

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

**FORM 8-K**

**CURRENT REPORT**

**Pursuant to Section 13 or 15(d)  
of the Securities Exchange Act of 1934**

**Date of Report (Date of earliest event reported): September 22, 2021**

**NORTHERN TECHNOLOGIES INTERNATIONAL CORPORATION**  
(Exact name of registrant as specified in its charter)

**Delaware**  
(State or Other Jurisdiction of Incorporation)

**001-11038**  
(Commission File Number)

**41-0857886**  
(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)

**Not Applicable**  
(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

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 is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

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.

**Item 2.03. Creation of a Direct Financial Obligation or an Obligation under an Off-Balance Sheet Arrangement of a Registrant.**

On September 22, 2021, Northern Technologies International Corporation (“NTIC”) announced that it has acquired the remaining 50% ownership interest in its Indian joint venture, Harita-NTI Limited, for USD \$6.25 million in cash, effective as of September 1, 2021. In connection with this transaction, on September 22, 2021, NTIC and PNC Bank, National Association (“PNC Bank”) entered into an Amended and Restated Loan Agreement (as amended and restated, the “Loan Agreement”) and Amended and Restated Security Agreement (as amended and restated, the “Security Agreement”) relating to the Company’s revolving line of credit with PNC Bank (the “Line of Credit”) and the Company issued an amended and restated promissory note thereunder (the “Amended Note”), in each case effective as of August 31, 2021, which together increased the line of credit from \$3.0 million to \$5.0 million, extended the maturity date to February 22, 2022 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 London Interbank Offered Rate (“LIBOR”) plus 250 basis points (2.50%).

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 amendments.

The foregoing description is qualified in its entirety by reference to the Loan Agreement and Amended Note, which are filed as Exhibits 10.1 and 10.2, respectively, to this current report on Form 8-K and incorporated by reference herein.

**Item 8.01. Other Events.**

On September 22, 2021, NTIC announced that it has acquired the remaining 50% ownership interest in its Indian joint venture, Harita-NTI Limited, for USD \$6.25 million in cash. NTIC funded the purchase price with cash on hand. In connection with the transaction, NTIC also announced that it increased its Line of Credit from \$3.0 million to \$5.0 million to provide for additional future financial flexibility.

**Item 9.01. Financial Statements and Exhibits.**

(d) *Exhibits.*

<b><u>Exhibit No.</u></b>	<b><u>Description</u></b>
<a href="#"><u>10.1</u></a>	<a href="#"><u>Amended and Restated Loan Agreement dated as of August 31, 2021 by and between Northern Technologies International Corporation and PNC Bank, National Association (filed herewith)</u></a>
<a href="#"><u>10.2</u></a>	<a href="#"><u>Amended and Restated Revolving Line of Credit Note dated as of August 31, 2021 issued by Northern Technologies International Corporation to PNC Bank, National Association (filed herewith)</u></a>
<a href="#"><u>99.1</u></a>	<a href="#"><u>Press Release issued September 22, 2021 (furnished herewith)</u></a>
104	The cover page from this current report on Form 8-K, formatted in Inline XBRL

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**SIGNATURE**

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

**NORTHERN TECHNOLOGIES INTERNATIONAL CORPORATION**

Date: September 22, 2021

By: /s/ Matthew C. Wolsfeld

Matthew C. Wolsfeld

Chief Financial Officer and Corporate Secretary

## AMENDED AND RESTATED LOAN AGREEMENT



THIS AMENDED AND RESTATED LOAN AGREEMENT (the “**Agreement**”), is entered into as of August 31, 2021, between **NORTHERN TECHNOLOGIES INTERNATIONAL CORPORATION**, a Delaware corporation (the “**Borrower**”), with an address at 4201 WOODLAND ROAD, CIRCLE PINES, MINNESOTA 55014-1794, and **PNC BANK, NATIONAL ASSOCIATION** (the “**Bank**”), with an address at 1900 E 9th St, Cleveland, OH 44114. This Agreement amends, restates and replaces that certain Loan Agreement dated January 10, 2011 between the Bank and the Borrower.

The Borrower and the Bank, with the intent to be legally bound, agree as follows:

1. **Loan.** The Bank has made or may make one or more loans (“**Loan**”) to the Borrower subject to the terms and conditions and in reliance upon the representations and warranties of the Borrower set forth in this Agreement. Each Loan shall be used for business purposes (and not for personal, family or household use) and is or will be evidenced by a promissory note or notes of the Borrower and all renewals, extensions, amendments and restatements thereof (whether one or more, collectively, the “**Note**”) acceptable to the Bank, which shall set forth the interest rate, repayment and other provisions of the respective Loan, the terms of which are incorporated into this Agreement by reference.

The Loans governed by this Agreement shall include the Loans specifically described below, if any, and any additional lines of credit or term loans that the Bank has made or may, in its sole discretion, make to the Borrower in the future.

2. **Security.** The security for repayment of the Loan shall include but not be limited to the collateral, guaranties and other documents heretofore, contemporaneously or hereafter executed and delivered to the Bank (the “**Security Documents**”), which shall secure repayment of the Loan and all other loans, advances, debts, liabilities, obligations, covenants and duties owing by the Borrower to the Bank described therein (hereinafter referred to collectively as the “**Obligations**”).

This Agreement, the Note, the Security Documents and all other agreements and documents executed and/or delivered pursuant or subject hereto, as each may be amended, modified, extended or renewed from time to time, are collectively referred to as the “**Loan Documents.**” Capitalized terms not defined herein shall have the meanings ascribed to them in the Loan Documents.

3. **Representations and Warranties.** The Borrower hereby makes the following representations and warranties, which shall be continuing in nature and remain in full force and effect until the Obligations are paid in full, and which shall be true and correct except as otherwise set forth on the Addendum attached hereto and incorporated herein by reference (the “**Addendum**”):

3.1 **Existence, Power and Authority.** If not a natural person, the Borrower is duly organized, validly existing and in good standing under the laws of the State of its incorporation or organization and has the power and authority to own and operate its assets and to conduct its business as now or proposed to be carried on, and is duly qualified, licensed and in good standing to do business in all jurisdictions where its ownership of property or the nature of its business requires such qualification or licensing. The Borrower is duly authorized to execute and deliver the Loan Documents, all necessary action to authorize the execution and delivery of the Loan Documents has been properly taken, and the Borrower is and will continue to be duly authorized to borrow under this Agreement and to perform all of the other terms and provisions of the Loan Documents.

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**3.2 Financial Statements.** The Borrower has delivered or caused to be delivered to the Bank its most recent Financial Statements (as defined herein). The Financial Statements are true, complete and accurate in all material respects and fairly present the Borrower's financial condition, assets and liabilities, whether accrued, absolute, contingent or otherwise and the results of the Borrower's operations for the period specified therein. The Financial Statements have been prepared in accordance with generally accepted accounting principles in effect from time to time ("GAAP") consistently applied from period to period, subject in the case of interim statements to normal year-end adjustments and to any comments and notes acceptable to the Bank in its sole discretion. As used herein, "Financial Statements" shall mean (i) with respect to an entity that is not a natural person, consolidated and, if required by the Bank in its sole discretion, consolidating balance sheets statements of income and cash flows for the year, month or quarter together with year-to-date figures and comparative figures for the corresponding periods of the prior year, prepared in accordance with GAAP, consistently applied from period to period; and (ii) with respect to natural persons, means personal financial statements and federal income tax returns.

