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Submitted through public comment form

Minnesota Pollution Control Agency
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Re: Keetac Mine NPDES Permit, Keetac Tailings Basin NPDES Permit, and Sulfate Variance Request

CURE submits this public comment regarding the Minnesota Pollution Control Agency's (MPCA) proposed actions in the above-referenced permitting matters.

CURE does not write to debate the science. Plenty of that has gone on for decades now, and too much time and too many resources have been wasted rehashing something so well-studied. MPCA should not be expected to prove every blade of grass is sickened by a particular effect—the science regarding sulfate/sulfides harming wild rice¹ is beyond question. Site specific standards appeared unworkable and complex when they were being designed, and are totally opaque to the general public—MPCA should continue to stand by the strong science supporting the 10mg/l standard and focus its efforts on effective and efficient enforcement.

Instead, CURE writes to expand upon economic matters that are related to the issue of protecting the environment and public health from sulfate pollution and the deadly mercury pollution it unlocks. The history of this standard and the mining industry argues strongly in favor of enforcement, which will spur innovation in pollution control, driving down costs while employing local workers. The time to finally enforce this standard is now, and MPCA should deny any delay or variance from its planned enforcement in the Keetac NPDES permits.

¹ For the sake of consistency with the state's terminology this comment refers to "wild rice" rather than its older and more established names of Manoomin/Psiñ. CURE hopes that MPCA's collaboration with tribal governments will continue to deepen its understanding of the importance of this plant, and the communities it supports, and further thanks the MPCA for efforts thus far.

1. High time for sulfate pollution to be controlled

The sulfate standard has been the law of the land for more than fifty years,² so there is no reasonable argument for a delay in its enforcement in this case or in any other permit where MPCA purports to regulate discharge to wild rice waters. Moreover, this particular facility has had a sulfate limit in its NPDES permits since 2011 – indeed, the applicable permit standards remain unchanged from the 2011 levels. Depending on your perspective, either U.S. Steel has had 52 years to comply, or it has had 14 years, and either way it is well beyond time for full compliance.

While there is always more data that could be collected, CURE finds it hard to believe that years of data collection will be necessary to support enforcement actions. In order to protect harmed wild rice and communities, MPCA should move up the planned timeline for a “functional equivalent” analysis, and should make clear that functional equivalent pollution discharges – which are prohibited by the permit – will be subject to enforcement as soon as the permit is in force and sufficient data is available. CURE encourages MPCA to prepare its own analysis and not wait on the permittee’s contractor’s analysis, which will likely be delayed and biased in favor of the company’s financial interests.

CURE strongly believes that the compliance timeline can and should be moved up, to require full compliance with sulfate limits at the midpoint of the NPDES permits rather than at year five. MPCA should review all the timelines set out in the permit and shorten them whenever possible in order to achieve compliance as soon as possible. Five years is not protective of the resource, and combined with the more than fifty years of nonenforcement is simply unacceptable.

2. Cost is likely overstated, and pollution control innovation is always opposed

Opponents to MPCA’s denial of the variance appear to point to a high cost of compliance.³ They assert that the costs of environmental cleanup will make each ton of iron ore more expensive to produce, meaning that the facility may have higher operating costs leading to the potential for idling based on economic headwinds. These concerns are overstated and logically flawed.

First, the estimates of cost appear to be overstated and could come in much lower than Barr Engineering estimates.⁴ For example, the technology chosen is both effective and expensive.

² Minnesota Pollution Control Agency, Protecting Wild Rice Waters, <https://www.pca.state.mn.us/air-water-land-climate/protecting-wild-rice-waters#standard>.

³ Fact Sheet at 53, Table 2 (reproducing Table 1 from Barr Engineering analysis of treatment technology costs).

⁴ Any review of Barr Engineering’s analysis should also factor in the company’s longstanding role as a contractor for U.S. Steel, which could impact its objectivity when assessing the value of work that it would normally be contracted to do.

MPCA knows it will work, but it is not the only potential technology that could be trialed. However, MPCA does not forbid U.S. Steel from also incorporating lower cost control technologies that could reduce sulfate in basin waters prior to any reverse osmosis system. Some promising research indicates that sulfate remediation in basin can be done much more cheaply, effectively, and with other beneficial side effects (such as “free” green hydrogen production).⁵ A combination of new technologies and reverse osmosis as an effective backup could greatly reduce the compliance costs for the permittee. The construction and operation costs will not be known until there is actual implementation of this permit.

