

Minnesota Center for Environmental Advocacy

Combined Comments to Minnesota Pollution Control Agency on Draft Keetac Mine NPDES Permit, Draft Keetac Tailings Basin NPDES Permit, and Sulfate Variance Request

September 22, 2025

I. Introduction

Minnesota Center for Environmental Advocacy (“MCEA”) appreciates the opportunity to submit these comments on the Minnesota Pollution Control Agency’s (“MPCA”) draft wastewater permits (National Pollutant Discharge Elimination System/State Disposal System) for United States Steel Corp – Keetac (the “Mine”) and US Steel – Tailings (“Tailings Basin”), together referred to as the “Draft Permits,” as well as the Facility-specific Preliminary Determination: Water Quality Standard Variance for Sulfate (“Preliminary Determination”).

MPCA has an obligation to protect the water quality of surface and groundwater near the Mine and Tailings Basin through the NPDES/SDS permits. MPCA has done just that by issuing its Preliminary Determination to deny US Steel’s variance request. MCEA appreciates MPCA’s Preliminary Determination and urges MPCA to make this permanent in its final determination on the variance request.

There are, however, also areas where the Draft Permits could be strengthened. To further avoid adverse effects to the water quality in wetlands, streams, rivers, and lakes, MCEA recommends several adjustments to the Draft Permits, including:

- Accelerating deadlines for meeting standards for sulfate emissions;
- Adding specific deadlines for regulating functionally equivalent discharges; and
- Adding provisions that anticipate timely permit modifications based on monitoring data for nitrogen, mercury, and PFAS.

II. MPCA Should Confirm its Preliminary Determination That Neither the Mine Nor the Tailings Basin Should Receive a Variance for Sulfate

A. Minnesota's Water Quality Standards Provide Heightened Protections for Waters Used for Wild Rice Production.

MPCA's administrative rules recognize the importance of wild rice for humans and wildlife alike.¹ Reflecting wild rice's critical status in our state, Minnesota Rule 7050.0224, subpart 1 provides that "[t]he quality of these [designated wild rice] waters and the aquatic habitat necessary to support the propagation and maintenance of wild rice plant species must not be materially impaired or degraded."² In addition, MPCA set a 10 mg/L limit for sulfates in "water used for production of wild rice during periods when the rice may be susceptible to damage by high sulfate levels."³ MPCA has an obligation under state and federal law to enforce this standard under the Clean Water Act, and inclusion of sulfate limits in this permit is an important step toward fulfilling that obligation.

The wild rice standard serves two important purposes: safeguarding treaty-protected wild rice, and the prevention of mercury exposure. First, as MPCA heard from multiple community members during the September 3, 2025, meeting in Virginia, Minnesota, Manoomin (wild rice) is not just sustenance. It is a part of the culture and tradition of the Tribes that live within Minnesota, and it is protected – including in ceded territories off-reservation where usufructuary rights were reserved – under a series of treaties the United States signed with the Tribes. MCEA echoes the calls of speakers from the Tribes at the public meeting for MPCA to enforce the wild rice standard to protect this valuable cultural resource. Strong protections for wild rice are necessary to comply with treaty obligations, something that the United States has frequently failed to do when it comes to treaties with Tribes.

Second, enforcing the wild rice standard is critical to protecting humans and the environment from mercury pollution. High concentrations of sulfates contribute to the formation of methylmercury.⁴ "Methylmercury bioaccumulates in . . . fish and shellfish,"

¹ Minn. R. 7050.0224, subp. 1.

² *Id.*

³ *Id.* subp. 2.

⁴ Emily Onello, et al., *Sulfide Mining and Human Health in Minnesota*, MINNESOTA MEDICINE 51, 53 (2016), https://www.savetheboundarywaters.org/sites/default/files/attachments/25-onello-emily-m.d._mmajournal_sulfidemininghumanhealthin-mn-11-2016.pdf (MCEA Ex. 1).

and humans are exposed to mercury through consumption of fish and shellfish that have elevated levels of methylmercury.⁵ The impact on Minnesotans is significant; the Minnesota Department of Health released a study showing that 8% of newborns in the Lake Superior Basin from 2008 to 2010 had elevated levels of methylmercury in their systems.⁶ Mercury emissions also have a disparate impact on Native communities due to their reliance on fish and wild rice.⁷ Although the vast majority of the mercury comes from atmospheric deposition,⁸ any contribution of sulfate may cause increased concentrations of methylmercury. In addition to the impacts on wild rice, MPCA should enforce the wild rice standard to protect human health from the negative impacts of methylmercury.

