

General information

Public comment period begins: March 28, 2025

Public comment period ends: May 12, 2025

Current permit issued: December 2, 2005

Current permit expiration date: September 30, 2008

The Minnesota Pollution Control Agency (MPCA) Commissioner has made a preliminary determination to reissue this permit for a term of approximately five years.

Name and address of Permittee:

Northshore Mining Co
10 Outer Dr
Silver Bay, MN 55614-1401

Facility name and location:

Northshore Mining Co
10 Outer Dr
Silver Bay, MN 55614-1401
Lake County
T056N, R08W, Section 031

MPCA contact person:

Stephanie Handeland
Industrial Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155-4194
Phone: 651-757-2405
Email: stephanie.handeland@state.mn.us

File manager phone: 651-757-2728 or
844-828-0942

A draft permit and fact sheet is available for review on the MPCA Public Notices webpage at <https://www.pca.state.mn.us/get-engaged/public-comments>. Additional materials relating to the issuance of this permit are available for inspection by appointment at any MPCA office (<https://www.pca.state.mn.us/about-mpca/contact-us>) between the hours of 8:00 a.m. and 4:30 p.m., Monday through Friday. The MPCA will mail or email a copy of the draft permit upon request. Comments, petitions, and other requests must be received at the MPCA in writing on or before the public comment period end date and U.S. Mail comments must be received by 4:30 p.m.

Watershed: Lake Superior - South

Receiving water: Unassessed - Class 2Bg, 3, 4A, 4B, 5, 6 water; Unassessed - Class 2Bg, 3, 4A, 4B, 5, 6 water; Beaver River - Class 1B, 2Ag, 3, 4A, 4B, 5, 6 water; Beaver River, East Branch - Class 1B, 2Ag, 3, 4A, 4B, 5, 6 water; Lake Superior Shoreline - Class 1B, 2A, 3, 4A, 4B, 5, 6 water.

Description of permitted facility

The principal activity at this facility is the production of magnetic iron ore concentrate at average and maximum rates of 5.4 and 8.0 million long tons per year, and the production of standard, low silica direct reduced iron-grade (DRI-grade), fluxed iron ore pellets and sinter feed, and iron ore. The facility consists of the E.W. Davis Works plant area at Silver Bay, steam plant, fluoride treatment system, the Mile Post 7 Tailings Basin area, water treatment plant (fibers), and the pipelines, rail lines, and related appurtenances that route wastes and process water between the Davis Works and Mile Post 7, as well as the drainage area contributing surface runoff to the Mile Post 7 tailings basin.

The site also includes an idled Silver Bay Power Company (SBP) steam electric generating plant which was indefinitely idled in 2019 as part of a power agreement with Minnesota Power. While SBP is idle, water from Lake Superior is appropriated for makeup water uses at the plant by using one intake pump with a design intake flow of 43.2 MGD. Excess of this make-up water is discharged via SD 003 at an average rate of 41.0 mgd and a maximum rate of 43.2 mgd.

Occasional maintenance dredging is conducted to remove sediments from the outfall SD 003 flow channel in Lake Superior. The dredged materials are temporarily stored at the Davis Works and are beneficially reused at the Davis Works or permanently disposed at the Milepost 7 tailings basin.

The Mile Post 7 tailings basin consists of a reclaim pond, seepage recovery pond, and water treatment plant. The company has the ability to manage and route water from the various seepage recovery areas to the reclaim pond. Excess water in the Mile Post 7 basin is pumped to the water treatment plant which discharges treated water to the Beaver River at an average and maximum rate of 6.0 mgd and 7.5 mgd. Tailings basin seepage from Dam 2 and pressure relief wells is collected at the north side of the basin and is discharged at an average and maximum rate of 0.004 and 0.01 mgd to an unnamed tributary to the East Branch of the Beaver River.

