

From: [Andrew G](#)
To: [Handeland, Stephanie \(MPCA\)](#)
Subject: Comment on NPDES permits MN0055948 and MN0031879 for U. S. Steel Keetac
Date: Tuesday, September 2, 2025 10:21:30 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future of Minnesota mines, local governments and other industries are critically affected by the enforcement of this outdated standard.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.

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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.

Andrew and Rachel Gregg
16667 Morrow Ave, Pengilly, MN 55775
218-969-7830

From: [anthony farley](#)
To: [Handeland, Stephanie \(MPCA\)](#)
Subject: Comment on NPDES permits MN0055948 and MN0031879 for U. S. Steel Keetac
Date: Tuesday, September 2, 2025 10:04:01 AM

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- 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.

Anthony Farley

5456 park drive

Mountain Iron, MN 55768

2187502013

[Sent from Yahoo Mail for iPhone](#)

From: [Adam Kokkinrn](#)
To: [Handeland, Stephanie \(MPCA\)](#)
Subject: Sulfate
Date: Tuesday, September 2, 2025 12:30:49 PM

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Adam kokkinen 218 256 1604
MN0031879

From: [Ben and Rachel Erickson](#)
To: [Handeland, Stephanie \(MPCA\)](#)
Subject: Comment on NPDES permits MN0055948 and MN0031879 for U. S. Steel Keetac
Date: Tuesday, September 2, 2025 1:12:22 PM

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- 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.

Ben Erickson

1005 East 21st Street, Hibbing, MN 55746

(218) 421-5411

From: [Chad Baltich](#)
To: [Handeland, Stephanie \(MPCA\)](#)
Subject: Keetac sulfate standards
Date: Tuesday, September 2, 2025 1:13:17 PM

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I'm writing to you because The sulfate standards are a complete joke. This needs to be site specific. This is just an attack by special interest groups on mining. If the mpca was actually concerned about it they would have started with municipalities and not the mining industry. You guys are just trying to remove the iron range to turn it into the metros playground. It's about time this study is finished and site specific standards are set in place!

Chad Baltich VP USW 6115

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From: [Deanna Kunnari](#)
To: [Handeland, Stephanie \(MPCA\)](#)
Subject: Comment on NPDES permits MN0055948 and MN0031879 for U. S. Steel Keetac
Date: Tuesday, September 2, 2025 3:08:00 PM

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In summary, I urge the MPCA:

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- 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.

Deanna Kunnari
Executive Assistant
DG Supply
P.O. Box 152

11402 Cooper Road
Chisholm, MN 55719
Office 218-585-2085
Cell 218-750-3497
deannak@dgsupply.us

From: [David Smith](#)
To: [Handeland, Stephanie \(MPCA\)](#)
Subject: Comment on NPDES permits MN0055948 and MN0031879 for U. S. Steel Keetac
Date: Tuesday, September 2, 2025 12:00:11 PM

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I'm writing to express my concerns about the proposed permits MN0055948 and MN0031879 for U.S. Steel's Keetac tailings basin and mining area. As someone who cares deeply about protecting Minnesota's environment, I believe it's crucial to revisit the state's sulfate water quality standard for wild rice waters.

The current standard of 10 mg/L is outdated and doesn't reflect the latest scientific understanding. In fact, research shows that wild rice can thrive in waters with sulfate levels up to 1,600 mg/L, far exceeding the current limit. This one-size-fits-all approach oversimplifies the complex environmental needs of wild rice, ignoring factors like water depth, predation, and competing vegetation.

Implementing this standard would have far-reaching economic implications for Minnesota, particularly on the Iron Range, where mining is a vital industry. With over 4,000 jobs and \$1.8 billion in annual economic contribution, the mining sector is a cornerstone of the regional economy. The cost of compliance would be substantial, with no guarantee of environmental benefit.

I urge the Minnesota Pollution Control Agency (MPCA) to:

- *Refrain from including sulfate limits* in Keetac's permits until a more scientifically sound standard is developed.
- *Modify the permits* to include a single downstream compliance point, as proposed by the permittee, to accurately reflect the combined discharges from the facility.
- *Update the sulfate standard* in accordance with the 2011 law, taking into account current science, site-specific variables, and cost considerations.

By reevaluating the sulfate standard, we can ensure that environmental protection and economic growth go hand-in-hand. I appreciate your attention to this matter and look forward to seeing the MPCA prioritize a more practical and effective approach to managing sulfate levels in Minnesota's waters.