B. MPCA Correctly Determined that Neither the Mine nor Tailings Basin are Eligible for a Variance and Should Formalize this Finding in the Final Permits

For both the Mine and the Tailings Basin, US Steel submitted a variance request regarding the sulfate standard for waters used for wild rice production.⁹ In its Preliminary Determination, MPCA properly concluded that neither the Mine nor the Tailings Basin qualified for a variance.¹⁰ As MPCA combined the Preliminary Determination for the Mine and Tailings Basin, we do so as well.

⁵ World Health Organization, *Mercury* (Oct. 24, 2024), <https://www.who.int/news-room/fact-sheets/detail/mercury-and-health> (MCEA Ex. 2).

⁶ MINN. DEP'T OF HEALTH, *MERCURY LEVELS IN BLOOD FROM NEWBORNS IN THE LAKE SUPERIOR BASIN* 11 (2011), <https://www.health.state.mn.us/communities/environment/fish/docs/glnpo.pdf> (MCEA Ex. 3).

⁷ Lylla Younes, *Tribes in Minnesota are Paying the Steepest Price for the Steel Industry's Mercury Pollution*, GRIST (July 17, 2024), <https://grist.org/accountability/tribes-minnesota-steel-industry-mercury-pollution/> (MCEA Ex. 4).

⁸ MINN. POLLUTION CONTROL AGENCY, *MINNESOTA STATEWIDE MERCURY TOTAL MAXIMUM DAILY LOAD* vi (2007), <https://www.pca.state.mn.us/sites/default/files/wq-iw4-01b.pdf> (internal citation omitted).

⁹ See *Application for a Variance from the Class 4A Sulfate Water Quality Standard for Waters Used for Production of Wild Rice: NPDES/SDS Permit Nos. MN0055948 and No. MN0031879*, U.S. STEEL (MAY 28, 2025), https://scs-public.s3-us-gov-west-1.amazonaws.com/env_production/oid333/did200071/pid_211787/project-documents/APPLICATION%20FOR%20VARIANCE%20FROM%20CLASS%204A%20SULFATE.pdf (requesting variances for both the Mine and Tailings Basin and including the report prepared by Barr Engineering Co.) [hereinafter *US Steel Variance Request*].

¹⁰ See Minn. Pollution Control Agency, *Water Quality Program Facility-Specific Preliminary Determination Water Quality Standard Variance for Sulfate: United States Steel Corporation U.S. Steel Keetac Facility and Tailings Basin: Permits MN 0031879 and MN 0055948*,

MPCA allows polluters to request a variance from specific Minnesota water quality standards.¹¹ According to the Minnesota Rules, a variance is a “*temporary change in a state water quality standard for a specified pollutant that reflects the highest attainable conditions for a permittee during the term of the variance.*”¹² Importantly, a variance cannot be granted if it would remove an existing use; for example, a variance could not be granted if it would result in wild rice no longer being able to be grown in wild rice waters.¹³ A variance, accordingly, is not simply a “get out of pollution free” card for dischargers—it must be limited in time, must still limit pollution to the highest extent attainable, and must not result in a drop in water quality that would not allow for an existing use of a particular water body.

