be deemed reduced to, and shall be, the Maximum Rate, and (i) the amount which would be excessive interest shall be deemed applied to the reduction of the principal balance of this Note and not to the payment of interest, and (ii) if the loan evidenced by this Note has been or is thereby paid in full, the excess shall be returned to the party paying same, such application to the principal balance of this Note or the refunding of such excess to be a complete settlement and acquittance thereof.

6. Conforming Changes Relating to BSBY; Benchmark Replacement Provisions. With respect to BSBY, the Bank shall have the right to make any technical, administrative or operational changes from time to time that the Bank decides may be appropriate to reflect the adoption and implementation of BSBY and to permit the administration thereof by the Bank in a manner substantially consistent with market practice or such other manner as the Bank decides is reasonably necessary. Notwithstanding anything to the contrary herein or in any other Loan Document, any amendments implementing such technical, administrative or operational changes will become effective without any further action or consent of the Borrower; provided that, with respect to any such amendment effected, the Bank shall provide notice to the Borrower of each such amendment implementing such technical, administrative or operational changes reasonably promptly after such amendment becomes effective.

If the applicable interest rate under this Note is based on a Benchmark, as defined in the Benchmark Replacement Rider attached to this Note and incorporated herein by this reference, and the Bank determines (which determination shall be final and conclusive) that (A) such Benchmark cannot be determined pursuant to its definition other than as a result of a Benchmark Transition Event (as defined in the Benchmark Replacement Rider attached to this Note), or (B) any enactment, promulgation or adoption of or any change in any applicable law, rule or regulation, or any change in the interpretation or administration thereof by a governmental authority, central bank or comparable agency charged with the interpretation or administration thereof, or compliance by the Bank with any guideline, request or directive (whether or not having the force of law) of any such authority, central bank or comparable agency shall make it unlawful or impracticable for the Bank to make or maintain or fund loans based on that Benchmark, then the Bank shall give notice thereof to the Borrower. Thereafter, until the Bank notifies the Borrower that the circumstances giving rise to such determination no longer exist, the interest rate for all amounts outstanding under this Note that otherwise would bear interest based on that Benchmark shall be equal to the Alternate Rate.

The Benchmark Replacement Rider provides a mechanism for determining an alternative rate of interest in the event that a Benchmark Transition Event (as defined in the Benchmark Replacement Rider) has occurred. The Bank does not warrant or accept any responsibility for and shall not have any liability with respect to, the administration, submission or any other matter related to any Benchmark. To the extent that any term or provision of the Benchmark Replacement Rider is or may be inconsistent with any term or provision in the remainder of this Note or any other Loan Document, the terms and provisions of the Benchmark Replacement Rider shall control.

7. <u>Other Payment Terms.</u> If any payment under this Note is due on a day of a calendar month for which there is no numerically corresponding day in certain other months (each, a "**Non-Conforming Month**"), then the payment in a Non-Conforming Month shall be due on the last day of such Non-Conforming Month. If any payment under this Note shall become due on a day other than a Business Day, such payment shall be due on the next succeeding Business Day, except that if such day falls in the next succeeding calendar month and such payment includes interest based on BSBY, such payment shall be due on the next preceding day that is a Business Day. Interest shall be computed to, but excluding, the date payment is due. The Borrower hereby authorizes the Bank to charge the Borrower's deposit account at the Bank for any payment when due under this Note or any other Loan Document. Payments received will be applied to charges, fees and expenses (including attorneys' fees), accrued interest and principal in any order the Bank may choose, in its sole discretion.

8. <u>Late Payments; Default Rate.</u> If the Borrower fails to make any payment of principal, interest or other amount coming due pursuant to the provisions of this Note within 15 calendar days of the date due and payable, the Borrower also shall pay to the Bank a late charge equal to the lesser of 5% of the amount of such payment or $100.00 (the "**Late Charge**"). Such 15-day period shall not be construed in any way to extend the due date of any such payment. Upon maturity, whether by acceleration, demand or otherwise, and at the Bank's option upon the occurrence of any Event of Default (as hereinafter defined) and during the continuance thereof, amounts outstanding under this Note shall bear interest at the Default Rate. The Default Rate shall continue to apply whether or not judgment shall be entered on this Note. Both the Late Charge and the Default Rate are imposed as liquidated damages for the purpose of defraying the Bank's expenses incident to the handling of delinquent payments, but are in addition to, and not in lieu of, the Bank's exercise of any rights and remedies hereunder, under the other Loan Documents or under applicable law, and any fees and expenses of any agents or attorneys which the Bank may employ. In addition, the Default Rate reflects the increased credit risk to the Bank of carrying a loan that is in default. The Borrower agrees that the Late Charge and Default Rate are reasonable forecasts of just compensation for anticipated and actual harm incurred by the Bank, and that the actual harm incurred by the Bank cannot be estimated with certainty and without difficulty.

9. <u>Prepayment.</u> The indebtedness evidenced by this Note may be prepaid in whole or in part at any time without penalty.