**3.3 No Material Adverse Change.** Since the date of the most recent Financial Statements, the Borrower has not suffered any damage, destruction or loss, and no event or condition has occurred or exists, which has resulted or could result in a material adverse change in its business, assets, operations, condition (financial or otherwise) or results of operation.

**3.4 Binding Obligations.** The Borrower has full power and authority to enter into the transactions provided for in this Agreement and has been duly authorized to do so by appropriate action of its Board of Directors if the Borrower is a corporation, its members and/or managers, as applicable, if the Borrower is a limited liability company, all its general partners if the Borrower is a partnership or otherwise as may be required by law, charter, other organizational documents or agreements; and the Loan Documents, when executed and delivered by the Borrower, will constitute the legal, valid and binding obligations of the Borrower enforceable in accordance with their terms.

**3.5 No Defaults or Violations.** There does not exist any Default or Event of Default, as hereinafter defined, under this Agreement, or any default or violation by the Borrower of or under any of the terms, conditions or obligations of: (i) its partnership agreement if the Borrower is a partnership, its articles or certificate of incorporation, regulations and bylaws if the Borrower is a corporation, its articles or certificate of organization and operating agreement if the Borrower is a limited liability company, or its other organizational documents as applicable; (ii) any indenture, mortgage, deed of trust, franchise, permit, contract, agreement, or other instrument to which it is a party or by which it is bound; or (iii) any law, ordinance, regulation, ruling, order, injunction, decree, condition or other requirement applicable to or imposed upon it by any law, the action of any court or any governmental authority or agency; and the consummation of this Agreement and the transactions set forth herein will not result in any such Default, Event of Default or violation.

**3.6 Title to Assets.** The Borrower has good and marketable title to the assets reflected on the most recent Financial Statements, free and clear of all liens and encumbrances, except for (i) liens in favor of the Bank; (ii) current taxes and assessments not yet due and payable; (iii) assets disposed of by the Borrower in the ordinary course of business since the date of the most recent Financial Statements; and (iv) those liens or encumbrances, if any, specified on the Addendum.

**3.7 Litigation.** There are no actions, suits, proceedings or governmental investigations pending or, to the knowledge of the Borrower, threatened against the Borrower, which could result in a material adverse change in its business, assets, operations, condition (financial or otherwise) or results of operations and there is no basis known to the Borrower for any action, suit, proceeding or investigation which could result in such a material adverse change. All pending and threatened litigation against the Borrower is listed on the Addendum attached hereto.

**3.8 Tax Returns.** The Borrower has filed all returns and reports that are required to be filed by it in connection with any federal, state or local tax, duty or charge levied, assessed or imposed upon it or its property or withheld by it, including income, unemployment, social security and similar taxes, and all of such taxes have been either paid or adequate reserves or other provision has been made therefor.

**3.9 Employee Benefit Plans.** Each employee benefit plan as to which the Borrower may have any liability complies in all material respects with all applicable provisions of the Employee Retirement Income Security Act of 1974 (as amended from time to time, “ERISA”), including minimum funding requirements, and (i) no Prohibited Transaction (as defined under ERISA) has occurred with respect to any such plan; (ii) no Reportable Event (as defined under Section 4043 of ERISA) has occurred with respect to any such plan which would cause the Pension Benefit Guaranty Corporation to institute proceedings under Section 4042 of ERISA; (iii) the Borrower has not withdrawn from any such plan or initiated steps to do so; and (iv) no steps have been taken to terminate any such plan.

**3.10 Environmental Matters.** The Borrower is in compliance, in all material respects, with all Environmental Laws (as hereinafter defined), including, without limitation, all Environmental Laws in jurisdictions in which the Borrower owns or operates, or has owned or operated, a facility or site, stores Collateral, arranges or has arranged for disposal or treatment of hazardous substances, solid waste or other waste, accepts or has accepted for transport any hazardous substances, solid waste or other wastes or holds or has held any interest in real property or otherwise. Except as otherwise disclosed on the Addendum, no litigation or proceeding arising under, relating to or in connection with any Environmental Law is pending or, to the best of the Borrower’s knowledge, threatened against the Borrower, any real property in which the Borrower holds or has held an interest or any past or present operation of the Borrower. No release, threatened release or disposal of hazardous waste, solid waste or other wastes is occurring, or to the best of the Borrower’s knowledge has occurred, on, under or to any real property in which the Borrower holds or has held any interest or performs or has performed any of its operations, in violation of any Environmental Law. As used in this Section, “**litigation or proceeding**” means any demand, claim notice, suit, suit in equity, action, administrative action, investigation or inquiry whether brought by a governmental authority or other person, and “**Environmental Laws**” means all provisions of laws, statutes, ordinances, rules, regulations, permits, licenses, judgments, writs, injunctions, decrees, orders, awards and standards promulgated by any governmental authority concerning health, safety and protection of, or regulation of the discharge of substances into, the environment.

**3.11 Intellectual Property.** The Borrower owns or is licensed to use all patents, patent rights, trademarks, trade names, service marks, copyrights, intellectual property, technology, know-how and processes necessary for the conduct of its business as currently conducted that are material to the condition (financial or otherwise), business or operations of the Borrower.

**3.12 Regulatory Matters.** No part of the proceeds of any Loan will be used for “purchasing” or “carrying” any “margin stock” within the respective meanings of each of the quoted terms under Regulation U of the Board of Governors of the Federal Reserve System as now and from time to time in effect or for any purpose which violates the provisions of the Regulations of such Board of Governors.

**3.13 Solvency.** As of the date hereof and after giving effect to the transactions contemplated by the Loan Documents, (i) the aggregate value of the Borrower’s assets will exceed its liabilities (including contingent, subordinated, unmaturing and unliquidated liabilities); (ii) the Borrower will have sufficient cash flow to enable it to pay its debts as they become due; and (iii) the Borrower will not have unreasonably small capital for the business in which it is engaged.

**3.14 Disclosure.** None of the Loan Documents contains or will contain any untrue statement of material fact or omits or will omit to state a material fact necessary in order to make the statements contained in this Agreement or the Loan Documents not misleading. There is no fact known to the Borrower which materially adversely affects or, so far as the Borrower can now foresee, might materially adversely affect the business, assets, operations, condition (financial or otherwise) or results of operation of the Borrower and which has not otherwise been fully set forth in this Agreement or in the Loan Documents.