Secondly, the money spent on environmental compliance is not a hardship for the northern Minnesota construction workers and engineers who will actually work on constructing and maintaining the pollution control technology required by this permit. Just the contrary, the skilled laborers and scientists working to clean up sulfate will see this “cost” as a \$814 million benefit in their own paychecks and in contracts to mining service providers. These jobs have the benefit of being idle-proof – even if the mine is not producing iron (which occurs due to global economic demand more so than local economics) the sulfate control technology will still have to be installed and operated. Pollution never sleeps. As a result, these NPDES permits will create a durable set of jobs for decades, work that many current employees at iron mines would be well qualified to be a part of and use their skills to advance. It does not make sense to view this long-term investment in jobs and pollution control as a negative compared with net profits from a company that is demonstrably sophisticated enough to know how to best maintain profitability and finance construction to minimize costs and maximize profit.

Third, it should be beyond the pale for a business to suggest that it will not clean up a large waste problem in its community that it has caused and plans to continue to cause for years in the future. This is as if a local restaurant proclaimed that it would immediately cease to pay for trash pickup because such fees are making its sandwiches marginally more expensive on the global sandwich market. Any health inspector worth their salt would shut down that business as soon as the garbage started piling up—this would be a no-brainer because such lack of concern for community health and wellbeing is a public nuisance. Uncontrolled sulfate in wild rice waters is not significantly different, except in terms of the scale of the harm.

Indeed, the steel industry has known for quite a while that they actually do have to clean up their own mess, especially and including in this part of the Mesabi Iron Range. In 1913 Swan Lake turned red due to tailings pollution, and local landowners on the lake sued the Wisconsin Steel Company for damage to their property values.⁶ Sixty years before the sulfate standard was

⁵ See ClearWater BioLogic, <https://clearwaterbiologic.com/> (“The Clearwater BioLogic process mimics nature’s way of removing sulfate from the environment using naturally occurring bacteria.”).

⁶ John Baeten, *A Landscape of Water and Waste: Heritage Legacies and Environmental Change in the Mesabi Iron Range at 193* (Jan. 2017), https://www.researchgate.net/publication/319875853_A_Landscape_of_Water_and_Waste_Herit

enacted to protect waters like Hay Lake and Swan Lake, the litigants stated that a red lake was not suitable for any of the uses that they expected from it, and ruined the scenic beauty they had been drawn to.⁷ The company's representative, similar to arguments made in 2025, suggested that the lake was always ruined and that nobody actually used it economically, so they had no harm.⁸ They also inconsistently claimed that the large amount of pollution in the lake didn't harm the fish in the lake.⁹ Science has advanced quite a bit in the past 112 years, but even then the argument came down to bald-faced statements that red water is or isn't good to drink and bathe in. At the time the mining representative also argued: "If the residents of Nashwauk and the citizens of the United States wanted good jobs and modern amenities, environmental quality had to suffer."¹⁰ Ultimately the mining company argued that there was no technological fix to the issue of tailings pollution, and then it proved the opposite by digging a ditch that was essentially the first ever tailings basin on the Iron Range.¹¹ What was once an unthinkable financial burden became a normal cost of doing business for taconite mines.

Today Keetac is currently seeking to expand its own tailings basin.¹² "Activities would involve vertically raising the existing dams and dikes using downstream and modified centerline construction methods, that would extend the dam and dikes beyond the current tailings storage facility's footprint."¹³ U.S. Steel seems capable of complying with pollution standards and building the necessary capture facility to expand its business. It would be ridiculous at this point for Keetac to start open-dumping its tailings on the theory that a tailings basin costs money that may increase the cost of iron produced at the facility. And yet the same argument is just as untenable when applied to known harm from dumping sulfate pollution into nearby waters from uncontrolled tailings basin discharge and seepage.

[age Legacies and Environmental Change in the Mesabi Iron Range](#) (click "Download full-text PDF" to access document).

⁷ *Id.* at 194.

⁸ *Id.* at 195.

⁹ *Id.* at 195-96.

¹⁰ *Id.* at 197. The economic arguments, which are extremely similar to those made today, are detailed more fully in this piece on pages 197 to 199.

¹¹ *Id.* at 199-203.

¹² Minnesota Department of Natural Resources, U.S. Steel Keetac Tailings Storage Facility Project, <https://www.dnr.state.mn.us/input/environmentalreview/keetac-tailings-storage-facility.html>.