To obtain a variance, a permittee must demonstrate that attaining a water quality standard “is not feasible” for one of six specific reasons, including because of human-caused pollution that cannot be remedied or because compliance would result in substantial and widespread negative economic and social impacts.¹⁴ In addition, the permittee must demonstrate that the variance will (1) comply with Minnesota’s antidegradation standard and other rules, (2) protect public health, safety, and welfare, and (3) reflect the “highest attainable conditions for a permittee during the term of the variance.”¹⁵

US Steel has requested a variance for 10 years—longer than the listed term of the draft NPDES permits—that would allow it to discharge calendar month maximums of 34.1 mg/L, 101.2 mg/L, 163.2 mg/L, and 218.4 mg/L at various outfalls, plus unlimited sulfate discharge at an as-yet unconstructed outfall.¹⁶ This is compared to the proposed permit limit of just 14 mg/L as a monthly average and 24 mg/L as a daily maximum. US Steel calculated these proposed variance limits not by determining the “highest attainable conditions” it could meet, but instead by *adding 20% to its “maximum recorded sulfate concentration from the past five years.”*¹⁷ In other words, US Steel seeks a variance that

https://scs-public.s3-us-gov-west-1.amazonaws.com/env_production/oid333/did200071/pid_211787/project-documents/US%20Steel%20Keetac%20Sulfate%20Variance%20Preliminary%20D.pdf (last visited Sept. 18, 2025) (emphasis added) [hereinafter *MPCA Preliminary Determination*].

¹¹ See Minn. R. 7050.0190, subp. 1.

¹² *Id.* (emphasis added).

¹³ *Id.* subp. 1(C).

¹⁴ *Id.* subp. 4(A).

¹⁵ *Id.* subp. 4(B)-(D).

¹⁶ *US Steel Variance Request*, at 1.

¹⁷ *Id.* (emphasis added).

would allow it to *increase* its sulfate pollution for 10 years, rather than making any efforts whatsoever to curb this pollution, as must be required for a variance. Critically, US Steel acknowledges the existence of technology that makes it possible to comply with the wild rice standard.¹⁸ US Steel's variance request details its Preliminary Alternatives Identification Plan, which describes the mechanism through which it could comply with this standard.¹⁹ Accordingly, US Steel cannot assert that achieving the standard is technically impossible. Instead, US Steel sought variances under Factor 3 and Factor 6, discussed here in turn.

Under Factor 3 a variance may be granted if the permittee demonstrates that "attaining the water quality standard is not feasible because . . . human-caused conditions or sources of pollution prevent attainment of water quality standards, and the conditions or sources cannot be remedied or would cause more environmental damage to correct than to leave in place."²⁰ Regarding the first clause, MPCA highlighted that these "variances are typically considered in cases where the pollution is from an indirect cause, outside the control of the permittee. *This does not describe circumstances where the requestor's processes and discharge itself is the cause of the pollution preventing attainment of the use.*"²¹ MPCA correctly concluded that US Steel's variance request did not meet this threshold as it failed to demonstrate how it was other human-caused pollution, and not US Steel's own discharges, that made compliance unfeasible.²² With respect to the second clause, MPCA correctly determined that (1) US Steel's variance request admitted the pollution could be remedied through treatment and (2) US Steel's argument that treatment would create environmental costs through increased carbon emissions and waste production failed to "address the benefits of treatment."²³ As a result, US Steel does not meet either requirement for a Factor 3 variance.

¹⁸ *Id.* at 16. *See also id.* at 21 (noting that "[b]ased on previous studies and pilot testing, the proposed water treatment technology should be capable of consistently achieving these sulfate limits.").

¹⁹ *Id.* at 21 ("The base water treatment system (WTS) will utilize nanofiltration (NF) membrane technology. The NF units are expected to separate over 95% of the feedwater sulfate into an NF reject stream. The treated water, NF permeate stream, will have a sulfate concentration lower than 14 mg/L."). *See also id.* Appendix B (Preliminary Alternatives Identification Plan).

²⁰ Minn. R. 7050.0190, subp. 4(A)(3).

²¹ MPCA *Preliminary Determination*, at 4.

²² *Id.* at 4-5.

²³ *Id.* at 5.