10. <u>Increased Costs; Yield Protection.</u> On written demand, together with written evidence of the justification therefor, the Borrower agrees to pay the Bank all direct costs incurred, any losses suffered or payments made by the Bank as a result of any Change in Law (hereinafter defined), imposing any reserve, deposit, allocation of capital or similar requirement (including without limitation, Regulation D of the Board of Governors of the Federal Reserve System) on the Bank, its holding company or any of their respective assets relative to the Facility. "**Change in Law**" means the occurrence, after the date of this Note, of any of the following: (a) the adoption or taking effect of any law, rule, regulation or treaty, (b) any change in any law, rule, regulation or treaty or in the administration, interpretation, implementation or application thereof by any governmental authority or (c) the making or issuance of any request, rule, guideline or directive (whether or not having the force of law) by any governmental authority; provided that notwithstanding anything herein to the contrary, (x) the Dodd-Frank Wall Street Reform and Consumer Protection Act and all requests, rules, guidelines or directives thereunder or issued in connection therewith and (y) all requests, rules, guidelines or directives promulgated by the Bank for International Settlements, the Basel Committee on Banking Supervision (or any successor or similar authority) or the United States or foreign regulatory authorities, in each case pursuant to Basel III, shall in each case be deemed to be a "Change in Law", regardless of the date enacted, adopted or issued.

11. <u>Other Loan Documents.</u> This Note is issued in connection with a letter agreement or loan agreement between the Borrower and the Bank, dated on or before the date hereof, and the other agreements and documents executed and/or delivered in connection therewith or referred to therein, the terms of which are incorporated herein by reference (as amended, modified or renewed from time to time, collectively the "**Loan Documents**"), and is secured by the property (if any) described in the Loan Documents and by any and all mortgages, security agreements, assignments, loan agreements, pledge agreements and other documents or instruments evidencing a security interest or other lien in favor of the Bank and delivered by the Borrower or by any third party with reference to indebtedness of the Borrower, whether such documents were previously or are hereafter executed, and whether given expressly as security for payment of this Note or generally as security for any and all indebtedness of the Borrower to the Bank. Such documents may be executed contemporaneously with the execution of this Note, or they may be executed and delivered at another time. Collateral securing other obligations of the Borrower to the Bank may also secure this Note.

12. <u>Events of Default.</u> The occurrence of any of the following events will be deemed to be an "**Event of Default**" under this Note: (i) the nonpayment of any principal, interest or other indebtedness under this Note when due; (ii) the occurrence of any event of default or any default and the lapse of any notice or cure period, or any Obligor's failure to observe or perform any covenant or other agreement, under or contained in any Loan Document or any other document now or in the future evidencing or securing any debt, liability or obligation of any Obligor to the Bank; (iii) the filing by or against any Obligor of any proceeding in bankruptcy, receivership, insolvency, reorganization, liquidation, conservatorship or similar proceeding (and, in the case of any such proceeding instituted against any Obligor, such proceeding is not dismissed or stayed within 30 days of the commencement thereof, provided that the Bank shall not be obligated to advance additional funds hereunder during such period); (iv) any assignment by any Obligor for the benefit of creditors, or any levy, garnishment, attachment or similar proceeding is instituted against any property of any Obligor held by or deposited with the Bank; (v) a default with respect to any other indebtedness of any Obligor for borrowed money, if the effect of such default is to cause or permit the acceleration of such debt; (vi) the commencement of any foreclosure or forfeiture proceeding, execution or attachment against any collateral securing the obligations of any Obligor to the Bank; (vii) the entry of a final judgment against any Obligor and the failure of such Obligor to discharge the judgment within 10 days of the entry thereof; (viii) any change in any Obligor's business, assets, operations, financial condition or results of operations that has or could reasonably be expected to have any material adverse effect on any Obligor; (ix) any Obligor ceases doing business as a going concern; (x) any representation or warranty made by any Obligor to the Bank in any Loan Document or any other documents now or in the future evidencing or securing the obligations of any Obligor to the Bank, is false, erroneous or misleading in any material respect; (xi) if this Note or any guarantee executed by any Obligor is secured, the failure of any Obligor to provide the Bank with additional collateral if in the Bank's opinion at any time or times, the market value of any of the collateral securing this Note or any guarantee has depreciated below that required pursuant to the Loan Documents or, if no specific value is so required, then in an amount deemed material by the Bank; (xii) the revocation or attempted revocation, in whole or in part, of any guarantee by any Obligor; or (xiii) the death, incarceration, indictment or legal incompetency of any individual Obligor or, if any Obligor is a partnership or limited liability company, the death, incarceration, indictment or legal incompetency of any individual general partner or member. As used herein, the term "**Obligor**" means any Borrower and any guarantor of, or any pledgor, mortgagor or other person or entity providing collateral support for, the Borrower's obligations to the Bank existing on the date of this Note or arising in the future.

Upon the occurrence of an Event of Default: (a) the Bank shall be under no further obligation to make advances hereunder; (b) if an Event of Default specified in clause (iii) or (iv) above shall occur, the outstanding principal balance and accrued interest hereunder together with any additional amounts payable hereunder shall be immediately due and payable without demand or notice of any kind; (c) if any other Event of Default shall occur, the outstanding principal balance and accrued interest hereunder together with any additional amounts payable hereunder, at the Bank's option and without demand or notice of any kind, may be accelerated and become immediately due and payable; (d) at the Bank's option, this Note will bear interest at the Default Rate from the date of the occurrence of the Event of Default; and (e) the Bank may exercise from time to time any of the rights and remedies available under the Loan Documents or under applicable law.

