

General information

Public comment period begins: September 12, 2021

Public comment period ends: October 12, 2021(4:30 p.m.)

Current permit issued: October 28, 2020

Current permit expiration date: September 30, 2025

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

Name and address of Permittee:

Prairie River Minerals LLC
415 NW 8th Ave Suite B
Grand Rapids, MN 55744-2359

Facility name and location:

Prairie River Minerals LLC
29013 County Highway 61
Grand Rapids, MN 55744-2359
Itasca County

MPCA contact person:

Kurt Carlson
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Minnesota Pollution Control Agency
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Saint Paul, MN 55155
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File manager phone: 651-757-2728 or
1-844-828-0942

A draft permit and supporting documentation is available for review on the MPCA Public Notices webpage at <http://www.pca.state.mn.us/publicnotices>. 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/mpca-offices>) 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 time identified above.

Watershed: Mississippi River - Grand Rapids

Description of Prairie River Minerals

Prairie River Minerals, LLC (PRM) proposes to collect and process legacy natural ore stockpiles for a demonstration project near Coleraine, Minnesota. The project will produce high grade iron lump and sinter feedstock products using an ultra-high dense medium separation (UHDMS) technology. The finished products will be shipped off-site to evaluate potential use in steel manufacturing. The proposed project is expected to last for a period of approximately 4 to 5 years.

PRM proposes to process up to 6,500,000 metric tons of material from the Buckeye Mine Stockpile (500,000 metric tons) and the Seven Cities Stockpile 39 (6,000,000 metric tons). The lean ore stockpiles contain approximately 32% iron with particle sizes ranging from fines to approximately 36 inches that was discarded unprocessed from historic operations. PRM's existing Demonstration Project processing plant will be used to process the Seven Cities Stockpile 39 Extension material. No changes to the existing processing plant layout or benefaction process are proposed. Primary crushing and sizing will be conducted using various methods at each stockpile. Crushed material one inch or smaller will be transported to a surge pile adjacent to the demonstration plant for further processing.

The proposed Waste Management Area (WMA) will be located on top of, and will extend west and east from, the existing permitted Demonstration Project WMA, including the infiltration basin and associated monitoring station WS001. New proposed infiltration basins will include a western area infiltration basin with monitoring station WS003 and an eastern area infiltration basin with monitoring station WS004. WS002 will remain.

The UHDMS benefaction process at the demonstration plant is a wet process using recirculated water from the thickener and the process water tank. The combined lump and sinter product goes to a screen where final separation between the lump ore and sinter fines takes place. The lump ore and sinter fines are stockpiled separately and hauled to PRM's rail loadout facility for shipping. Total production is estimated to be up to 300,000 metric tons per year, but may vary based on plant efficiency and throughput.

Process water used in the beneficiation processes and for plant cleaning will be appropriated from the West Hill mine pit per a DNR water appropriation permit. Additives include ferro-silica, lime and a flocculant. Process water will be recirculated; the only water to leave the plant will be moisture contained in the final products and rejects/waste material, and evaporation losses from the process. Process wastewater will not be discharged to surface waters as a part of the demonstration project.

A bermed staging area immediately adjacent to the plant will be used to temporarily stage dewatered rejects/waste material from the plant prior to relocation to the waste management area (WMA) where the rejects/waste material will be disposed of as a waste stockpile within the (approximately) 27.8 acre WMA site. Berms surrounding both the waste staging area and the WMA will be constructed to prevent run-on into, and run-off from these areas. Any potential draindown from the stockpiled rejects/waste materials, as well as precipitation contacting the waste materials, will be collected within the berms and routed to infiltration basins located within the waste staging area and/or the WMA.

This permit authorizes the management of process wastewater from the proposed 6,500,000 metric ton demonstration project only. A modification of this permit will be required for any processing of material beyond the initial 6,500,000 metric ton demonstration project. This permit does not authorize the discharge of process wastewater or industrial stormwater from the facility. The discharge and management of industrial stormwater for the demonstration project will be regulated under the NPDES/SDS Industrial Stormwater General Permit (MNR050000).

Addition of WS003 (western infiltration basin) and WS004 (east infiltration basin) A total of 6,000,000 metric tons from the Seven Cities Stockpile 39 (in addition to the 500,000 metric tons in the October 2020 permit. Elimination of WS001 (due to expansion)

The preliminary determination to issue 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

To submit comments or petitions to the MPCA through the mail or email, you 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. MPCA staff will be present to provide information. If an interested person would like the MPCA to hold a public informational meeting, the person should include all information identified above and in addition include a statement of the reasons the person desires the MPCA to hold a public informational meeting and the issues that the person would like the agency to address at the public informational meeting.

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.