**3.15 Beneficial Owners.** If the Borrower is or was required to execute and deliver to the Bank a Certification of Beneficial Owner(s) (individually and collectively, as updated from time to time, the “**Certification of Beneficial Owners**”), the information in the Certification of Beneficial Owners, as updated from time to time in accordance with this Agreement, is true, complete and correct as of the date thereof, as of the date hereof and as of the date any such update is delivered to the Bank. The Borrower acknowledges and agrees that the Certification of Beneficial Owners is a Loan Document.

**4. Affirmative Covenants.** The Borrower agrees that from the date of execution of this Agreement until all Obligations have been paid in full and any commitments of the Bank to the Borrower have been terminated, the Borrower will:

**4.1 Books and Records.** Maintain books and records in accordance with GAAP and give representatives of the Bank access thereto at all reasonable times, including permission to examine, copy and make abstracts from any of such books and records and such other information as the Bank may from time to time reasonably request, and the Borrower will make available to the Bank for examination copies of any reports, statements and returns which the Borrower may make to or file with any federal, state or local governmental department, bureau or agency.

**4.2 Financial Reporting.** Deliver or cause to be delivered to the Bank (i) the Financial Statements, reports and certifications, if any, set forth on the Addendum and (ii) such other information about Borrower’s or Guarantor’s financial condition, properties and operations as and when requested by the Bank, from time to time. As used herein, “**Guarantor**” shall collectively refer to each Entity Guarantor and Individual Guarantor of the Obligations, jointly and severally; “**Entity Guarantor**” shall mean each Guarantor who is not a natural person; and “**Individual Guarantor**” shall mean each Guarantor who is a natural person.

**4.3 Payment of Taxes and Other Charges.** Pay and discharge when due all indebtedness and all taxes, assessments, charges, levies and other liabilities imposed upon the Borrower, its income, profits, property or business, except those which currently are being contested in good faith by appropriate proceedings and for which the Borrower shall have set aside adequate reserves or made other adequate provision with respect thereto acceptable to the Bank in its sole discretion.

**4.4 Maintenance of Existence, Operation and Assets.** Do all things necessary to (i) maintain, renew and keep in full force and effect its organizational existence and all rights, permits and franchises necessary to enable it to continue its business as currently conducted; (ii) continue in operation in substantially the same manner as at present; (iii) keep its properties in good operating condition and repair; and (iv) make all necessary and proper repairs, renewals, replacements, additions and improvements thereto.

4.5 **Insurance.** Maintain, with financially sound and reputable insurers, insurance with respect to its property and business against such casualties and contingencies, of such types and in such amounts, as is customary for established companies engaged in the same or similar business and similarly situated. In the event of a conflict between the provisions of this Section and the terms of any Security Documents relating to insurance, the provisions in the Security Documents will control.

4.6 **Compliance with Laws.** Comply with all laws applicable to the Borrower and to the operation of its business (including without limitation any statute, ordinance, rule or regulation relating to employment practices, pension benefits or environmental, occupational and health standards and controls).

4.7 **Bank Accounts.** Establish and maintain at the Bank the Borrower's primary depository accounts.

4.8 **Financial Covenants.** Comply with all of the financial and other covenants, if any, set forth on the Addendum.

4.9 **Additional Reports.** Provide prompt written notice to the Bank of the occurrence of any of the following (together with a description of the action which the Borrower proposes to take with respect thereto): (i) any Event of Default or any event, act or condition which, with the passage of time or the giving of notice, or both, would constitute an Event of Default (a "**Default**"); (ii) any litigation filed by or against the Borrower; (iii) any Reportable Event or Prohibited Transaction with respect to any Employee Benefit Plan(s) (as defined in ERISA) or (iv) any event which might result in a material adverse change in the business, assets, operations, condition (financial or otherwise) or results of operation of the Borrower.

4.10 **Certification of Beneficial Owners and Other Additional Information.** Provide: (i) such information and documentation as may reasonably be requested by the Bank from time to time for purposes of compliance by the Bank with applicable laws (including without limitation the USA PATRIOT Act and other "know your customer" and anti-money laundering rules and regulations), and any policy or procedure implemented by the Bank to comply therewith; and (ii) if the Borrower is or was required to deliver a Certification of Beneficial Owners to the Bank, (a) confirmation of the accuracy of the information set forth in the most recent Certification of Beneficial Owners provided to the Bank, as and when requested by the Bank; and (b) a new Certification of Beneficial Owners in form and substance acceptable to the Bank when the individual(s) identified as a controlling party and/or a direct or indirect individual owner on the most recent Certification of Beneficial Owners provided to the Bank have changed.

5. **Negative Covenants.** The Borrower covenants and agrees that from the date of this Agreement until all Obligations have been paid in full and any commitments of the Bank to the Borrower have been terminated, except as set forth in the Addendum, the Borrower will not, without the Bank's prior written consent:

5.1 **Indebtedness.** Create, incur, assume or suffer to exist any indebtedness for borrowed money other than:

- (i) the Loan and any subsequent indebtedness to the Bank; and
- (ii) open account trade debt incurred in the ordinary course of business and not past due.

5.2 **Liens and Encumbrances.** Except as provided in Section 3.6, create, assume, incur or permit to exist any mortgage, pledge, encumbrance, security interest, lien or charge of any kind upon any of its property, now owned or hereafter acquired, or acquire or agree to acquire any kind of property subject to any conditional sales or other title retention agreement.

5.3 **Guarantees.** Guarantee, endorse or become contingently liable for the obligations of any person, firm, corporation or other entity, except in connection with the endorsement and deposit of checks for collection in the ordinary course of business.

5.4 **Loans or Advances.** Purchase or hold beneficially any stock, other securities or evidence of indebtedness of, or make or have outstanding, any loans or advances to, or otherwise extend credit to, or make any investment or acquire any interest whatsoever in, any other person, firm, corporation or other entity, except investments disclosed on the Borrower's Financial Statements that have been provided to the Bank on or before the date hereof, or that are otherwise acceptable to the Bank in its sole discretion.

5.5 **Merger or Transfer of Assets.** Liquidate or dissolve, or merge or consolidate with or into any person, firm, corporation or other entity, or sell, lease, transfer or otherwise dispose of all or a substantial part of its property, assets, operations or business, whether now owned or hereafter acquired.

5.6 **Change in Business, Management or Ownership.** Make or permit, nor shall any Guarantor or grantor under the Security Documents make or permit, any change in (i) its form of organization, including a division into two or more entities; (ii) the nature of its business as carried on as of the date hereof; (iii) the composition of its current executive management; or (iv) its equity ownership.

5.7 **Dividends.** On and after the occurrence of an Event of Default or if an Event of Default would occur as a result thereof, declare or pay any dividends on or make any distribution with respect to any class of its equity or ownership interest, or purchase, redeem, retire or otherwise acquire any of its equity up to \$3,000,000.00.

5.8 **Acquisitions.** Make acquisitions of all or substantially all of the property or assets of any person, firm, corporation or other entity.

6. **Events of Default.** The occurrence of any of the following will be deemed to be an "Event of Default":

6.1 **Covenant Default.** The Borrower shall default in the performance of any of the covenants or agreements contained in this Agreement.