13. <u>Right of Setoff.</u> In addition to all liens upon and rights of setoff against the Borrower's money, securities or other property given to the Bank by law, the Bank shall have, with respect to the Borrower's obligations to the Bank under this Note and to the extent permitted by law, a contractual possessory security interest in and a contractual right of setoff against, and the Borrower hereby grants the Bank a security interest in, and hereby assigns, conveys, delivers, pledges and transfers to the Bank, all of the Borrower's right, title and interest in and to, all of the Borrower's deposits, moneys, securities and other property now or hereafter in the possession of or on deposit with, or in transit to, the Bank or any other direct or indirect subsidiary of The PNC Financial Services Group, Inc., whether held in a general or special account or deposit, whether held jointly with someone else, or whether held for safekeeping or otherwise, excluding, however, all IRA, Keogh, and trust accounts. Every such security interest and right of setoff may be exercised without demand upon or notice to the Borrower. Every such right of setoff shall be deemed to have been exercised immediately upon the occurrence of an Event of Default hereunder without any action of the Bank, although the Bank may enter such setoff on its books and records at a later time.

14. <u>Anti-Money Laundering/International Trade Law Compliance.</u> The Borrower represents, warrants and covenants to the Bank, as of the date hereof, the date of each advance of proceeds under the Facility, the date of any renewal, extension or modification of the Facility, and at all times until the Facility has been terminated and all amounts thereunder have been indefeasibly paid in full, that: (a) no Covered Entity (i) is a Sanctioned Person; (ii) has any of its assets in a Sanctioned Jurisdiction or in the possession, custody or control of a Sanctioned Person; or (iii) does business in or with, or derives any of its operating income from investments in or transactions with, any Sanctioned Jurisdiction or Sanctioned Person; (b) the proceeds of the Facility will not be used to fund any operations in, finance any investments or activities in, or, make any payments to, a Sanctioned Jurisdiction or Sanctioned Person; (c) the funds used to repay the Facility are not derived from any unlawful activity; (d) each Covered Entity is in compliance with, and no Covered Entity engages in any dealings or transactions prohibited by, any laws of the United States, including but not limited to any Anti-Terrorism Laws; and (e) no Collateral is or will become Embargoed Property. The Borrower covenants and agrees that (a) it shall immediately notify the Bank in writing upon the occurrence of a Reportable Compliance Event; and (b) if, at any time, any Collateral becomes Embargoed Property, in addition to all other rights and remedies available to the Bank, upon request by the Bank, the Borrower shall provide substitute Collateral acceptable to the Bank that is not Embargoed Property.

As used herein: "**Anti-Terrorism Laws**" means any laws relating to terrorism, trade sanctions programs and embargoes, import/export licensing, money laundering, or bribery, all as amended, supplemented or replaced from time to time; "**Collateral**" means any collateral securing any debt, liabilities or other obligations of any Obligor to the Bank; "**Compliance Authority**" means each and all of the (a) U.S. Treasury Department/Office of Foreign Assets Control, (b) U.S. Treasury Department/Financial Crimes Enforcement Network, (c) U.S. State Department/Directorate of Defense Trade Controls, (d) U.S. Commerce Department/Bureau of Industry and Security, (e) U.S. Internal Revenue Service, (f) U.S. Justice Department, and (g) U.S. Securities and Exchange Commission; "**Covered Entity**" means the Borrower, its affiliates and subsidiaries, all guarantors, pledgors of collateral, all owners of the foregoing, and all brokers or other agents of the Borrower acting in any capacity in connection with the Facility; "**Embargoed Property**" means any property (a) in which a Sanctioned Person holds an interest; (b) beneficially owned, directly or indirectly, by a Sanctioned Person; (c) that is due to or from a Sanctioned Person; (d) that is located in a Sanctioned Jurisdiction; or (e) that would otherwise cause any actual or possible violation by the Bank of any applicable Anti-Terrorism Law if the Bank were to obtain an encumbrance on, lien on, pledge of or security interest in such property or provide services in consideration of such property; "**Reportable Compliance Event**" means (1) any Covered Entity becomes a Sanctioned Person, or is indicted, arraigned, investigated or custodially detained, or receives an inquiry from regulatory or law enforcement officials, in connection with any Anti-Terrorism Law or any predicate crime to any Anti-Terrorism Law, or self-discovers facts or circumstances implicating any aspect of its operations with the actual or possible violation of any Anti- Terrorism Law; (2) any Covered Entity engages in a transaction that has caused or may cause the Bank to be in violation of any Anti-Terrorism Laws, including a Covered Entity's use of any proceeds of the Facility to fund any operations in, finance any investments or activities in, or, make any payments to, directly or indirectly, a Sanctioned Jurisdiction or Sanctioned Person; or (3) any Collateral becomes Embargoed Property; "**Sanctioned Jurisdiction**" means a country subject to a sanctions program maintained by any Compliance Authority; and "**Sanctioned Person**" means any individual person, group, regime, entity or thing listed or otherwise recognized as a specially designated, prohibited, sanctioned or debarred person or entity, or subject to any limitations or prohibitions (including but not limited to the blocking of property or rejection of transactions), under any order or directive of any Compliance Authority or otherwise subject to, or specially designated under, any sanctions program maintained by any Compliance Authority.

