



Minnesota Department of Natural Resources

500 Lafayette Road 45
St. Paul, Minnesota 55155-40__

August 12, 1997

Mr. Robert C. Berglund
Vice President and General Manager
Northshore Mining Company
10 Outer Drive
Silver Bay, MN 55614

RE: MILEPOST 7 TAILINGS BASIN FIVE YEAR OPERATIONS PLAN APPROVAL and
MILEPOST 7 MASTER PERMIT RENEWAL

Dear Mr. Berglund:

I hereby approve the "Milepost 7 Tailings Basin Five Year Operations Plan" dated March 21, 1997 that is supported by documents listed as references on page 54 of that report, and which is supplemented by information supplied by Northshore in letters from Dennis Wagner, dated May 14, 1997 and July 18, 1997.

In addition, I hereby renew the Milepost 7 Master Permit for a term to expire on June 30, 2002. Plans to cover the period beyond that date shall be submitted no later than 180 days before the permit expires.

I believe the renewed permit is consistent with all applicable court orders, and carries out the responsibilities vested by law in the Department of Natural Resources.

Dated this 12th day of August 1997.

A handwritten signature in cursive script, reading 'William C. Brice'.

William C. Brice
Director, Division of Minerals

c: ~~Pedar Larson~~, Pollution Control Agency
~~Eldon Kaul~~, Attorney General's Office
~~Michael Indihar~~, Northshore Mining
Dennis Wagner, Northshore Mining



Steve



Minnesota Department of Natural Resources

DIVISION OF LANDS AND MINERALS
1525 THIRD AVENUE EAST
HIBBING, MINNESOTA 55746
TELEPHONE: (218) 262-7389 FAX: (218) 262-7328
E-MAIL: arlo.knoll@dnr.state.mn.us

July 2, 2003

Dennis Wagner
Sr. Environmental Engineer
Northshore Mining
10 Outer Drive
Silver Bay, MN 55614-1499

Dear Mr. Wagner:

In response to Northshore's letter of June 25, 2003, and July 1, 2003, the Department grants an extension of one year (until June 30, 2004) of the Mile Post 7 Five-Year Operating Plan and Mile Post 7 Master Permit as Amended. This extension is granted providing Northshore continues operations consistent with the March 1997 Five-Year Operating Plan and current Mile Post 7 Master Permit for the next year while this permitting activity is completed. Plans to cover the period beyond June 30, 2004, shall be submitted no later than 180 days before the permit extension expires.

Sincerely,

DIVISION OF LANDS & MINERALS

A handwritten signature in dark ink, appearing to read "Arlo Knoll", is written over the typed name.

Arlo Knoll, Manager
Mineland Reclamation

AK:sls
c: Ann Foss, MPCA





Cleveland-Cliffs Inc

March 7, 2005



Via Courier

William C. Brice
Director
Division of Lands and Minerals
Minnesota Department of Natural Resources
500 Lafayette Road
St. Paul, MN 55155



Re: Permit to Mine Assignment, Milepost 7 Five-Year Operating
Plan Approval and Milepost 7 Master Permit Renewal

Dear Mr. Brice:

Enclosed is the approval for the Permit to Mine assignment which has been acknowledged on behalf of Cleveland-Cliffs Inc and Northshore Mining Company.

Very truly yours,

T. L. Forrester /s/

T. L. Forrester
Corporate Attorney

Enclosure

*Arlo - Here's the
orig¹ / copy for
you / Hibling*

*Kathy Lewis has a
copy & so does
M. Katsoulis.*

Bill has seen this

Jeanne 3/8/05

STATE OF MINNESOTA
DEPARTMENT OF NATURAL RESOURCES

In the Matter of the Application for
Permits for the Mile Post 7 On-Land Tailings
Disposal Plan at Silver Bay, Minnesota, and
Assignment of the Permit to Mine

**MILE POST 7 MASTER
PERMIT AMENDMENT
AND ASSIGNMENT OF
THE PERMIT TO MINE**

The Mile Post 7 Master Permit and Permit to Mine, Reserve Mining Company #1, as amended, are hereby assigned to Cleveland Cliffs, Inc., to continue to operate the Peter Mitchell Mine and Mile Post 7 On-Land Tailings Disposal System consistent with prior permit authorizations, subject to the following conditions and modifications.