6.2 **Breach of Warranty.** Any Financial Statement, representation, warranty or certificate made or furnished by the Borrower to the Bank in connection with this Agreement shall be false, incorrect or incomplete when made.

6.3 **Other Default.** The occurrence of (i) an Event of Default as defined in the Note or any of the Loan Documents and (ii) a default or event of default under or as defined in any other agreement, instrument or document between the Borrower and PNC Bank, National Association or any of its subsidiaries or affiliates.

Upon the occurrence of an Event of Default, the Bank will have all rights and remedies specified in the Note and the Loan Documents and all rights and remedies (which are cumulative and not exclusive) available under applicable law or in equity.

7. **Conditions.** The Bank's obligation to make any advance under any Loan, or to issue any letter of credit, is subject to the conditions that as of the date of the advance:

7.1 **No Event of Default.** No Event of Default or Default shall have occurred and be continuing.

7.2 **Authorization Documents.** The Bank shall have received certified copies of resolutions of the board of directors, the general partners or the members or managers of any partnership, corporation or limited liability company that executes this Agreement, the Note or any of the other Loan Documents; or other proof of authorization satisfactory to the Bank.

7.3 **Receipt of Loan Documents.** The Bank shall have received the Loan Documents and such other instruments and documents which the Bank may reasonably request in connection with the transactions provided for in this Agreement, which may include an opinion of counsel in form and substance satisfactory to the Bank for any party executing any of the Loan Documents.

7.4 **Fees.** The Bank shall have received all fees owing in respect of the Loan.

8. **Fees; Expenses.** The Borrower agrees to reimburse the Bank, upon the execution of this Agreement, and otherwise on demand, all fees due and payable to the Bank hereunder and under the other Loan Documents and all costs and expenses incurred by the Bank in connection with the preparation, negotiation and delivery of this Agreement and the other Loan Documents, and any modifications or amendments thereto or renewals thereof, and the collection of all of the Obligations, including but not limited to enforcement actions, relating to the Loan, whether through judicial proceedings or otherwise, or in defending or prosecuting any actions or proceedings arising out of or relating to this Agreement, including (i) reasonable fees and expenses of counsel (which may include costs of in-house counsel); (ii) all costs related to conducting UCC, title and other public record searches; (iii) fees for filing and recording documents in the public records to perfect the Bank's liens and security interests; (iv) expenses for auditors, appraisers and environmental consultants; and (v) taxes. The Borrower hereby authorizes and directs the Bank to charge Borrower's deposit account(s) with the Bank for any and all of the foregoing fees, costs and expenses.

9. **Increased Costs.** 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 Loan. "**Change in Law**" means the occurrence, after the date hereof, of any of the following: (i) the adoption or taking effect of any law, rule, regulation or treaty; (ii) any change in any law, rule, regulation or treaty or in the administration, interpretation, implementation or application thereof by any governmental authority or (iii) 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, (a) the Dodd-Frank Wall Street Reform and Consumer Protection Act and all requests, rules, guidelines or directives thereunder or issued in connection therewith and (b) 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.

**10. Miscellaneous.**

**10.1 Notices.** 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 Agreement) and will be effective upon receipt. 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. 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 section.

**10.2 Preservation of Rights.** 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.

**10.3 Illegality.** If any provision contained in this Agreement should be invalid, illegal or unenforceable in any respect, it shall not affect or impair the validity, legality and enforceability of the remaining provisions of this Agreement.

**10.4 Changes in Writing.** No modification, amendment or waiver of, or consent to any departure by the Borrower from, any provision of this Agreement will be effective unless made in a writing signed by the party to be charged, 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 Agreement or any of the other Loan Documents 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). No notice to or demand on the Borrower will entitle the Borrower to any other or further notice or demand in the same, similar or other circumstance.

**10.5 Entire Agreement.** This Agreement (including the documents and instruments referred to herein) constitutes the entire agreement and supersedes all other prior agreements and understandings, both written and oral, between the parties with respect to the subject matter hereof.

**10.6 Counterparts.** This Agreement 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. Delivery of an executed counterpart of a signature page to this Agreement or any other Loan Document by facsimile transmission shall be effective as delivery of a manually executed counterpart. Any party so executing this Agreement or any other Loan Document by facsimile transmission shall promptly deliver a manually executed counterpart, provided that any failure to do so shall not affect the validity of the counterpart executed by facsimile transmission.

**10.7 Successors and Assigns.** This Agreement will be binding upon and inure to the benefit of the Borrower and the Bank and their respective heirs, executors, administrators, successors and assigns; provided, however, that the Borrower may not assign this Agreement in whole or in part without the Bank’s prior written consent and the Bank at any time may assign this Agreement in whole or in part.

**10.8 Interpretation.** In this Agreement, unless the Bank and the Borrower otherwise agree in writing, the singular includes the plural and the plural the singular; words importing any gender include the other genders; references to statutes are to be construed as including all statutory provisions consolidating, amending or replacing the statute referred to; the word “or” shall be deemed to include “and/or”, the words “including”, “includes” and “include” shall be deemed to be followed by the words “without limitation”; references to articles, sections (or subdivisions of sections) or exhibits are to those of this Agreement; and references to agreements and other contractual instruments shall be deemed to include all subsequent amendments and other modifications to such instruments, but only to the extent such amendments and other modifications are not prohibited by the terms of this Agreement. Section headings in this Agreement are included for convenience of reference only and shall not constitute a part of this Agreement for any other purpose. Unless otherwise specified in this Agreement, all accounting terms shall be interpreted and all accounting determinations shall be made in accordance with GAAP. If this Agreement is executed by more than one party as Borrower, the obligations of such persons or entities will be joint and several.

**10.9 No Consequential Damages, Etc.** The Bank will not be responsible for any damages, consequential, incidental, special, punitive or otherwise, that may be incurred or alleged by any person or entity, including the Borrower and any Guarantor, as a result of this Agreement, the other Loan Documents, the transactions contemplated hereby or thereby, or the use of the proceeds of the Loan.

**10.10 Assignments and Participations.** At any time, without any notice to the Borrower, the Bank may sell, assign, transfer, negotiate, grant participations in, or otherwise dispose of all or any part of the Bank’s interest in the Loan. The Borrower hereby authorizes the Bank to provide, without any notice to the Borrower, any information concerning the Borrower, including information pertaining to the Borrower’s financial condition, business operations or general creditworthiness, to any assignee of or participant in or any prospective assignee of or participant in all or any part of the Bank’s interest in the Loan.

**10.11 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 or documentation 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.

**10.12 Important Information about Phone Calls.** By providing telephone number(s) to the Bank, now or at any later time, the Borrower hereby authorizes the Bank and its affiliates and designees to contact the Borrower regarding the Borrower’s account(s) with the Bank or its affiliates, whether such accounts are Borrower’s individual accounts or business accounts for which Borrower is a contact, at such numbers using any means, including but not limited to placing calls using an automated dialing system to cell, VoIP or other wireless phone number, or by leaving prerecorded messages or sending text messages, even if charges may be incurred for the calls or text messages. Borrower hereby consents that any phone call with the Bank may be monitored or recorded by the Bank.