Dave Smith
16981 W. Bay Dr.
Pengilly, Minnesota 55775

From: [Gretchen Wronka](#)
To: [Handeland, Stephanie \(MPCA\)](#)
Subject: MN Sulfate standards
Date: Tuesday, September 2, 2025 2:46:57 PM

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Ms. Handeland,

Regarding the public notice of draft NPDES permits MN0055948 and MN0031879 for the U. S. Steel Keetac tailings basin and mining area: Minnesota needs an updated sulfate standard policy that based on modern science, addresses site-specific variables and contains cost

MPCA needs to implement such research-based standards that include these recommendations:

- *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.*

I am a registered, active member of the DFL party and a voter deeply concerned about our environment. I am contacting my representative Steve Elkins and my state senator Alice Mann on this issue.

Regards, Gretchen Hintz Wronka

5201 West 108 Street

Bloomington, MN 55437

218-206-5377

She/her/hers

From: [Hans Wronka](#)
To: [Handeland, Stephanie \(MPCA\)](#)
Subject: Comment on NPDES permits MN0055948 and MN0031879 for U. S. Steel Keetac
Date: Tuesday, September 2, 2025 4:28:32 PM

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Ms. Handeland,

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. Interestingly enough I am also a scientist with a Bachelor's of Science in Geology and Hydro-Environmental Geology from the University of Minnesota Duluth (UMD). I am also an environmental consultant with 30 years of experience serving industry and public sector clients. I have followed the scientific process throughout my career because that is what I was taught to do and it is the only responsible and ethical way to practice science. What is most troubling to me is the politicization of science from people on all sides of almost any challenging issue facing our world today. Those opposed to the Iron Mining Industry in Minnesota do not engage in fact based science to make their case. They are poorly informed or willingly blind to the science, and they are politicizing the MPCA for a means to their ends.

I strongly urge MPCA to update the wild rice sulfate standard considering current science and site-specific variables and not give in to the political pressure from non-science based interests. 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.

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- To abide by the 2011 law and update the 10 mg/L sulfate standard that the state of Minnesota has recognized as being incorrect.

Sincerely,

Hans Wronka

duluth2o.com

218-343-6453

From: [Jim Bozich](#)
To: [Handeland, Stephanie \(MPCA\)](#)
Date: Tuesday, September 2, 2025 1:13:41 PM

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James Bozich

P O Box 208

Keewatin MN 56753

Phone. (218)969-2027

From: james.thune@global.komatsu
To: [Handeland, Stephanie \(MPCA\)](#)
Subject: Comment on NPDES permits MN0055948 and MN0031879 for U. S. Steel Keetac
Date: Tuesday, September 2, 2025 10:51:28 AM
Attachments: [image355902.png](#)

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Stephanie,

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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.

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\$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.

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In summary, I urge the MPCA:

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- To abide by the 2011 law and update the 10 mg/L sulfate standard that the state of Minnesota has recognized as being incorrect.

Please also recognize that the effects of the aforementioned, unattainable standards are far reaching. The Komatsu facility I run in Virginia, Minnesota employees

approximately 70 employees, we have plans to expand our facility and employee base in the future but neither of these things can happen if our customers aren't allowed to operate moving forward. All we are asking for is science base standards that are attainable and reasonable, nothing more. I live on a chain of lakes approximately 20 miles north of Hibbing Taconite, water quality and environmental impacts from our regional mining facilities is very important to me. I don't think this is a matter of choosing the environment or mining, both can coexist as long as reasonable standards are in place.

Thank you.

Jim Thune

Regional Manager - Iron Range

Komatsu

4100 P&H Road

Virginia, MN 55792

United States

Office +1 218 742 1457

Mobile +1 218 290 1180

james.thune@global.komatsu



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From: [Kenny Kruger](#)
To: [Handeland, Stephanie \(MPCA\)](#)
Subject: Comment on NPDES permits MN0055948 and MN0031879 for U. S. Steel Keetac
Date: Tuesday, September 2, 2025 11:07:32 AM

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Thank you,

Kenny Kruger
Vice President - Sales

DG Supply
P.O. Box 152
11402 Cooper Road
Chisholm MN 55719
Office 218-585-2085
Cell 218-969-2310
kennyk@dgsupply.us

From: [Leann Landrus](#)
To: [Handeland, Stephanie \(MPCA\)](#)
Subject: NPDES permits MN0055948 and MN0031879 for U. S. Steel Keetac
Date: Tuesday, September 2, 2025 10:21:53 AM



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MINNESOTA SULFATE STANDARD

In the early 1970s, the Minnesota Pollution Control Agency (MPCA) adopted a sulfate water quality standard of 10 mg/L for waters used to produce wild rice. For decades it went unused. In the last 15 years, the MPCA has begun to enforce this standard and has drastically increased the number of lakes and rivers across the state where it will be applied. Now, the MPCA has started a public comment process on a permit to enforce that standard. The future of Minnesota mines, local governments and other industries is critically affected by the potential enforcement of that outdated standard.

