STATE OF MINNESOTA DEPARTMENT OF NATURAL RESOURCES

Amendment

CLEVELAND-CLIFFS INC. NORTHSHORE MINING COMPANY

Permit to Mine (Modification of the Type II Virginia Formation Stockpile Cover)

I. INTRODUCTION

After review, due investigation, and based on the information and statements contained in the permit application submitted on November 27, 2019, and a revision submitted on March 17, 2020 (contents of which are listed in Attachment 1 and hereafter referred to as the "Application"), the description of work proposed to be undertaken, the administrative record, and pursuant to Minnesota Statutes 93.44 to 93.51,

and in consideration of

the determination by the Commissioner of the Minnesota Department of Natural Resources ("DNR") that the:

- 1. Permittee has no proposed or anticipated changes in the operating plans as compared to the original Permit to Mine dated March 1, 1985 and all previously approved subsequent amendments and assignments (collectively referred to herein as "Permit to Mine");
- 2. Permittee agrees to assume all outstanding obligations set forth in Minnesota Rules, parts 6130.0100 to 6130.6300 and in the Permit to Mine;
- 3. Reclamation planned for the operation complies with lawful requirements and can be accomplished under available technology; and
- 4. Proposed reclamation or restoration techniques are practical and workable under available technology, the DNR

HEREBY GRANTS PERMISSION

to

<u>Cleveland-Cliffs Inc. (Cliffs)</u>, formerly known as Cliffs Natural Resources Inc., the parent company of Northshore Mining Company and a corporation organized under the laws of the State of Ohio, authorized to do business in Minnesota, whose address is 200 Public Square, Suite 3300, Cleveland, Ohio 44114,

and

Northshore Mining

<u>Northshore Mining Company (Northshore)</u>, the entity that is engaged in or carrying out a mining operation, is a corporation organized under the laws of the State of Delaware, authorized to do business in Minnesota, whose address is 10 Outer Drive, Silver Bay, MN 55614,

for the purpose of

substituting the Test Plot ND5 cover design (no drainage layer, 5-foot cover) in place of Test Plot SP7 cover design (2-foot drainage layer, 7-foot cover), approved for use in the Type II Virginia Formation (VF) Stockpile Plan (May 2, 2013), and requiring completion of the installation of the cover segment on the initial stockpiled Type II VF material by October 31, 2021 (see Attachment 2) which are both specifically depicted in the permit amendment application.

II. TERM OF AMENDMENT

The conditions of this permit amendment apply to all mining, auxiliary facilities, reclamation, and postclosure activities conducted at the mine facility until the lands have met the requirements of (i) the Application and (ii) the lands are released from reclamation obligations. Under normal iron ore sale conditions, the planned mining and reclamation activities will be completed in approximately the year 2078.

III. CONDITIONS OF PERMIT

This permit is subject to the following GENERAL and SPECIAL CONDITIONS:

A. GENERAL CONDITIONS

Permittee's mining and reclamation activities associated with the permit amendment must be conducted in a manner consistent with (i) the **SPECIAL CONDITIONS** set forth below, (ii) the reclamation plans presented in the Application, (iii) all subsequent amendments or assignments. All of Permittee's activities under this Permit to Mine are subject to the Taconite and Iron Ore Mineland Reclamation Rules (Chapter 6130 of the Minnesota Rules). This Permit to Mine does not waive the requirements of any other applicable permit or rules of the DNR or any other agency or governmental unit or of any other applicable statute, rule, law, or ordinance.

B. SPECIAL CONDITIONS

 The amount, the applicable items in the cost determination, the mechanism, and the duration of financial assurance will be reviewed at least annually at the time of the annual report and operating plan due each January. The financial assurance will only terminate when the closure and post closure responsibilities as outlined in the Type II Virginia Formation Stockpile Plan dated May 2, 2013 (Stockpile Plan), the conditions of this Permit to Mine amendment, and MN Rules Chapter 6130, and all applicable statutes and laws are fulfilled.

Northshore Mining Permit to Mine Amendment Modify VFII Stockpile Cover 2 of 4

- Section 2.5.2 Cover Monitoring of the Stockpile Plan is considered modified to include noting the presence or absence of both woody species and animal burrowing. The annual test plot monitoring and reporting will also include noting the presence or absence of both woody species and animal burrowing.
- 3. In addition to contingency actions as described in section 2.6 of the Stockpile Plan, examples of potential response actions will also include revision of the test plot program.
- 4. Any changes to the design, construction, maintenance, or monitoring, including termination of monitoring, of either the test plots or the Virginia Formation Type II stockpile, as outlined in the Stockpile Plan, Appendix F of the Permit to Mine Amendment dated March 10, 2016, and the conditions of the Permit to Mine, must be described to and approved by DNR in advance of implementing any change.
- 5. MDNR will be notified within 60 days if an alert trigger as described in section 2.6 of the Stockpile Plan is reached. Such notification will include reporting of all monitoring data collected since the last Annual Report, summary of alerts, information on Virginia Formation Type II rock blasting and stockpiling, and any actions deemed necessary. Depending on actions required as a result, more frequent reporting may be required by DNR.