15. Indemnity. The Borrower agrees to indemnify each of the Bank, each legal entity, if any, who controls, is controlled by or is under common control with the Bank, and each of their respective directors, officers and employees (the "**Indemnified Parties**"), and to defend and hold each Indemnified Party harmless from and against any and all claims, damages, losses, liabilities and expenses (including all fees and charges of internal or external counsel with whom any Indemnified Party may consult and all expenses of litigation and preparation therefor) (each, a "**Claim**") which any Indemnified Party may incur or which may be asserted against any Indemnified Party by any person, entity or governmental authority (including any person or entity claiming derivatively on behalf of the Borrower), in connection with or arising out of or relating to the matters referred to in this Note or in the other Loan Documents or the use of any advance hereunder, whether (a) arising from or incurred in connection with any breach of a representation, warranty or covenant by the Borrower, or (b) arising out of or resulting from any suit, action, claim, proceeding or governmental investigation, pending or threatened, whether based on statute, regulation or order, or tort, or contract or otherwise, before any court or governmental authority; provided, however, that the foregoing indemnity agreement shall not apply to any Claim that is determined by a court of competent jurisdiction in a final, non-appealable judgment to have been solely attributable to an Indemnified Party's gross negligence or willful misconduct. The indemnity agreement contained in this paragraph shall survive the termination of this Note, payment of any advance hereunder and the assignment of any rights hereunder. The Borrower may participate at its expense in the defense of any such action or claim.

16. Miscellaneous. All notices, demands, requests, consents, approvals and other communications required or permitted hereunder ("**Notices**") must be in writing (except as may be agreed otherwise above with respect to borrowing requests or as otherwise provided in this Note). Notices may be given in any manner to which the parties may agree. Without limiting the foregoing, first-class mail, postage prepaid, facsimile transmission and commercial courier service are hereby agreed to as acceptable methods for giving Notices. In addition, the parties agree that Notices may be sent electronically to any electronic address provided by a party from time to time or through an automated platform that the Bank provides to the Borrower. Notices may be sent to a party's address as set forth above or to such other address as any party may give to the other for such purpose in accordance with this paragraph. Notices will be effective upon receipt. For purposes hereof, "receipt" shall mean: (i) for notices sent by U.S. mail, the third business day after the date such notice was sent; (ii) for notices delivered by hand or sent by overnight courier service, the date delivered; (iii) for notices sent by facsimile or electronic communication, the date when sent; and (iv) for notices sent by any other method, the date received. No delay or omission on the Bank's part to exercise any right or power arising hereunder will impair any such right or power or be considered a waiver of any such right or power, nor will the Bank's action or inaction impair any such right or power. The Bank's rights and remedies hereunder are cumulative and not exclusive of any other rights or remedies which the Bank may have under other agreements, at law or in equity. Except as otherwise set forth in this Note, no modification, amendment or waiver of, or consent to any departure by the Borrower from, any provision of this Note will be effective unless made in a writing signed by the Bank, and then such waiver or consent shall be effective only in the specific instance and for the purpose for which given. Notwithstanding the foregoing, the Bank may modify this Note for the purposes of completing missing content or correcting erroneous content, without the need for a written amendment, provided that the Bank shall send a copy of any such modification to the Borrower (which notice may be given by electronic mail). The Borrower agrees to pay on demand, to the extent permitted by law, all costs and expenses incurred by the Bank in the enforcement of its rights in this Note and in any security therefor, including without limitation reasonable fees and expenses of the Bank's counsel. If any provision of this Note is found to be invalid, illegal or unenforceable in any respect by a court, all the other provisions of this Note will remain in full force and effect. The Borrower and all other makers and indorsers of this Note hereby forever waive presentment, protest, notice of dishonor, notice of non-payment, notice of intent to accelerate and notice of acceleration, and any other notice of any kind. The Borrower also waives all defenses based on suretyship or impairment of collateral. If this Note is executed by more than one Borrower, the obligations of such persons or entities hereunder will be joint and several. This Note shall bind the Borrower and its heirs, executors, administrators, successors and assigns, and the benefits hereof shall inure to the benefit of the Bank and its successors and assigns; provided, however, that the Borrower may not assign this Note in whole or in part without the Bank's written consent and the Bank at any time may assign this Note in whole or in part.