**10.13 Confidentiality.** In connection with the Obligations, this Agreement and the other Loan Documents, the Bank and the Borrower will be providing to each other, whether orally, in writing or in electronic format, nonpublic, confidential or proprietary information (collectively, “**Confidential Information**”). Each of the Borrower and the Bank agrees (i) to hold the Confidential Information of the other in confidence; and (ii) not to disclose or permit any other person or entity access to the Confidential Information of the other party, except for disclosure or access (a) to a party’s affiliates and its or their employees, officers, directors, agents, representatives, (b) to other third parties that provide or may provide ancillary support relating to the Obligations, this Agreement and/or the other Loan Documents, (c) in connection with the exercise of any remedies or enforcement of rights under this Agreement or any action or proceeding relating to the Obligations, this Agreement and/or the other Loan Documents, (d) to its external or internal auditors or regulatory authorities, or (e) upon the order of a court or other governmental agency having jurisdiction over a party. It is understood and agreed that the obligation to protect such Confidential Information shall be satisfied if the party receiving such Confidential Information utilizes the same control (but no less than reasonable) as it does to avoid disclosure of its own confidential and valuable information. It is also understood and agreed that no information shall be within the protection of this Agreement where such information: (w) is or becomes publicly available through no fault of the party to whom such Confidential Information has been disclosed, (x) is released by the originating party to anyone without restriction, (y) is rightly obtained from third parties who are not, to such receiving party’s knowledge, under an obligation of confidentiality, or (z) is required to be disclosed by subpoena or similar process of applicable law or regulations.

For the purposes of this Agreement, Confidential Information of a party shall include, without limitation, any financial information, scientific or technical information, design, process, procedure or improvement and all concepts, documentation, reports, data, data formats, specifications, computer software, source code, object code, user manuals, financial models, screen displays and formats, software, databases, inventions, knowhow, showhow and trade secrets, whether or not patentable or copyrightable, whether owned by a party or any third party, together with all memoranda, analyses, compilations, studies, notes, records, drawings, manuals or other documents or materials which contain or otherwise reflect any of the foregoing information.

Each of the Borrower and the Bank agrees to return to the other or destroy all Confidential Information of the other upon the termination of this Agreement; provided, however, each party may retain such limited information for customary archival and audit purposes only for reference with respect to prior dealings between the parties subject at all times to the continuing terms of this Section 10.13.

Each of the Borrower and the Bank agrees not to use the other’s name or logo in any marketing, advertising or related materials, without the prior written consent of the other party.

**10.14 Sharing Information with Affiliates of the Bank.** The Borrower acknowledges that from time to time other financial and banking services may be offered or provided to the Borrower or one or more of its subsidiaries and/or affiliates (in connection with this Agreement or otherwise) by the Bank or by one or more subsidiaries or affiliates of the Bank or of The PNC Financial Services Group, Inc., and the Borrower hereby authorizes the Bank to share any information delivered to the Bank by the Borrower and/or its subsidiaries and/or affiliates pursuant to this Agreement or any of the Loan Documents to any subsidiary or affiliate of the Bank and/or The PNC Financial Services Group, Inc., subject to any provisions of confidentiality in this Agreement or any other Loan Documents.

**10.15 Electronic Signatures and Records.** Notwithstanding any other provision herein, the Borrower agrees that this Agreement, 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.

**10.16 Governing Law and Jurisdiction.** This Agreement 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. **THIS AGREEMENT WILL BE INTERPRETED AND THE RIGHTS AND LIABILITIES OF THE BANK AND THE BORROWER DETERMINED IN ACCORDANCE WITH THE LAWS OF THE STATE WHERE THE BANK'S OFFICE INDICATED ABOVE IS LOCATED, EXCLUDING ITS CONFLICT OF LAWS RULES, INCLUDING WITHOUT LIMITATION THE ELECTRONIC TRANSACTIONS ACT (OR EQUIVALENT) IN EFFECT IN THE STATE WHERE THE BANK'S OFFICE INDICATED ABOVE IS LOCATED (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 Agreement 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 Bank and the Borrower agree 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 Agreement.

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**10.17 WAIVER OF JURY TRIAL. EACH OF THE BORROWER AND THE BANK IRREVOCABLY WAIVES ANY AND ALL RIGHT IT MAY HAVE TO A TRIAL BY JURY IN ANY ACTION, PROCEEDING OR CLAIM OF ANY NATURE RELATING TO THIS AGREEMENT, ANY DOCUMENTS EXECUTED IN CONNECTION WITH THIS AGREEMENT OR ANY TRANSACTION CONTEMPLATED IN ANY OF SUCH DOCUMENTS. THE BORROWER AND THE BANK ACKNOWLEDGE THAT THE FOREGOING WAIVER IS KNOWING AND VOLUNTARY.**

**The Borrower acknowledges that it has read and understands all the provisions of this Agreement, including the 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.

NORTHERN TECHNOLOGIES INTERNATIONAL  
CORPORATION

By: /s/ Matthew Wolsfeld  
(SEAL)  
Matthew Wolsfeld, Chief Financial Officer

PNC BANK NATIONAL ASSOCIATION

By: /s/ Yelena Spadafora  
(SEAL)  
Yelena Spadafora, Senior Vice President

## ADDENDUM

**ADDENDUM** to that certain Amended and Restated Loan Agreement dated August 31, 2021, 2021 between NORTHERN TECHNOLOGIES INTERNATIONAL CORPORATION as the Borrower and PNC Bank, National Association, as the Bank. Capitalized terms used in this Addendum and not otherwise defined shall have the meanings given them in the Agreement. Section numbers below refer to the sections of the Agreement.

**3.6 Title to Assets.** Describe additional liens and encumbrances below:

None.

**3.7 Litigation.** Describe pending and threatened litigation, investigations, proceedings, etc. below:

None.

**3.10 Environmental Matters.** Describe pending or threatened litigation or proceeding arising under, relating to or in connection with any Environmental Law below:

None.

**4.2 Financial Reporting Requirements.**

**1. Borrower's Financial Reporting.**

a) **Interim Financial Statements.** Within forty-five (45) days after the end of each quarter, the Borrower's Financial Statements for such period, in reasonable detail, certified by an authorized officer of the Borrower and prepared in accordance with GAAP, consistently applied from period to period.

b) **Annual Financial Statements.** Within one hundred twenty (120) days after the end of each fiscal year, the Borrower's annual Financial Statements. The Financial Statements will be prepared on an audited basis in accordance with GAAP by an independent certified public accountant selected by the Borrower and satisfactory to the Bank. Audited Financial Statements shall contain the unqualified opinion of an independent certified public accountant and all accountant examinations shall have been made in accordance with GAAP consistently applied from period to period.

### CONTINUATION OF ADDENDUM

**4.8 Financial Covenants.**

(1) The Borrower will maintain as of the end of each fiscal year, a Fixed Charge Coverage Ratio of at least 1.10 to 1.00.