I. GENERAL PERMIT ACTIVITIES, MILE POST 7

The Mile Post 7 Master Permit is a combination of a number of water appropriation permits and works in the beds of public waters permits that are necessary for the operation of the Mile Post 7 on-land, closed-circuit, taconite tailings disposal system, located near the shore of Lake Superior west of Silver Bay, Minnesota, and the operation and maintenance of the delta, located off-shore in Lake Superior. The Mile Post 7 Master Permit functions as the primary authorization of the Department of Natural Resources for engineering and operational activities conducted at the Mile Post 7 tailings basin.

The Mile Post 7 Master Permit was originally issued on July 27, 1977, to Reserve Mining Company, Armco Steel Corporation and Republic Steel Corporation. An amended permit was issued on August 23, 1977, which superseded the original permit. The permit authorized construction of a taconite tailings disposal basin and associated tailings containment dams, seepage recovery dams, diversion dikes and facilities, splitter dikes, a tailings transport system, water reclamation facilities, stream crossings, and other facilities and systems. The permit requires the submission of detailed engineering plans and specifications and an operational plan for the handling and disposal of tailings that must be evaluated and approved by the Commissioner of the Department of Natural Resources. The permit further requires the permittee to assume the obligation of final closure and perpetual maintenance of the tailings

basin and all parts of the tailings disposal system and to submit plans for final closure and perpetual maintenance. The permit was amended August 2, 1982; July 1, 1984; July 31, 1984 and August 3, 1987.

On August 17, 1989, the permit was further amended and transferred to Cyprus Minerals Company and Cyprus Northshore Mining Company as joint co-permittees. The 1989 amendment authorized Cyprus to operate the basin in accordance with the engineering plan entitled, "Tailings Basin Closure Consensus Plan for Reserve Mining Company, Silver Bay, Minnesota," prepared by Klohn Leonoff engineering consultants (referred to as the "Klohn Consensus Plan"). Under the Klohn Consensus Plan, it was estimated that the production of fifteen million long tons of taconite pellets would create tailings to fill cells #1 and #4 of the tailings basin, while cells #2-3 would contain a pond. Filling cells #1 and #4 with tailings is consistent with the goals of reducing the potential for dam failure and improving manageability and ultimately reclamation of the basin, thereby resolving significant environmental concerns.

The permit was further modified on October 24, 1991, in relation to the use of tailings for road construction at the Peter Mitchell Mine; on February 20, 1992, in relation to the delay of a planned expansion of the water treatment facility; and on March 13, 1992, in relation to further use of tailings for the stemming of blast holes at the Peter Mitchell Mine. On May 27, 1994, the permit was renewed for a term of five years, until June 1, 1999, or upon the production of fifteen million long tons of taconite pellets, whichever occurred earlier. The 1994 renewal was based upon continued operations pursuant to the Klohn Consensus Plan. On or about August 30, 1995, as fifteen million tons of taconite tailings were about to be produced, the Department of Natural Resources renewed the Mile Post 7 Master Permit until January 15, 1996. On January 15, 1996, the permit was again renewed until July 15, 1996.

On September 30, 1994, the stock of Cyprus Northshore Mining Corporation was purchased from Cyprus Amax Minerals Company, fka Cyprus Minerals Company, by Cliffs Minnesota Minerals Company, a wholly-owned subsidiary of Cleveland-Cliffs, Inc. Cyprus Northshore Mining Company was renamed Northshore Mining Company. Cyprus Minerals Company was deleted as a permittee on the Mile Post 7 Master Permit and the name of Cyprus Northshore Mining Company was changed to Northshore Mining Company.