A runoff collection system at the Davis Works collects industrial stormwater from the plant site, conveyor system and rail loading area. This runoff is routed to the tailings basin. Some stormwater drainage from the salvage yard and adjacent rail loading area may either infiltrate or flow to Marina and White Rock Creeks apart from the principal Davis Works runoff collection system. Benchmark monitoring for industrial stormwater that is not routed to the tailings basin is monitored at the plant at SD 010

Eleven groups of groundwater monitoring wells are located around the tailings basin. Active downgradient groundwater stations include: well Group 5 (GW 001, GW 002 and GW 013); Group 12, (GW 008, GW 009 and, GW 010); and Group 13 (GW 011 and, GW012). Active upgradient, background groundwater stations include: Group 10 (GW 004, and GW 005) and Group 11 (GW 006, and GW 007).

Monitoring at internal waste stream stations occurs at various locations in the process. Internal monitoring occurs at the influent to the water treatment plant at the tailings basin (WS 001), Seepage Recovery Pond 1A (WS 017), and Seepage Recovery Pond 1B (WS 018). Water from the pellet plant blowdown treatment system at the Davis Works is monitored at WS 014. Leachate transferred to the tailings basin from the former ash landfill is monitored at WS 016.

This permit includes surface water monitoring stations SW 001 and SW 004 in the East Branch of the Beaver River, stations SW 002 and SW 003 in the Beaver River, and station SW 005 in Lake Superior.

The draft permit contains updated limits & monitoring requirements and addition and updating of internal waste stream monitoring locations.

A 2020 Supreme Court decision in *County of Maui v. Hawaii Wildlife Fund*, 140 S. Ct. 1462 (2020), (Maui) requires consideration of discharges of wastewater from a facility to groundwater are functionally equivalent to direct discharges of wastewater to surface water. This permit authorizes a discharge of tailings basin seepage to groundwater, with estimated flows reported at GW 026. Surface water monitoring locations SW 001 and SW 002 in the East Branch of the Beaver River and the Beaver River respectively have intervention limits applicable to address the potential for this sub-surface seepage discharge to reach and/or affect downgradient surface waters, which would require the permitting of a functionally equivalent discharge.

The preliminary determination to reissue this Wastewater permit is tentative.

Procedure for public participation

As stated in Minn. R. chs. 7000 and 7001, there are three formal procedures for public participation in the MPCA's consideration of this matter. Interested persons may:

- 1) Submit written comments on the draft permit.
- 2) Petition the MPCA to hold a public informational meeting.
- 3) Petition the MPCA to hold a contested case hearing.

Submitting written comments

Comments may be submitted:

- 1) Online at <https://mpca.commentinput.com/comment/search>; or
- 2) By U.S. postal mail to the following address:
Stephanie Handeland
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155-4194

Submitted comments or petitions must state:

- 1) Your interest in the permit application or the draft permit.
- 2) The action you wish the MPCA to take, including specific references to the section of the draft permit you believe should be changed.
- 3) The reasons supporting your position, stated with sufficient specificity as to allow the MPCA to investigate the merits of the position.

Public informational meeting

A public informational meeting is an informal meeting during which interested persons can ask questions concerning the proposed facility.

An in person public informational meeting about the draft permit will take place April 23, 2025, from 6:00-7:30 p.m. at Reunion Hall, 97 Outer Drive, Silver Bay, MN 55614. MPCA staff will be present to provide information.

Contested Case Hearing

A contested case hearing is a formal proceeding before an administrative law judge empowered to advise the MPCA regarding issues of fact. As described in Minn. R. 7000.1800, persons who submit petitions for a contested case hearing must also state the issues they propose to address in a contested case hearing, the specific relief requested or resolution of the matter, and the reasons (which may be in the form of proposed findings) supporting an MPCA decision to hold a contested case hearing. Failure to comply with these rules exactly may result in a denial of the request. To the extent known, the petitioner may also submit a list of prospective witnesses to be called at a hearing, a proposed list of publications, references, or studies to be introduced at a hearing and the approximate time required for the petitioner to present the matter at a hearing. The decision whether to hold a contested case hearing will be made under Minn. R. 7000.1900.