¹³ *Id.*

3. Economic headwinds are not MPCA's doing and cannot be fully controlled by any government entity

U.S. Steel recently was sold to a foreign steel company, Nippon Steel, who has promised both to invest heavily in facilities like Keetac,¹⁴ and to not reduce production at these facilities for years. Just this week the Trump administration reportedly blocked a facility idling in Illinois under the company's enforceable national-security commitment.¹⁵ These promises were made in order to seal a deal worth billions of dollars, putting the cost of this technological investment in perspective. Compared with the company and industry's larger business operations, and plans to invest at least \$14 billion in U.S. Steel facilities, pollution control is simply not that costly.

The fact is that demand for Minnesota iron is currently down, largely due to unnecessary trade wars and policies that are depressing demand for American-made cars and trucks.¹⁶ The iron mining industry's profitability is also menaced by the possibility of higher energy rates if Minnesota Power is taken over by private equity interests, who appear poised to increase electric rates in order to make higher profits for their investors.¹⁷ These are all costs and policy issues affecting the industry, and all of them dwarf the potential economic impact of enforcement of a half-century-old water quality standard.¹⁸

MPCA does not control the state's economy, nor does it control global trade flows in and out of the United States and Minnesota. As such, MPCA is not responsible for the many stresses impacting this industry and the entire regional economy. What it is responsible for is keeping Minnesotans healthy, protecting water quality, and making sure that treaty promises made to

¹⁴ *Nippon Steel to invest \$4 billion for new U.S. Steel mill in \$14 billion package*, Reuters reports, Reuters, May 19, 2025, <https://www.cnbc.com/2025/05/20/nippon-steel-to-invest-4-billion-for-new-us-steel-mill-reuters-.html>.

¹⁵ Marc Levy, *The White House says it blocked US Steel's decision to stop processing steel at Illinois plant*, Associated Press, Sept. 22, 2025, <https://apnews.com/article/us-steel-trump-nippon-steel-granite-city-7d9acc7fiaibo8b971b374c40574beec>.

¹⁶ Sarah Cwiek, *An idled Dearborn steel factory tells a larger story about tariffs and the economy*, Michigan Public, July 17, 2025, <https://www.michiganpublic.org/economy/2025-07-17/an-idled-dearborn-steel-factory-tells-a-larger-story-about-tariffs-and-the-economy>.

¹⁷ "Among the critics of the proposed acquisition are the so-called Large Power Intervenor, a coalition of industrial customers of Minnesota Power, including the mining and wood products sectors, who are strongly opposed to the sale, mostly over fears that the new owners will seek higher rates to boost their returns on their investment." Marshall Helmberger, *Proposed sale of Minnesota Power divides typical allies*, Aug. 14, 2025, <https://www.timberjay.com/stories/proposed-sale-of-minnesota-power-divides-typical-allies.23363>.

¹⁸ The electricity costs imposed on the large power customers of Minnesota Power will increase by many billions of dollars in the next twenty years under the plans proposed. Tariffs have even larger implications over a shorter period of time, it seems.

Tribal Nations are kept through state policy and enforcement. It is MPCA's important duty to put these values and lives before economic impacts that are entirely outside of the agency's authority and control. Minnesotans deserve the environmental protections set in law, and to live in a healthy environment, and MPCA is well positioned to help assure that outcome.

4. MPCA's sulfate enforcement must start somewhere

MPCA must enforce this standard. U.S. Steel is particularly well situated to test and implement the control technology necessary to capture large amounts of sulfate pollution. Indeed, with the additional funding and conditions placed upon it through the sale to Nippon Steel, there is not a better opportunity to discover the best route to compliance.

This permit will hopefully show a way for other heavy industries (including the Minnesota Power Boswell coal plant discharging sulfate directly into a wild rice water) that will allow for better and cheaper compliance going forward. If MPCA cannot require this facility to comply with the law then it will ultimately fail to protect our state grain, a treaty-protected resource that is necessary to aquatic and avian species in addition to tribal members and other residents of the Arrowhead. By proving this technology MPCA will also help to demonstrate that the unchecked methylated mercury pollution in the region is potentially addressable – and CURE hopes that the agency will work swiftly to control sulfate from large polluting facilities to the extent that it is unable or unwilling to enforce mercury air pollution limits against the same facilities. Failing to enforce the sulfate standard now would be an abdication of authority and an abandonment of northern Minnesota communities as sacrifice zones.

CURE encourages MPCA to continue in its important work enforcing our laws, deny the variance, and move up the compliance dates so that affected waters can be restored before 2030. Thank you for the opportunity to provide this comment.

Respectfully submitted,

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