As used herein:

“**Current Maturities**” means the scheduled payments of principal on all indebtedness for borrowed money having an original term of more than one year (including but not limited to amortization of capital or finance lease obligations), as shown on the Borrower’s Financial Statements as of one year prior to the date of determination.

“**EBITDA**” means net income plus interest expense plus income tax expense plus depreciation plus amortization.

“**Fixed Charge Coverage Ratio**” means (i) EBITDA, divided by (ii) the sum of Current Maturities plus interest expense plus cash taxes paid plus dividends plus Unfunded Capital Expenditures.

“**Unfunded Capital Expenditures**” means capital expenditures made from the Borrower’s funds other than funds borrowed as term debt to finance such capital expenditures.

All of the above financial covenants shall be computed and determined in accordance with GAAP applied on a consistent basis (subject to normal year-end adjustments).

# Amended and Restated Revolving Line of Credit Note (Daily LIBOR)



\$5,000,000.00

August 31, 2021

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 hereunder and the Bank may advance and readvance under this Note from time to time (each an "advance" and together the "advances") until the Expiration Date, subject to the terms and conditions of this Note and the Loan Documents (as defined below). The "**Expiration Date**" shall mean **February 22, 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 at all times equal to the sum of (A) the Daily LIBOR 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 September 10, 2021. The outstanding principal balance and any accrued but unpaid interest shall be due and payable on the Expiration Date.

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%). If and when the Base Rate (or any component thereof) 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.

"**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.

"**Daily LIBOR Rate**" shall mean, for any day, the rate per annum determined by the Bank by dividing

the Published Rate by (B) a number equal to 1.00 minus the percentage prescribed by the Federal Reserve for determining the maximum reserve requirements with respect to any eurocurrency fundings by banks on such day; provided, however, if the Daily LIBOR Rate determined as provided above would be less than 50 basis points, then such rate shall be deemed to be 50 basis points. The rate of interest will be adjusted automatically as of each Business Day based on changes in the Daily LIBOR Rate without notice to the Borrower.

“**Default Rate**” shall mean the rate per annum (based on the actual number of days that principal is outstanding over a year of 360 days) 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.

“**Maximum Rate**” shall mean the maximum rate of interest allowed by applicable law.

“**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 Federal Reserve Bank of New York (“**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 rate of interest published each Business Day in the Wall Street Journal “Money Rates” listing under the caption “London Interbank Offered Rates” for a one month period (or, if no such rate is published therein for any reason, then the Published Rate shall be the eurodollar rate for a one month period as published in another publication selected by the Bank).

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. **Alternate LIBOR Rate Provisions.** If the Bank determines (which determination shall be final and conclusive) that, by reason of circumstances affecting the eurodollar market generally, deposits in dollars (in the applicable amounts) are not being offered to banks in the eurodollar market for the selected term, or adequate means do not exist for ascertaining the Daily LIBOR Rate, then the Bank shall give notice thereof to the Borrower. Thereafter, until the Bank notifies the Borrower that the circumstances giving rise to such suspension no longer exist, the interest rate for all amounts outstanding under this Note shall be equal to the Alternate Rate.

In addition, if, after the date of this Note, the Bank shall determine (which determination shall be final and conclusive) that 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 impossible for the Bank to make or maintain or fund loans based on the Daily LIBOR Rate, the Bank shall notify the Borrower. Thereafter, until the Bank notifies the Borrower that the circumstances giving rise to such determination no longer apply, the interest rate on all amounts outstanding under this Note shall be the Alternate Rate.

The LIBOR Replacement Rider attached to this Note and incorporated herein by this reference provides a mechanism for determining an alternative rate of interest in the event that the London interbank offered rate is no longer available or in certain other circumstances. 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 the London interbank offered rate or other rates in the definition of "LIBOR" or with respect to any alternative or successor rate thereto, or replacement rate therefor. To the extent that any term or provision of the LIBOR 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 LIBOR Replacement Rider shall control.

7. **Other Payment Terms.** If any payment under this Note shall become due on a day other than a Business Day, such payment shall be made on the next succeeding Business Day and such extension of time shall be included in computing interest in connection with such payment. 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. **Late Payments; Default Rate.** 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. **Prepayment.** The indebtedness evidenced by this Note may be prepaid in whole or in part at any time without penalty.

10. **Increased Costs; Yield Protection.** 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. **Other Loan Documents.** 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. **Events of Default.** 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. **Right of Setoff.** 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. **Anti-Money Laundering/International Trade Law Compliance.** 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) and will be effective upon receipt. 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. 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. 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. 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. **Counterparts; Electronic Signatures and Records.** 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. **Automatic Payment.** 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. **Depository.** 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. **State-Specific Provisions.**

(a) **Power to Confess Judgment.** 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.

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26. **Amendment and Restatement.** 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 \$3,000,000.00 payable to the order of the Bank and dated December 21, 2020 (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.

27. **WAIVER OF JURY TRIAL.** 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.

**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.**

NORTHERN TECHNOLOGIES INTERNATIONAL  
CORPORATION

By: /s/ Matthew Wolsfeld  
(SEAL)

Matthew Wolsfeld, Chief Financial Officer

## LIBOR Replacement Rider

(a) **Announcements Related to LIBOR.** On March 5, 2021, the ICE Benchmark Administration, the administrator of LIBOR (the “IBA”) and the U.K. Financial Conduct Authority, the regulatory supervisor for the IBA, announced in a public statement the future cessation or loss of representativeness of overnight/Spot Next, 1-week, 1-month, 2-month, 3-month, 6-month and 12- month USD LIBOR tenor settings (collectively, the “Cessation Announcements”). The parties hereto acknowledge that, as a result of the Cessation Announcements, a Benchmark Transition Event occurred on March 5, 2021 with respect to USD LIBOR under clauses (1) and (2) of the definition of Benchmark Transition Event below; provided however, no related Benchmark Replacement Date occurred as of such date.

(b) **Benchmark Replacement.** Notwithstanding anything to the contrary herein or in any other Loan Document, if a Benchmark Transition Event or an Early Opt-in Election, as applicable, 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” on the 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” on the 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 hereto or to any other Loan Document, or further action or consent of the Borrower.

(c) **Benchmark Replacement Conforming Changes.** In connection with the 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.

(d) **Notices; Standards for Decisions and Determinations.** The Bank will promptly notify the Borrower of (i) any occurrence of a Benchmark Transition Event, a Term SOFR Transition Event or an Early Opt-in Election, as applicable, and its related Benchmark Replacement Date, (ii) the implementation of any Benchmark Replacement, (iii) the effectiveness of any Benchmark Replacement Conforming Changes and (iv) the commencement or conclusion 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 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 any selection, will be conclusive and binding absent manifest error and may be made in its sole discretion and without consent from the Borrower.

(e) **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. During any Benchmark Unavailability Period, the component of the Fallback Rate based upon the then-current Benchmark, if any, will not be used in any determination of the Fallback Rate.