Northshore Mining Company submitted a proposed operating plan which contemplated continued operation pursuant to the Klohn Consensus Plan, until such time as engineering data gathered at the site is analyzed to develop new detailed designs, specifications and operating

procedures. Although the Klohn Consensus Plan production mark of fifteen million tons had been met, cells #1 and #4 of the tailings basin were not yet completely filled. Hence, continued operation as contemplated by the Klohn Consensus Plan remained a feasible and reasonable option.

On August 12, 1997 the permit was again renewed until June 30, 2002 and subsequently extended until June 30, 2004. All of the above permits, amendments and renewals are a part of, and are referred to hereafter as, "the Mile Post 7 Master Permit."

II. MILE POST 7 TAILING BASIN 5 YEAR OPERATING PLAN APPROVAL AND MASTER PERMIT RENEWAL AND TRANSFER TO CLEVELAND-CLIFFS, INC.

The Mile Post 7 Master Permit is hereby amended to replace Northshore Mining Company with Cleveland Cliffs, Inc. as permittee.

A. The Mile Post 7 Master Permit is updated in the "Milepost 7 Tailings Basin Five-Year Operations Plan" with Appendices A-H, dated December 2003, and is supplemented by information supplied by Northshore Mining Company as follows:

- 1) in a memorandum from Barr Engineering dated June 17, 2004 addressing comments from the DNR on the Mile Post 7 water balance,
- 2) in a letter of response to comments from the MPCA dated August 13, 2004, and
- 3) in revisions to Table E-4 and Appendix F also dated August 13, 2004.

The Mile Post 7 Tailing Basin Five Year Operations Plan, dated December 2003 with appendices and supplements is hereby approved as specified below.

B. Conditions of Operation

No additional construction or significant alteration, modification or addition to the approved Mile Post 7 Five-Year Operations Plan, dated December 2003, shall be undertaken by Cleveland-Cliffs, Inc., without prior written approval of the Commissioner.

Prior to December 31, 2008, Cleveland-Cliffs, Inc. shall present a schedule of the activities required to complete a detailed design and operating plan for continuation of tailings disposal through the life of the mine, as described generally in the "Mile Post 7 Tailings Basin Five-Year Operations Plan," dated December 2003, and shall provide a proposed date for the submittal of such design and plan.

All other obligations and requirements of the Mile Post 7 Master Permit remain in effect, are binding upon Cleveland-Cliffs, Inc., and shall be subject to such necessary and reasonable financial assurance as the Commissioner requires.

C. Term of Amended Permit

The permit expiration date shall be June 30, 2009.

III. ASSIGNMENT OF THE PERMIT TO MINE

The Permit to Mine was originally issued to Reserve Mining Company on March 1, 1985. On August 9, 1989 the Permit to Mine was assigned to Cyprus Northshore Mining Company. On September 30, 1994 Cyprus Northshore Mining Company was acquired by Cliffs Minnesota Minerals Company, a wholly-owned subsidiary of Cleveland-Cliffs, Inc., and renamed Northshore Mining Company and assigned the Permit to Mine.

I hereby assign to Cleveland-Cliffs, Inc. the Permit, entitled **PERMIT TO MINE RESERVE MINING COMPANY #1**, as amended.

IV. PERMIT TO MINE RESPONSIBILITIES AND PAST ACTIVITIES OF RESERVE AT THE PETER MITCHELL MINE

Cleveland-Cliffs' responsibility for past activities of Reserve Mining Company at the Peter Mitchell Mine are as specified in a letter to Cyprus Minerals Company and Cyprus Northshore Mining Corporation, dated August 17, 1989, regarding the assignment of the Permit to Mine to Cyprus Minerals Company and Cyprus Northshore Mining Corporation. Responsibilities for past activities of Reserve and Cyprus Northshore Mining Corporation at the Peter Mitchell Mine are also addressed in the Stipulation Agreement, dated August 17, 1989, among the State of Minnesota, Minnesota Pollution Control Agency, Minnesota Department of Natural Resources, Reserve Mining Company, Armco Inc., First Taconite Company, Inc., Cyprus Minerals Company, and Cyprus Northshore Mining Corporation.