17. **Governing Law and Venue.** This Note has been delivered to and accepted by the Bank and will be deemed to be made in the State where the Bank's office indicated above is located (the "**State**"). **THIS NOTE WILL BE INTERPRETED AND THE RIGHTS AND LIABILITIES OF THE BANK AND THE BORROWER DETERMINED IN ACCORDANCE WITH THE LAWS OF THE STATE, EXCLUDING ITS CONFLICT OF LAWS RULES, INCLUDING WITHOUT LIMITATION THE ELECTRONIC TRANSACTIONS ACT (OR EQUIVALENT) IN EFFECT IN THE STATE (OR, TO THE EXTENT CONTROLLING, THE LAWS OF THE UNITED STATES OF AMERICA, INCLUDING WITHOUT LIMITATION THE ELECTRONIC SIGNATURES IN GLOBAL AND NATIONAL COMMERCE ACT)**. The Borrower hereby irrevocably consents to the exclusive jurisdiction of any state or federal court in the county or judicial district where the Bank's office indicated above is located; provided that nothing contained in this Note will prevent the Bank from bringing any action, enforcing any award or judgment or exercising any rights against the Borrower individually, against any security or against any property of the Borrower within any other county, state or other foreign or domestic jurisdiction. The Borrower acknowledges and agrees that the venue provided above is the most convenient forum for both the Bank and the Borrower. The Borrower waives any objection to venue and any objection based on a more convenient forum in any action instituted under this Note.

18. **Commercial Purpose.** The Borrower represents that the indebtedness evidenced by this Note is being incurred by the Borrower solely for the purpose of acquiring or carrying on a business, professional or commercial activity, and not for personal, family or household purposes.

19. **USA PATRIOT Act Notice.** To help the government fight the funding of terrorism and money laundering activities, Federal law requires all financial institutions to obtain, verify and record information that identifies each Borrower that opens an account. What this means: when the Borrower opens an account, the Bank will ask for the business name, business address, taxpayer identifying number and other information that will allow the Bank to identify the Borrower, such as organizational documents. For some businesses and organizations, the Bank may also need to ask for identifying information and documentation relating to certain individuals associated with the business or organization.

20. **Representation by Counsel.** The Borrower hereby represents that it has been represented by competent counsel of its choice, or has knowingly waived its right to use and retain counsel, in the negotiation and execution of this Note and the other Loan Documents; that it has read and fully understood the terms hereof; that the Borrower and any retained counsel have been afforded an opportunity to review, negotiate and modify the terms of this Note and the other Loan Documents; and that it intends to be bound hereby. In accordance with the foregoing, the general rule of construction to the effect that any ambiguities in a contract are to be resolved against the party drafting the contract shall not be employed in the construction and interpretation of this Note or any other Loan Document.

21. **Authorization to Obtain Credit Reports.** By signing below, each person, who is signing in his or her individual capacity, requests and provides written authorization to the Bank or its designee (and any assignee or potential assignee hereof) to obtain such individual's personal credit profile from one or more national credit bureaus. This authorization extends to obtaining a credit profile in (i) considering an application for credit that is evidenced, guaranteed or secured by this document, (ii) assessing creditworthiness and (iii) considering extensions of credit, including on an ongoing basis, as necessary for the purposes of (a) update, renewal or extension of such credit or additional credit, (b) reviewing, administering or collecting the resulting account and (c) reporting on the repayment and satisfaction of such credit obligations. By signing below, such individual further ratifies and confirms his or her prior requests and authorizations with respect to the matters set forth herein. For the avoidance of doubt, this provision does not apply to persons signing below in their capacities as officers or other authorized representatives of entities, organizations or governmental bodies.

22. <u>Counterparts; Electronic Signatures and Records.</u> This Note and any other Loan Document may be signed in any number of counterpart copies and by the parties hereto on separate counterparts, but all such copies shall constitute one and the same instrument. Notwithstanding any other provision herein, the Borrower agrees that this Note, the Loan Documents, any amendments thereto, and any other information, notice, signature card, agreement or authorization related thereto (each, a "**Communication**") may, at the Bank's option, be in the form of an electronic record. Any Communication may, at the Bank's option, be signed or executed using electronic signatures. For the avoidance of doubt, the authorization under this paragraph may include, without limitation, use or acceptance by the Bank of a manually signed paper Communication which has been converted into electronic form (such as scanned into PDF format) for transmission, delivery and/or retention.

23. <u>Automatic Payment.</u> If due to any act or omission of the Borrower or another Obligor the Bank cannot automatically deduct payments required under this Note or the other Loan Documents from a deposit account with the Bank (including due to the Borrower's revocation of its authorization to do so or failure to maintain such deposit account with the Bank or otherwise), the Bank may, at its option, upon 30 days' notice to the Borrower, increase the interest rate payable by the Borrower under this Note by 25 basis points (0.25%).

24. <u>Depository.</u> The Borrower will establish and maintain with the Bank the Borrower's primary depository accounts. If the Borrower fails to establish and/or maintain its primary depository accounts with the Bank, the Bank may, at its option, upon 30 days' notice to the Borrower, increase the interest rate payable by the Borrower under this Note by up to 100 basis points (1.00%). The Bank's right to increase the interest rate pursuant to this paragraph shall be in addition to any other rights or remedies the Bank may have under this Note, all of which are hereby reserved, and shall not constitute a waiver, release or limitation upon the Bank's exercise of any such rights or remedies.