(f) **Secondary Term SOFR Conversion.** Notwithstanding anything to the contrary herein or in any other Loan Document and subject to the proviso below in this paragraph, if a Term SOFR Transition Event and its related Benchmark Replacement Date have occurred in respect of any setting of the then-current Benchmark, then (i) the applicable Benchmark Replacement will replace the then-current Benchmark for all purposes hereunder or under any Loan Document in respect of such Benchmark setting (the “**Secondary Term SOFR Conversion Date**”) and subsequent Benchmark settings, without any amendment or further action or consent of any other party hereto or to any other Loan Document; and (ii) loans outstanding on the Secondary Term SOFR Conversion Date bearing interest based on the then-current Benchmark shall be deemed to have been converted to loans bearing interest at the Benchmark Replacement with a tenor approximately the same length as the interest payment period of the then-current Benchmark; provided that, (A) this paragraph (f) shall not be effective unless the Bank has delivered to the Borrower a Term SOFR Notice and (B) this paragraph (f) shall not be effective with respect to the Facility if (I) the Borrower has outstanding an interest rate swap with the Bank to hedge, in whole or part, the floating rate risk under the Facility on the Secondary Term SOFR Conversion Date, and (II) such swap incorporates LIBOR fallback provisions with a Daily Simple SOFR rate as the primary alternative fallback rate for USD LIBOR.

(g) **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, USD LIBOR; provided that if a Benchmark Transition Event, a Term SOFR Transition Event or an Early Opt-in Election, as applicable, and its related Benchmark Replacement Date have occurred with respect to USD LIBOR 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 (b) 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 on the applicable Benchmark Replacement Date; provided, however, if (i) the Borrower has outstanding an interest rate swap with the Bank on the Benchmark Replacement Date to hedge, in whole or part, the floating rate risk under the Facility, and (ii) such swap incorporates LIBOR fallback provisions with a Daily Simple SOFR rate as the primary alternative fallback rate for USD LIBOR, then the Benchmark Replacement alternative set forth in clause (1) below shall not apply to the Facility and the alternative set forth below in clause (2) shall be the first alternative:

- (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;
- (3) the sum of: (a) the alternate benchmark rate that has been selected by the Bank as the replacement for the then-current Benchmark, giving due consideration to (i) any selection or recommendation of a replacement benchmark rate or the mechanism for determining such a rate by the Relevant Governmental Body or (ii) any evolving or then-prevailing market convention for determining a benchmark rate as a replacement for the then-current Benchmark for U.S. dollar-denominated syndicated or bilateral credit facilities at such time, and (b) the related Benchmark Replacement Adjustment;

provided that, in the case of clause (1), such Unadjusted Benchmark Replacement is displayed on a screen or other information service that publishes such rate from time to time as selected by the Bank in its reasonable discretion; provided, further, that, with respect to a Term SOFR Transition Event, on the applicable Benchmark Replacement Date, the “Benchmark Replacement” shall revert to and shall be determined as set forth in clause (1) of this definition, all in accordance with paragraph (f) (Secondary Term SOFR Conversion) above. 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, with respect to any replacement of the then-current Benchmark with an Unadjusted Benchmark Replacement for any setting of such Unadjusted Benchmark Replacement:

- (1) for purposes of clauses (1) and (2) of the definition of “Benchmark Replacement,” 0.11448% (11.448 basis points). This value represents the ARRC/ISDA recommended spread adjustment value for the Available Tenor available here: [https://assets.bbhub.io/professional/sites/10/IBOR-Fallbacks-LIBOR-Cessation\\_Announcement\\_20210305.pdf](https://assets.bbhub.io/professional/sites/10/IBOR-Fallbacks-LIBOR-Cessation_Announcement_20210305.pdf).
- (2) for purposes of clause (3) of the definition of “Benchmark Replacement,” the spread adjustment, or method for calculating or determining such spread adjustment, (which may be a positive or negative value or zero) that has been selected by the Bank, giving due consideration to (i) any selection or recommendation of 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 by the Relevant Governmental Body on the applicable Benchmark Replacement Date or (ii) 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 for U.S. dollar-denominated syndicated or bilateral credit facilities.

“**Benchmark Replacement Conforming Changes**” means, with respect to any Benchmark Replacement, any technical, administrative or operational changes (including changes to the definition of “Base Rate,” the definition of “Business Day,” the timing and frequency of determining rates and making payments of interest, timing of borrowing requests or prepayment, 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 the earliest to occur of the following events with respect to the then-current Benchmark:

- (1) in the case of clause (1) or (2) 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 administrator of such Benchmark (or the published component used in the calculation thereof) permanently or indefinitely ceases to provide the Available Tenor of such Benchmark (or such component thereof);

- (2) in the case of clause (3) of the definition of “Benchmark Transition Event,” the date determined by the Bank, which date shall promptly follow the date of the public statement or publication of information referenced therein;
- (3) in the case of a Term SOFR Transition Event, the date that is set forth in the Term SOFR Notice provided to the Borrower pursuant to this Rider, which date shall be at least 30 days from the date of the Term SOFR Notice; or
- (4) in the case of an Early Opt-in Election, the sixth (6th) Business Day after the date notice of such Early Opt-in Election is provided to the Borrower.

“**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 the administrator of such Benchmark (or the published component used in the calculation thereof) announcing that such administrator has ceased or will cease to provide the Available Tenor of such Benchmark (or such component thereof), permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide the Available Tenor of such Benchmark (or such component thereof);
- (2) a public statement or publication of information by a Governmental Authority having jurisdiction over the Bank, the regulatory supervisor for the administrator of such Benchmark (or the published component used in the calculation thereof), the Board of Governors of the Federal Reserve System, the Federal Reserve Bank of New York, an insolvency official with jurisdiction over the administrator for such Benchmark (or such component), a resolution authority with jurisdiction over the administrator for such Benchmark (or such component) or a court or an entity with similar insolvency or resolution authority over the administrator for such Benchmark (or such component), which states that the administrator of such Benchmark (or such component) has ceased or will cease to provide the Available Tenor of such Benchmark (or such component thereof) permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide such Available Tenor of such Benchmark (or such component thereof); or
- (3) a public statement or publication of information by the regulatory supervisor for the administrator of such Benchmark (or the published component used in the calculation thereof) or a Governmental Authority having jurisdiction over the Bank announcing that the Available Tenor of such Benchmark (or such component thereof) is no longer representative.

“**Benchmark Unavailability Period**” means the period (if any) (x) beginning at the time that a Benchmark Replacement Date pursuant to clauses (1) or (2) of that definition 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.

**“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.

**“Early Opt-in Election”** means, if the then-current Benchmark is USD LIBOR, the occurrence of:

- (1) a determination by the Bank that at least five (5) currently outstanding U.S. dollar-denominated syndicated or bilateral credit facilities at such time contain (as a result of amendment or as originally executed) a SOFR-based rate (including SOFR, a term SOFR or any other rate based upon SOFR) as a benchmark rate, and
- (2) the election by the Bank to trigger a fallback from USD LIBOR and the provision by the Bank of written notice of such election to the Borrower.