Scientists and impacted groups – who have worked for years to identify a workable solution – are advocating for a modern standard that is based on science, is proven to result in increased or stable wild rice, provides for site-specific standards, and is financially feasible to implement.

**SUBMIT A
COMMENT
TO THE
MPCA**

**ATTEND
MPCA
PUBLIC
MEETING 9-
3-25**

A map of the state of Minnesota with blue dots indicating bodies of water where wild rice is present.



THE FACTS

Minnesota is the only state/province in North America with a sulfate standard.

Wild rice has been successful in waters with sulfate levels of 1,600 mg/L and beyond.

Many other factors, like iron and carbon content, greatly determine wild rice resilience.

Minnesota has 2,400 wild rice-producing lakes, and no two lakes are the same.

Our state's sulfate standard cannot be one-size-fits-all.

According to the University of Minnesota, no single standard is correct.

HOW WE GOT HERE

The 10 mg/L sulfate standard was enacted in the 1970s based on research from the 1940s. Since then, years of scientific study and MPCA research show that this standard is not based on the best available science. A **2018 Governor's Task Force on Wild Rice** confirmed the need for a more holistic approach to understanding wild rice habitats.

For many businesses and communities, a 10 mg/L sulfate standard is functionally unattainable. As a result, most organizations must request variances to the state's antiquated standard. The MPCA has acknowledged that the sulfate standard is not a one-size-fits-all solution. Variances are a short-term solution, and ultimately the standard needs to be fixed as was required by law in 2011.

From smalltown wastewater facilities to mines employing thousands of Minnesotans, the cost of meeting the current 10 mg/L sulfate standard puts Minnesota at risk. Without a sulfate standard policy that follows modern science, addresses site-specific variables and contains cost, Minnesotans will not achieve the outcomes they deserve – thriving communities, good jobs, clean water AND healthy wild rice. Let's not give up on real solutions.

LEADERS SPEAK ON MINNESOTA'S SULFATE STANDARD

*Iron Ore Alliance, Iron Mining Association
and Range Area Municipalities and Schools
meeting August 19, 2025*

**Chrissy Bartovich,
Senior director of
enviromental, U. S.
Steel Corporation**

**Jake Friend, President,
USW Local 2660**

**Adam Lantz, Mayor of
Chisholm and small
business owner**

Pete Hyduke, Mayor of Hibbing

WHAT WE'RE DOING

Since 1960, U. S. Steel has invested hundreds of millions of dollars in environmental improvement measures. Here's what we're doing to protect our environment, our communities and a thriving Minnesota economy:

- Recently completed a crowd sourcing challenge through Wazoku to engage a global pool of experts on how to solve the sulfate situation at Keetac
- Installed state of the art scrubber technology
- Implemented dust collectors and low NOx burners
- Performing research into innovative sulfate technologies such as permeable reactive barriers

IT'S TIME FOR A REAL STANDARD

Now is the time to bring Minnesota's sulfate standard up to date and protect our environment and the industries our communities rely on. Minnesota must invest time and expertise to get it right.

SUBMIT A COMMENT TO THE MPCA

Send an email to the MPCA in less than one minute following the easy-to-use instructions below. Deadline for public comments is September 22.

1. [Click this link to send an email to stephanie.handeland@state.mn.us at the MPCA.](mailto:stephanie.handeland@state.mn.us)
2. Copy and paste this subject line: *Comment on NPDES permits MN0055948 and MN0031879 for U. S. Steel Keetac*
3. Copy the following message and paste it into the email (personalize as you wish):

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Thank you.

Leann Landrus

PO Box 358

Keewatin MN 55753

218-360-0056

My livelihood depends on the right thing being done here

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From: [Paul Bernier](#)
To: [Handeland, Stephanie \(MPCA\)](#)
Subject: Comment on NPDES permits MN0055948 and MN0031879 for U. S. Steel Keetac
Date: Tuesday, September 2, 2025 8:01:39 AM

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Thank you.

Paul Bernier

1800 Horseshoe lake Road

Grand Rapids, MN 55744

(218)259-2233

Sent from my iPhone

From: [Tawnya Gustafson](#)
To: [Handeland, Stephanie \(MPCA\)](#)
Subject: Sulfate standard
Date: Tuesday, September 2, 2025 10:28:35 AM

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Tawnya Gustafson
403 Rainey Rd
Kelly Lake, MN
55746
218-966-0701

Sent from my iPhone

From: [Wendy McFerran](#)
To: [Handeland, Stephanie \(MPCA\)](#)
Subject: Comment on NPDES permits MN0055948 and MN0031879 for U. S. Steel Keetac
Date: Tuesday, September 2, 2025 1:12:12 PM

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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.

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