Dated this 21 day of October, 2004

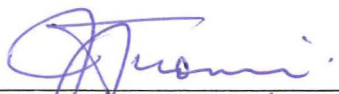

William C. Brice, Director


Division of Lands and Minerals

Acknowledged this 7th day of MARCH, 2004: 2005

CLEVELAND-CLIFFS, INC.

NORTHSHORE MINING COMPANY


Name
Title Acting Vice President
Operations


Donald R. Pahl
General Manager and Vice President



Minnesota Department of Natural Resources

Division of Lands and Minerals

500 Lafayette Road, Box 45

St. Paul, Minnesota 55155-4045

June 22, 2010

Mr. Scott Gischia and Mr. Marvin Harmer
Northshore Mining Company
10 Outer Drive, Silver Bay MN 55614

RE: Northshore Mining Company Milepost 7 Tailings Basin Five-Year Operating Plan 2009-2013 Approval

Dear Mr. Gischia and Mr. Harmer:

Thank you for your May 11, 2010 response letter to the comments from DNR on the MP7 Five-year Operating Plan. Based on the responses and additional information provided in that letter, we approve the 2009-2013 Milepost 7 Tailings Basin Operating plan with the following expectations:

Please provide an updated text portion of the report that incorporates the changes, discussion, and tables presented in the response letter. This update should be provided by the end of July 2010. It is our experience that having a clean, final copy of a significant document such as this 5-year plan helps to minimize the potential for missing appended information, especially by future reviewers that may be unfamiliar with the genesis of the entire document.

We would also like to bring your attention to the following items:

- With regard to Questions 1 (seepage cutoff activity) and Question 5, Items 2 and 3 we have three further questions:
 1. Has the dramatic decrease in groundwater (and consequent seepage) described in your response been validated by borings or piezometers?
 2. Are seepage volumes recorded from the seepage recovery ponds and if so, what are those volumes?
 3. What is the estimated volume of unrecoverable seepage from the basin (as compared to estimates documented in the 1987 Klohn Leonoff report)?

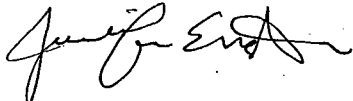
Please provide the above information in the 2010 Annual Report, due January 31, 2011.

- With regard to Question 2 we find Section 4.4 of the operating plan to be adequate for our purposes.

- With regard to Question 8, please revise the 2.c portion of the response to say that the water treatment plant will operate as long as the water quality of the basin is not acceptable for direct discharge to the environment.

Thank you for your work, cooperation, and patience in developing this plan. If you have any questions, please do not hesitate to contact me.

Sincerely,



Jennifer Engstrom
Mineland Reclamation Manager
Division of Lands and Minerals
MN Dept of Natural Resources
jennifer.engstrom@state.mn.us
651-259-5385

C: Anne Jagunich

EC: Mike Crotteau, DNR Waters
Julie Jordan
Kate Gunderson
Suzanne Baumann, MPCA
Memos Katsoulis

Minnesota Department of Natural Resources

500 Lafayette Road • St. Paul, MN • 55155-40



March 24, 2015

Mr. Scott Gischia
Northshore Mining Company
10 Outer Drive
Silver Bay MN 55614

RE: Northshore Mining Company's Mile Post 7 Tailings Basin Five-Year Operating Plan 2014-2018 Approval

Dear Mr. Gischia:

We appreciate Northshore Mining Company's efforts to provide the MN Department of Natural Resources (MNDNR) and the Minnesota Pollution Control Agency (MPCA) with the opportunity to inspect the inactive tailings delta on Lake Superior and the active tailings disposal facility at Mile Post 7 (MP7). In addition we found it helpful to have your basin contractor (Barr Engineering) provide a separate inspection at your facility to review detailed design criteria and planned construction. Based on all information reviewed your submission of the 2014-2018 Mile Post 7 Tailings Basin Five Year Operating Plan is hereby approved by MNDNR, subject to the following expectations:

- Dams 1 and 2 on the south and north ends of MP7, respectively, were recently raised using upstream construction to provide a subsequent "beach" of fine tailings to provide a seal for limited seepage. It is also noted that these respective dams have rail lines constructed parallel on the downstream side above the top elevation of the filter berms. These rail lines are used to transport aggregate used in dam construction. It is expected that these aggregate materials be measured and accounted for during on-going construction and stockpiling for future use.
- Dam 5 was originally constructed by the downstream method and in 2004, changed to the vertical centerline method. This dam protects Bear Lake to the east and seepage from the dam and outflow from Bear Lake are collected and pumped to the Reclaim Pond by submersible pump. In a major storm event or during a long term shutdown, the elevation of this pond needs to be monitored to prevent back flow into Bear Lake, and prevent an increase to the phreatic line and possible unplanned pore water pressure increases in Dam 5.
- As Dam 2 is raised to provide the necessary minimum 10 feet of freeboard, as proposed in the Plan, monitoring of the seepage cutoff constructed in 2012 on the east end will be needed to ensure proper seepage control.
- Continue to monitor internal weirs for potential failure, particularly during the winter months.



- Continue to remove brush and trees from dam slopes, and seed as necessary to provide erosion control.
- Please provide the most recent Public Land Survey data for the Mile Post 7 Area to ensure compliance with existing and future permits.
- Please update the MP7 Emergency Action Plan on a yearly basis to ensure safety and relevancy to changing laws, policies and requirements.
- Continue monitoring and providing armor stone protection to prevent wave degradation to the inactive delta tailings basin exposed face in Lake Superior.
- MNDNR Lands & Minerals & Northshore Mining Company and/or its contractor shall make a yearly site inspection of MP7.

Please attach this approval as an addendum to the Five Year Operating Plan for future reference.

Thank you again for your work on this Plan.

Sincerely,



James M. Sellner, P.E., P.G.
Manager, Engineering & Mineral Operations
1525 Third Ave. E.
Hibbing, MN 55746
218-231-8470

cc: J. Richards
P. Clevensine
J. Henderson
J. Engstrom
J. Boyle
B. Smith
S. Baumann



Division of Ecological and Water Resources
500 Lafayette Road
St. Paul, MN 55155

August 28, 2019

Ms. Andrea Hayden, Section Manager, Environmental Services
Cliffs Natural Resources
Northshore Mining Company
10 Outer Drive
Silver Bay, MN 55614

RE: Five-Year Operations Plan, Years 2019-2023, Milepost 7 Tailings Basin

Dear Ms. Hayden,

Thank you for the submission of the Northshore Mining Company's Five-Year Operations Plan, Years 2019-2023, for the Milepost 7 Tailings Basin. MNDNR Dam Safety, at the request of MNDNR Lands and Minerals, has reviewed this operating plan. Based on our review and the additional information requested of and provided by the Northshore Mining Company, MNDNR Dam Safety finds the Five-Year Operating Plan to be comprehensive and complete.

Therefore, an extension is hereby granted for the continued operations of the Milepost 7 Tailings Basin so long as those operations are consistent with the current Five-Year Operations Plan and the current Milepost 7 Master Permit. This Extension to the Five-Year Operations Plan will expire on December 31, 2023.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Dana Dostert', with a long horizontal flourish extending to the right.

Dana Dostert PE, PG
Senior Engineer – MNDNR Dam Safety

Cc: Joe Henderson
Pete Clevenstine
Jason Boyle
Jennifer Engstrom
Scott Gishia (Northshore Mining)