**“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 USD LIBOR had become unavailable 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 USD LIBOR 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).

**“ISDA Definitions”** means the 2006 ISDA Definitions published by the International Swaps and Derivatives Association, Inc. or any successor thereto, as amended or supplemented from time to time, or any successor definitional booklet for interest rate derivatives published from time to time by the International Swaps and Derivatives Association, Inc. or such successor thereto.

**“Relevant Governmental Body”** means the Board of Governors of the Federal Reserve System 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 or the Federal Reserve Bank of New York, or any successor thereto.

**“SOFR”** means, with respect to any Business Day, a rate per annum equal to the secured overnight financing rate for such Business Day published by the SOFR Administrator on the SOFR Administrator’s Website on the immediately succeeding Business Day.

**“SOFR Administrator”** means the Federal Reserve Bank of New York (or a successor administrator of the secured overnight financing rate).

**“SOFR Administrator’s Website”** means 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 SOFR Administrator from time to time.

“**Term SOFR**” means, for the applicable Available Tenor, the forward-looking term rate based on SOFR that has been selected or recommended by the Relevant Governmental Body.

“**Term SOFR Notice**” means a notification by the Bank to the Borrower of the occurrence of a Term SOFR Transition Event.

“**Term SOFR Transition Event**” means the determination by the Bank that (1) Term SOFR has been recommended for use by the Relevant Governmental Body, and is determinable for the Available Tenor, (2) the administration of Term SOFR is administratively feasible for the Bank and (3) a Benchmark Transition Event has previously occurred resulting in a Benchmark Replacement in accordance with this Rider that is not Term SOFR.

“**Unadjusted Benchmark Replacement**” means the applicable Benchmark Replacement excluding the related Benchmark Replacement Adjustment.

“**USD LIBOR**” means, for purposes of this Rider only, any interest rate that is based on the London interbank offered rate for U.S. dollars.

## Northern Technologies International Corporation Acquires Remaining Ownership Interest in Indian Joint Venture

**Expected to Add an Additional \$0.10 Per Diluted Share in Earnings and Approximately \$10 Million to Consolidated Net Sales in Fiscal Year 2022**

MINNEAPOLIS, Sept. 22, 2021 (GLOBE NEWSWIRE) -- Northern Technologies International Corporation (NASDAQ: NTIC), a leading developer of corrosion inhibiting products and services, as well as bio-based and biodegradable polymer resin compounds, today announced that it has acquired the remaining 50% ownership interest in its Indian joint venture, HARITA-NTI LTD. ("Zerust India"), for USD \$6.25 million in cash. NTIC funded the purchase price with a combination of cash on hand and borrowings under its revolving line of credit, which was increased in connection with the transaction to \$5.0 million.

"NTIC's network of joint ventures was carefully built over the last 35 years, in order to efficiently expand our access to international markets and enable us to provide on-site technical service to our global customer base," said G. Patrick Lynch, President and Chief Executive Officer of NTIC. "Many of our multinational customers either have their own operations in India or have suppliers based there, making it one of our strongest international markets. So, naturally, we look forward to further enhancing our presence there."

Zerust India was originally formed in 2000, to provide NTIC's leading Zerust® corrosion inhibiting products to a market that was rapidly becoming a key global source of high-quality automotive components. Zerust India had \$5.7 million in revenue and \$1.15 million in earnings in fiscal 2020 and \$6.7 million in revenue and \$1.77 million in earnings over the nine months ended May 31, 2021. Due to NTIC's original ownership interest in Zerust India being just 50%, U.S. generally accepted accounting practices had required that the joint venture be reflected in NTIC's consolidated financial statements via the equity method of accounting, with NTIC recording its 50% portion of the earnings in Equity in Income from Joint Ventures and Fees for Services Provided to Joint Ventures. With NTIC's fiscal year 2022 starting on September 1st, going forward, Zerust India, the now wholly owned subsidiary, will be fully consolidated on NTIC's consolidated financial statements effective as of September 1, 2021 and is expected to contribute approximately \$10 million in net sales along with over \$2.2 million in net income during fiscal year 2022, amounting to an additional \$0.10 per diluted share in fiscal year 2022. NTIC's 75% ownership stake in Natur-Tec India Private Limited is unaffiliated with Zerust India and was not part of this transaction. As of today's announcement, NTIC has 10 operating subsidiaries and 18 global joint ventures across the world.

### About Northern Technologies International Corporation

Northern Technologies International Corporation develops and markets proprietary environmentally beneficial products and services in over 60 countries either directly or via a network of subsidiaries, joint ventures, independent distributors and agents. NTIC's primary business is corrosion prevention marketed primarily under the ZERUST® brand. NTIC 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 40 years and in recent years has targeted and expanded into the oil and gas industry. NTIC 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 products to analyze their specific needs and develop systems to meet their technical requirements. NTIC also markets and sells a portfolio of bio-based and biodegradable polymer resins and finished products marketed under the Natur-Tec® brand.

### Forward-Looking Statements

*Statements contained in this release that are not historical information are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Such statements include NTIC's expectations regarding Zerust India's contribution to NTIC's net sales, net income and net income per diluted share in fiscal year 2022, and other statements that can be identified by words such as "expects," "believes," "continue," "anticipates," "intends," "potential," "will," "may," "would," "should," or words of similar meaning and the use of future dates. Such forward-looking statements are based upon the current beliefs and expectations of NTIC's management and are inherently subject to risks and uncertainties that could cause actual results to differ materially from those projected or implied. Such potential risks and uncertainties include, but are not limited to, in no particular order: NTIC's operating results for fiscal year 2021 and fiscal year 2022 and the effects of the COVID-19 pandemic, economic uncertainty, trade disputes, and political unrest on NTIC's business and operating results; risks associated with NTIC's international operations, including its exposure to fluctuations in foreign currency exchange rates and tariffs; NTIC's relationships with and dependence on its joint ventures and fees and dividend distributions that NTIC receives from them; the level of future growth in NTIC's markets; the success of NTIC's investments in research and development; acceptance of existing and new products; competition; the costs and effects of complying with changes in tax, fiscal, government and other regulatory policies; rules relating to environmental, health and safety matters; the ability of NTIC to continue to pay dividends; and NTIC's reliance on its intellectual property rights and the absence of infringement of the intellectual property rights of others. More detailed information on these and additional factors which could affect NTIC's operating and financial results is described in NTIC's filings with the Securities and Exchange Commission, including its most recent annual report on Form 10-K for the fiscal year ended August 31, 2020 and subsequent quarterly reports on Form 10-Q. NTIC urges all interested parties to read these reports to gain a better understanding of the many business and other risks that the Company faces. Additionally, NTIC undertakes no obligation to publicly release the results of any revisions to these forward-looking statements, which may be made to reflect events or circumstances occurring after the date hereof or to reflect the occurrence of unanticipated events.*

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