Factor 6 provides for a variance if the permittee demonstrates that meeting the standard is not feasible because the restrictions, which must be more stringent than the relevant sections of the Clean Water Act, “would result in substantial and widespread negative economic and social impacts.”²⁴ In assessing US Steel’s financial status, MPCA found that all four factors used to determine US Steel’s financial situation – profit rate, current ratio, Beaver’s ratio, and debt-to-equity ratio – supported a conclusion that US Steel could, in fact, pay for the pollution control measures to comply with the wild rice standard.²⁵ MPCA properly determined that the entity “has sufficient profits to pay for pollution control costs, and therefore substantial impacts on [US Steel] will not result from compliance with the water quality standards.”²⁶

In its analysis of the economic and social impacts, US Steel sets up a false choice for MPCA – protect water quality or protect the jobs of US Steel’s employees.²⁷ In fact, the information from US Steel itself indicates that the Keetac has the resources to install the technology required to protect water quality and wild rice. US Steel itself indicated that the profit rate would be identical – .07 percent – with or without the pollution control measures required to comply with the sulfate standard.²⁸ Although US Steel’s analysis indicates that compliance “would decrease profits by 9% in 2024,”²⁹ this figure (1) is specific to the Keetac facility, and does not signify a loss of the company’s overall profits, and (2) indicates that while the Mine may be less profitable, US Steel would still be making a profit *without impacting employment or wages*. MPCA has already determined, *based on documentation provided by US Steel itself*, that the company has the ability to pay for technology required to comply with this standard. The company should not take this money from the employees and contractors who support Keetac when it has the financial ability to bear the costs itself.³⁰

²⁴ Minn. R. 7050.0190, subp. 4(A)(6).

²⁵ MPCA Preliminary Determination, at 6-7.

²⁶ *Id.* at 6.

²⁷ US Steel Variance Request, at 16.

²⁸ *Id.* at 100-101; MPCA Preliminary Determination, at 6-7.

²⁹ US Steel Variance Request, at 15.

³⁰ In addition, US Steel’s economic argument fails to acknowledge that it has financially *benefitted* because it has not been required to comply with the wild rice standard over the past fifty years, since the standard was adopted in 1973. Permittees should not be allowed to delay compliance with an environmental standard in perpetuity by asserting that doing so would lower profits when in fact their profits have been artificially inflated for years because they were not required to comply with a standard.

While Nippon Steel recently purchased US Steel, this should not undermine MPCA's analysis of the financial viability of the pollution control measures. On the contrary, the deal includes language intended to provide protections for Keetac's workers. Nippon Steel has pledged to "make approximately \$11 billion in new investments in U.S. Steel by 2028,"³¹ and reports indicate that \$800 million of those investments will be directed to the Iron Range.³² In addition, the deal called for the company to "maintain base salaries of current employees until 2030" and to "safeguard against plant closures, idles or sales up to June 18, 2035," including at Keetac.³³ If anything, Nippon Steel's acquisition of US Steel improves its financial status, further establishing that neither the Mine nor Tailings Basin qualify for a variance under Factor 6.

Although not specific to the Factor 3 or 6 analysis, MCEA also wishes to address arguments raised by the facility and supporters regarding perceived inequities in enforcement of the wild rice standard. US Steel's application for the variance indicated that "[t]he costs required to come into compliance with the draft permit conditions present a substantial economic hardship, notably one that others in the industry and within the state do not share."³⁴ Several individuals who spoke during the public meeting suggested that it was unfair for Keetac to be forced to comply with the wild rice standard when wastewater treatment plants did not have to do so. As MPCA addressed during the meeting, variance determinations on other facilities have not been completed, and speculative determinations regarding wastewater treatment plants have no bearing on US Steel's variance request. When variances for wastewater treatment plants are considered, they will be evaluated according to the same variance criteria applied to US Steel's request—meaning that US Steel will not, in fact, be treated differently. For a public entity like a wastewater treatment plant, analysis of the "substantial and widespread

³¹ *Nippon Steel Corporation and U.S. Steel Finalize Historic Partnership*, UNITED STATES STEEL (June 18, 2025), <https://www.ussteel.com/newsroom/-/blogs/nippon-steel-corporation-and-u-s-steel-finalize-historic-partnership> (MCEA Ex. 5).