25. <u>State-Specific Provisions.</u>

(a) **<u>Power to Confess Judgment.</u> The Borrower hereby irrevocably authorizes any attorney-at- law, including an attorney employed by or retained and paid by the Bank, to appear in any court of record in or of the State of Ohio, or in any other state or territory of the United States, at any time after the indebtedness evidenced by this Note becomes due, whether by acceleration or otherwise, to waive the issuing and service of process and to confess a judgment against the Borrower in favor of the Bank, and/or any assignee or holder hereof for the amount of principal and interest and expenses then appearing due from the Borrower under this Note, together with costs of suit and thereupon to release all errors and waive all right of appeal or stays of execution in any court of record. The Borrower hereby expressly (i) waives any conflict of interest of the attorney(s) retained by the Bank to confess judgment against the Borrower upon this Note, and (ii) consents to the receipt by such attorney(s) of a reasonable legal fee from the Bank for legal services rendered for confessing judgment against the Borrower upon this Note. A copy of this Note, certified by the Bank, may be filed in each such proceeding in place of filing the original as a warrant of attorney.**

26. <u>Amendment and Restatement.</u> This Note amends and restates, and is in substitution for, that certain Amended and Restated Revolving Line of Credit Note in the original principal amount of $5,000,000.00 payable to the order of the Bank and dated January 04, 2022 (the "**Existing Note**"). However, without duplication, this Note shall in no way extinguish, cancel or satisfy Borrower's unconditional obligation to repay all indebtedness evidenced by the Existing Note or constitute a novation of the Existing Note. Nothing herein is intended to extinguish, cancel or impair the lien priority or effect of any security agreement, pledge agreement or mortgage with respect to any Obligor's obligations hereunder and under any other document relating hereto.

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27. <u>WAIVER OF JURY TRIAL.</u> THE BORROWER IRREVOCABLY WAIVES ANY AND ALL RIGHTS THE BORROWER MAY HAVE TO A TRIAL BY JURY IN ANY ACTION, PROCEEDING OR CLAIM OF ANY NATURE RELATING TO THIS NOTE, ANY DOCUMENTS EXECUTED IN CONNECTION WITH THIS NOTE OR ANY TRANSACTION CONTEMPLATED IN ANY OF SUCH DOCUMENTS. THE BORROWER ACKNOWLEDGES THAT THE FOREGOING WAIVER IS KNOWING AND VOLUNTARY.

The Borrower acknowledges that it has read and understands all the provisions of this Note, including the confession of judgment and waiver of jury trial, and has been advised by counsel as necessary or appropriate.

WITNESS the due execution hereof as a document under seal, as of the date first written above, with the intent to be legally bound hereby.

<u>WARNING-BY SIGNING THIS PAPER YOU GIVE UP YOUR RIGHT TO NOTICE AND COURT TRIAL. IF YOU DO NOT PAY ON TIME A COURT JUDGMENT MAY BE TAKEN AGAINST YOU WITHOUT YOUR PRIOR KNOWLEDGE AND THE POWERS OF A COURT CAN BE USED TO COLLECT FROM YOU REGARDLESS OF ANY CLAIMS YOU MAY HAVE AGAINST THE CREDITOR WHETHER FOR RETURNED GOODS, FAULTY GOODS, FAILURE ON HIS PART TO COMPLY WITH THE AGREEMENT, OR ANY OTHER CAUSE.</u>

NORTHERN TECHNOLOGIES INTERNATIONAL CORPORATION

By: E-SIGNED by Matthew Wolsfeld on 03-02-2022 11:43:15 EST

(SEAL)

Matthew Wolsfeld, Chief Financial Officer

Benchmark Replacement Rider

(a) **Benchmark Replacement.** Notwithstanding anything to the contrary herein or in any other Loan Document, if a Benchmark Transition Event and its related Benchmark Replacement Date have occurred in respect of any setting of the then-current Benchmark, then, (x) if the Benchmark Replacement is determined in accordance with clause (1) or (2) of the definition of "Benchmark Replacement" for such Benchmark Replacement Date, such Benchmark Replacement will replace such Benchmark for all purposes hereunder and under any Loan Document in respect of such Benchmark setting and subsequent Benchmark settings without any amendment, or further action or consent of any other party, hereto or to any other Loan Document; and (y) if a Benchmark Replacement is determined in accordance with clause (3) of the definition of "Benchmark Replacement" or clause (2) of the definition of "Benchmark Replacement Adjustment" for such Benchmark Replacement Date, such Benchmark Replacement will replace such Benchmark for all purposes hereunder and under any Loan Document in respect of any Benchmark setting at or after 5:00 p.m. (Eastern time) on the fifth (5th) Business Day after the date notice of such Benchmark Replacement is provided to the Borrower without any amendment, or further action or consent of any other party, hereto or to any other Loan Document.

(b) **Benchmark Replacement Conforming Changes.** In connection with the use, administration, adoption or implementation of a Benchmark Replacement, the Bank will have the right to make Benchmark Replacement Conforming Changes from time to time and, notwithstanding anything to the contrary herein or in any other Loan Document, any amendments implementing such Benchmark Replacement Conforming Changes will become effective without any further action or consent of the Borrower.

(c) **Notices; Standards for Decisions and Determinations.** The Bank will promptly notify the Borrower of (i) the implementation of any Benchmark Replacement, (ii) the effectiveness of any Benchmark Replacement Conforming Changes in connection with the use, administration, adoption or implementation of a Benchmark Replacement and (iii) the commencement of any Benchmark Unavailability Period. Any determination, decision or election that may be made by the Bank pursuant to this Rider, including any determination with respect to a tenor, rate or adjustment or of the occurrence or non-occurrence of an event, circumstance or date and any decision to take or refrain from taking any action or selection, will be conclusive and binding absent manifest error and may be made in its sole discretion and without consent from the Borrower.

