

From: [Pat Kackman](#)
To: [Handeland, Stephanie \(MPCA\)](#)
Subject: Sulfate
Date: Wednesday, September 3, 2025 7:19:38 AM

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I am writing to provide comments regarding public notice of draft NPDES permits MN0055948 and MN0031879 for the U. S. Steel Keetac tailings basin and mining area, respectively. I have interest in these draft permits because I, like most Minnesotans, care deeply about protecting the environment.

I am concerned about the Minnesota Pollution Control Agency's (MPCA) sulfate water quality standard of 10 mg/L for wild rice waters and its consequences to the Iron Range and communities across the state. MPCA was directed to review and update the wild rice sulfate standard in 2011 but has not done so to date. The future of Minnesota mines, local governments and other industries are critically affected by the enforcement of this outdated standard.

I strongly urge MPCA to update the wild rice sulfate standard considering current science and site-specific variables. The current 10 mg/L sulfate standard oversimplifies the environmental needs of wild rice. Many other factors determine wild rice resilience, such as water depth and fluctuation, predation, and competing vegetation. Wild rice has even proven to be successful in waters with sulfate levels up to 1,600 mg/L and beyond – 160 times higher than our current standard. The current 10 mg/L standard is not proven to be effective and compliance with it is unattainable for many businesses and communities. From wastewater facilities and small businesses to mines employing thousands of Minnesotans, the cost of meeting a 10 mg/L sulfate standard puts Minnesota at risk with no guaranteed outcome. Do not waste time, money and energy on a sulfate standard that doesn't make sense. I strongly urge you to refrain from including permit limits for sulfate until the time and resources are invested to develop a sulfate standard that follows modern science, addresses site-specific variables and contains cost as required by the 2011 law.

Beyond environmental science, this issue carries significant economic implications for our region and the State of Minnesota. Mining is a cornerstone of Northeast Minnesota's economy, contributing over \$1.8 billion annually and supporting more than 4,000 family-sustaining jobs. These positions offer wages significantly above the regional average, with mining workers earning approximately \$1,708 per week, nearly \$950 more than the average across all industries. The sector also accounted for over one-third of net new jobs in the region during recent growth periods.

The current Keetac compliance schedule is too short and unattainable. There are currently no commercially proven and economical sulfate treatment strategies in place anywhere in the world. Time is needed to evaluate and develop treatment alternatives that are effective and achievable. Since these are some of the first permits to contain the 10 mg/L sulfate limit, other permittees will use the testing and engineering developed for compliance as a model in the future. Current treatment technologies to reduce sulfate levels result in increased solid waste that will be required to be landfilled, increased electrical usage, increased greenhouse gas emissions, and other negative environmental outcomes. Time and careful consideration are needed to develop feasible

sulfate treatment that all Minnesotans can benefit from. The MPCA should allow a longer compliance schedule, or grant the variance, to provide more time to effectively find a feasible solution. The current compliance schedule does not include time for regulatory agency requirements such as environmental review, permitting and other authorizations that may be required.

The two draft permits require wild rice sulfate compliance at each of Keetac's outfalls, yet they all discharge to one water body where the MPCA has said the wild rice standard applies. The compliance point should protect that water body and be representative of the combined discharges from the Keetac facility. The permittee requested to combine sulfate compliance points to factually represent offsite discharges, however the MPCA denied that request. It is concerning that the MPCA will not consider the request, even though it is more factually accurate than what is contained in the draft permits. MPCA must modify the permits to include a single downstream compliance point as proposed by the permittee.

U. S. Steel has submitted two site-specific standard (SSS) requests for sulfate at Hay Lake near Keetac. The 2014 request was never acted upon by MPCA and the 2022 request was denied. These applications followed MPCA guidance and show that a higher sulfate standard than 10 mg/L is warranted. It is concerning that the MPCA does not take into account modern science and site-specific conditions. I urge the MPCA to reconsider the SSS applications as Keetac has been discharging to Hay Lake for almost 60 years with healthy wild rice in existence.

In summary, I urge the MPCA:

- To refrain from including sulfate limits in Keetac's permits. If the permit limits remain as proposed, the MPCA must modify the permits to contain a single sulfate compliance point and allow more time for compliance.*
- To abide by the 2011 law and update the 10 mg/L sulfate standard that the state of Minnesota has recognized as being incorrect.*

Thank you.

Pat Kackman
Business development/organizer
Iron range resident
International, Union of Painters and Allied Trades/local 106
Sent from my iPhone

From: [Ryan, Robert](#)
To: [Handeland, Stephanie \(MPCA\)](#)
Subject: Comment on NPDES permits MN0055948 and MN0031879 for U. S. Steel Keetac
Date: Wednesday, September 3, 2025 9:14:42 AM
Attachments: [image003.png](#)

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Thank you.

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