Dated at St. Paul, Minnesota,

this 72 day of October, 2020

STATE OF MINNESOTA

DEPARTMENT OF NATURAL RESOURCES

Sind Budenon

Joseph Henderson, Director Division of Lands and Minerals Received and acknowledged by:

Cleveland-Cliffs Inc.

ţ,

· · · · ·

this_28TH day of <u>SEPTEMBER</u>, 2020

James M. Kochevar, Vice President, Iron Ore Operations

Received and acknowledged by:

Northshore Mining Company

this 2nd day of October, 2020

Paul A. Carlson, General Manager

Northshore Mining

ATTACHMENT 1

CONTENTS OF AMENDMENT APPLICATION

Cover Letter

November 27, 2019

Re: Type II Virginia Formation Stockpile Cover System Substitution and Extension of the Cover System Placement Timeline

Technical Basis for a Proposal Related to Covering Type II Virginia Formation Material

March 11, 2020

Table of Contents

- 1. Introduction
- 2. Background
- 3. Test Plot Program Results
- 4. ND5 Cover System Substitution
- 5. Extension of Cover System Placement Timelinc
- 6. Conclusions
- 7. References

ATTACHMENT 2

Type II Virginia Formation Stockpile Cover System Placement Timeline MDNR Approval Letter to Northshore Mining Company

February 18, 2020



Division of Lands and Minerals 500 Lafayette Road, Box 45 St. Paul, MN 55155-4045

February 18, 2020

Andrea Hayden Environmental Manager Northshore Mining Company 10 Outer Drive Silver Bay, MN 56614

Re: Type II Virginia Formation Stockpile Cover System Placement Timeline

Dear Ms. Hayden,

This letter is in response to a request made by Northshore Mining Company (Northshore) related to special condition 7 of the Permit to Mine amendment for the Type II Virginia Formation (VF) stockpile, dated March 10, 2016. Special condition 7 states as follows:

"Any changes to the design, construction, maintenance, or monitoring of the Virginia Formation Type II stockpile, as outlined in the Stockpile Plan and the conditions of this Permit to Mine amendment, must be described to and approved by DNR in advance of implementing any change."

On November 27, 2019, Northshore Mining Company submitted a request to the Minnesota Department of Natural Resources (DNR) to extend the timeline for the Type II VF cover system placement by approximately three and a half months. The requested is stated as follows:

"In the Type II Virginia Formation Stockpile Plan, the reclamation design requires placement of a cover system over Type II Virginia Formation (VF) materials within 30 months of placement in a stockpile. Material was first moved by Northshore to the Type II VF stockpile on January 22, 2019; therefore, requiring a cover system to be completed by July 22, 2021. To take full advantage of the 2021 construction season, a one-time extension by approximately three and a half months is being requested, with a proposed new timeframe to cover the stockpile extending through October 31, 2021."

Included with this request was a report from Northshore's consultants, Golder Associates (Golder), entitled "Technical Basis for a Proposal Related to Covering Type II Virginia Formation Material",

dated November 26, 2019. This report includes the rationale for the extension of the time by which the rock would need to be covered as compared with the approved design outlined in the Type II VF stockpile plan (dated May 2, 2013), Appendix B of the Permit to Mine Amendment.

Section 3.3.2 of the Type II VF stockpile plan describes the basis for the 30 month timeline for cover placement. The plan states as follow:

"The laboratory based lag time of I20 weeks (approximately 30 months) has been used in the plan to develop a design criterion wherein the stockpiled Type II VF material will be progressively covered within 30 months following excavation. The 30-month lag time is based solely on laboratory kinetic testing, which is designed to accelerate weathering conditions, and is therefore conservative for field conditions."

The DNR has reviewed the recent submittal related to covering Type II VF material and had meetings on December 19, 2019 and February 4, 2020 with Northshore and Golder to discuss this change to the approved Type II VF stockpile plan.

In order to allow construction of the entire cover segment that is needed to cover the initial stockpiled Type II VF material in one season, the DNR is approving this one-time extension of three and a half months with completion by October 31, 2021. Please rctain this letter with your permitting materials. If you have any questions, please contact Jennifer Engstrom, Reclamation Manager at 651-259-5385 or email jennifer.engstrom@state.mn.us.

Sincerely,

Just Hudurn

Joseph Henderson Director, Division of Lands and Minerals

Cc: Jennifer Engstrom, DNR Katie Larson, DNR Richard Clark, MPCA