(d) **Benchmark Unavailability Period.** Upon the Borrower's receipt of notice of the commencement of a Benchmark Unavailability Period, amounts outstanding hereunder automatically will bear interest at the Fallback Rate.

(e) **Certain Defined Terms.** As used in this Rider:

"Available Tenor" means, as of any date of determination and with respect to the then-current Benchmark, as applicable, one month.

"Benchmark" means, initially, BSBY; provided that if a Benchmark Transition Event has occurred with respect to BSBY or the then-current Benchmark, then "Benchmark" means the applicable Benchmark Replacement to the extent that such Benchmark Replacement has replaced such prior benchmark rate pursuant to paragraph (a) of this Rider.

"Benchmark Replacement" means, for the Available Tenor, the first alternative set forth in the order below that can be determined by the Bank for the applicable Benchmark Replacement Date:

(1) the sum of: (a) Term SOFR and (b) the related Benchmark Replacement Adjustment;

(2) the sum of: (a) Daily Simple SOFR and (b) the related Benchmark Replacement Adjustment; and

(3) the sum of: (a) the alternate benchmark rate and (b) an adjustment (which may be a positive or negative value or zero), in each case, that has been selected by the Bank as the replacement for the Available Tenor of such Benchmark giving due consideration to any evolving or then- prevailing market convention for determining a benchmark rate and an adjustment as a replacement for the then-current Benchmark, including any applicable recommendations made by a Relevant Governmental Body, for U.S. dollar-denominated syndicated or bilateral commercial credit facilities at such time;

provided that any such Benchmark Replacement shall be administratively feasible as determined by the Bank in its sole discretion. If the Benchmark Replacement as determined pursuant to clause (1), (2) or (3) above would be less than the Floor, the Benchmark Replacement will be deemed to be the Floor for the purposes hereof and of the other Loan Documents.

"Benchmark Replacement Adjustment" means, for purposes of clauses (1) and (2) of the definition of "Benchmark Replacement," with respect to any replacement of the then-current Benchmark with an Unadjusted Benchmark Replacement for any setting of such Unadjusted Benchmark Replacement, the first alternative set forth in the order below that can be determined by the Bank:

(1) an adjustment (which may be a positive or negative value or zero) equal to the BSBY Long- Term Spread Adjustment for such Available Tenor as of the time such Benchmark Replacement is first set and is displayed on a screen or other information service that publishes such adjustment from time to time as selected by the Bank in its reasonable discretion; and

(2) an adjustment (which may be a positive or negative value or zero) that has been selected by the Bank as the replacement for such Available Tenor, giving due consideration to any evolving or then-prevailing market convention for determining a spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of such Available Tenor of such Benchmark with the applicable Unadjusted Benchmark Replacement, including any applicable recommendations made by a Relevant Governmental Body, for U.S. dollar-denominated syndicated or bilateral commercial credit facilities at such time.

"Benchmark Replacement Conforming Changes" means, with respect to any Benchmark Replacement, any technical, administrative or operational changes (including changes to the definitions of "Base Rate," "Business Day" or "U.S. Government Securities Business Day," timing and frequency of determining rates and making payments of interest, timing of borrowing requests or prepayment, the applicability and length of lookback periods, the applicability of breakage provisions and other technical, administrative or operational matters) that the Bank decides may be appropriate to reflect the adoption and implementation of such Benchmark Replacement and to permit the administration thereof by the Bank in a manner substantially consistent with market practice (or, if the Bank decides that adoption of any portion of such market practice is not administratively feasible or if the Bank determines that no market practice for the administration of such Benchmark Replacement exists, in such other manner of administration as the Bank decides is reasonably necessary in connection with the administration of the Facility and the Loan Documents).

"Benchmark Replacement Date" means a date and time determined by the Bank, which date shall be no later than the earlier to occur of the following events with respect to the then-current Benchmark:

(1) in the case of clause (1) of the definition of "Benchmark Transition Event," the later of (a) the date of the public statement or publication of information referenced therein and (b) the date on which the Available Tenor of such Benchmark (or such component thereof) is no longer available or permitted to be used for determining the interest rate of U.S. dollar-denominated syndicated or bilateral commercial loans, or shall cease; or

(2) in the case of clause (2) of the definition of "Benchmark Transition Event," a date and time determined by the Bank as administratively feasible in its reasonable discretion and no later than 90 days following the date of the public statement or publication of information referenced therein.

"Benchmark Transition Event" means the occurrence of one or more of the following events with respect to the then-current Benchmark:

(1) a public statement or publication of information by or on behalf of (a) the administrator of such Benchmark (or the published component used in the calculation thereof), (b) a Governmental Authority having jurisdiction over such administrator with respect to its publication of such Benchmark or (c) a Governmental Authority having jurisdiction over the Bank, in each case acting in such capacity, identifying a specific date after which the Available Tenor of such Benchmark (or such component thereof) (i) shall or will no longer be made available or permitted to be used for determining the interest rate of U.S. dollar-denominated syndicated or bilateral commercial loans, or (ii) shall or will otherwise cease, provided that, at the time of any such statement or publication to the extent related solely to unavailability or cessation of such Benchmark, there is no successor administrator that will continue to provide the Available Tenor of such Benchmark (or such component thereof); or

(2) a public statement or publication of information by the administrator of such Benchmark (including a "Technical Note" published on the BSBY Website) that a BSBY Final Step Event has occurred for the Available Tenor of such Benchmark.

"Benchmark Unavailability Period" means, so long as a Benchmark Transition Event has occurred, the period (if any) (x) beginning at the time that a Benchmark Replacement Date has occurred if, at such time, no Benchmark Replacement has replaced the then-current Benchmark for all purposes hereunder and under any Loan Document in accordance with this Rider, and (y) ending at the time that a Benchmark Replacement has replaced the then-current Benchmark for all purposes hereunder and under any Loan Document in accordance with this Rider.

"BSBY Final Step Event" means, for any Available Tenor, either (i) the twentieth (20th) consecutive U.S. Government Securities Business Day or (ii) the thirtieth (30th) U.S. Government Securities Business Day within a rolling 90-day period, on which BSBY is calculated in accordance with "Level 6" (or any successor final step) of the "Alternative Calculation Waterfall" defined or set forth in BSBY's index methodology and rulebook, as published on the BSBY Website.

"BSBY Long-Term Spread Adjustment" means the most recently dated "BSBY SOFR 5Y Spread Adjustment" published on the BSBY Website.

"BSBY Website" means the "Bloomberg Short-Term Bank Yield Index" website at https://www.bloomberg.com/professional/product/indices/bsby/ (or any successor website).

"Daily Simple SOFR" means, for any day, SOFR, with the conventions for this rate (which may include a lookback) being established by the Bank in accordance with the conventions for this rate selected or recommended by the Relevant Governmental Body for determining "Daily Simple SOFR" for business loans; provided, that if the Bank decides that any such convention is not administratively feasible for the Bank, then the Bank may establish another convention in its reasonable discretion.

"Fallback Rate" means the alternative rate of interest that would have been applicable under the terms of the Facility (absent this Rider) if the Bank had given notice that the Benchmark cannot be determined or the Bank cannot make or maintain or fund loans based on such Benchmark or, if no such alternative rate is specified, the Base Rate.

"Floor" means the minimum rate of interest, if any, provided under the terms of the Facility with respect to BSBY or, if no minimum rate of interest is specified, zero.

"Governmental Authority" means the government of the United States of America or any other nation, or of any political subdivision thereof, whether state or local, and any agency, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative powers or functions of or pertaining to government (including any supra-national bodies such as the European Union or the European Central Bank).

"Relevant Governmental Body" means the Board of Governors of the Federal Reserve System of the United States and/or the Federal Reserve Bank of New York, or a committee officially endorsed or convened by the Board of Governors of the Federal Reserve System of the United States and/or the Federal Reserve Bank of New York, or any successor thereto.

"SOFR" means a rate equal to the secured overnight financing rate as published by the Federal Reserve Bank of New York (or a successor administrator of the secured overnight financing rate) on the website of the Federal Reserve Bank of New York, currently at http://www.newyorkfed.org, or any successor source for the secured overnight financing rate identified as such by the administrator of the secured overnight financing rate from time to time.

"Term SOFR" means, for the Applicable Tenor, the forward-looking term rate based on SOFR administered by CME Group Benchmark Administration Limited (or a successor administrator selected by the Bank in its reasonable discretion).

"Unadjusted Benchmark Replacement" means the applicable Benchmark Replacement excluding the related Benchmark Replacement Adjustment.

Exhibit 31.1

**CERTIFICATION PURSUANT TO SECTION 302(a) OF
THE SARBANES-OXLEY ACT OF 2002**

I, G. Patrick Lynch, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Northern Technologies International Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: April 8, 2022

/s/ G. Patrick Lynch
G. Patrick Lynch
President and Chief Executive Officer
(principal executive officer)

Exhibit 31.2

**CERTIFICATION PURSUANT TO SECTION 302(a) OF
THE SARBANES-OXLEY ACT OF 2002**

I, Matthew C. Wolsfeld, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Northern Technologies International Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: April 8, 2022

/s/ Matthew C. Wolsfeld
Matthew C. Wolsfeld, CPA
Chief Financial Officer and Corporate Secretary
(principal financial officer)

Exhibit 32.1

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

In connection with the Quarterly Report on Form 10-Q of Northern Technologies International Corporation (the “Company”) for the period ended February 28, 2022, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, G. Patrick Lynch, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge and belief:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ G. Patrick Lynch
G. Patrick. Lynch
President and Chief Executive Officer
(principal executive officer)

Circle Pines, Minnesota
April 8, 2022

Exhibit 32.2

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

In connection with the Quarterly Report on Form 10-Q of Northern Technologies International Corporation (the “Company”) for the period ended February 28, 2022, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Matthew C. Wolsfeld, Chief Financial Officer and Corporate Secretary of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge and belief:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Matthew C. Wolsfeld
Matthew C. Wolsfeld, CPA
Chief Financial Officer and Corporate Secretary (principal financial officer)

Circle Pines, Minnesota
April 8, 2022