³² Jerry Burns, *What the U.S. Steel Sale Means for Minnesota's Iron Range*, IRON RANGE TODAY (June 19, 2025), <https://ironrangetoday.com/2025/06/19/what-the-u-s-steel-sale-means-for-minnesotas-iron-range/> (MCEA Ex. 6); Lee Bloomquist, *A Massive Investment in Minnesota's Iron Range*, MESABI TRIBUNE (May 28, 2025), https://www.mesabitrribune.com/news/a-massive-investment-in-minnesotas-iron-range/article_43af179e-2822-4e0c-9b3c-aeb4b0d292ba.html (MCEA Ex. 7).

³³ Jerry Burns, *What the U.S. Steel Sale Means for Minnesota's Iron Range*, IRON RANGE TODAY (June 19, 2025), <https://ironrangetoday.com/2025/06/19/what-the-u-s-steel-sale-means-for-minnesotas-iron-range/> (MCEA Ex. 6).

³⁴ *US Steel Variance Request*, at 14 (emphasis added).

negative economic and social impacts” that would result from compliance can, and should, be conducted differently, but that does not mean that doing so treats US Steel unfairly. The analysis of potential economic and social impacts is inherently different for these types of facilities; wastewater treatment plants do not produce pollution in pursuit of profit—they treat and deal with pollution that was created by other actors to promote the public interest.

In sum, MPCA’s Preliminary Determination regarding the variance request correctly finds that neither the Mine nor the Tailings Basin should receive a variance because US Steel has not demonstrated that (1) the pollution is due to a human-caused condition other than the mine/tailings basin themselves or (2) that compliance with applicable water quality standards would cause substantial economic impacts. As a result, MPCA should formalize its decision in a final determination denying the variance request.

III. MPCA Should Provide an Accelerated Deadline for Compliance with the Sulfate Standard in the Final Permits.

Although the Preliminary Determination recommended against granting US Steel variances for water quality standards related to sulfate in waters used for wild rice production, discussed above, the Draft Permits provide a deadline for compliance with the sulfate standard of April 30, 2030.³⁵ While the Draft Permits state that compliance should occur “as soon as possible,” with April 30, 2030 as a final deadline,³⁶ US Steel has no incentive to meet the sulfate standard before the deadline.

In addition to the April 2030 overall deadline, the Draft Permits also provide inappropriate interim deadlines for compliance. The Draft Permits state that US Steel must provide a “Sulfate Treatment/Mitigation Alternatives Evaluation Plan” by March 1, 2026, with a “Final Sulfate Compliance Plan” to be submitted by December 1, 2026.³⁷ The Draft Permits set the final sulfate effluent limits at a monthly average of 14 mg/L,

³⁵ See Minn. Pollution Control Agency, *National Pollution Discharge Elimination System/State Disposal System: MN0031879* at 17, 19, 40, https://scs-public.s3-us-gov-west-1.amazonaws.com/env_production/oid333/did200071/pid_211787/project-documents/Draft%20Permit.pdf (last visited Sept. 18, 2025) [*hereinafter Draft Mine Permit*]; Minn. Pollution Control Agency, *National Pollution Discharge Elimination System/State Disposal System: MN 0055948* at 21, 23, 46, https://scs-public.s3-us-gov-west-1.amazonaws.com/env_production/oid333/did200071/pid_211798/project-documents/Draft%20Permit.pdf (last visited Sept. 18, 2025) [*hereinafter Draft Tailings Basin Permit*].

³⁶ See *Draft Mine Permit*, at 17, 19, 40; *Draft Tailings Basin Permit*, at 21, 23, 46.

³⁷ *Draft Mine Permit*, at 17, 39; *Draft Tailings Basin Permit*, at 21-22, 45-46.

with a maximum of 24 mg/L³⁸—the same limitations that were included in the original permits from 2011. US Steel has had years to work towards compliance; in addition, it has had three years since the EPA informed MPCA that it needed to enforce the wild rice standard.³⁹ Taconite mining companies have also known about the issue of sulfate pollution from mining for decades, with one former miner providing public comment to the MPCA in Virginia, Minnesota describing sulfate pollution as the industry’s “dirty little secret.” US Steel also has already identified the technology necessary to meet the standard,⁴⁰ so a lengthy planning time is unnecessary. MPCA should not give US Steel an additional five years to comply with this standard when it has already been in the previous permit for more than 14 years, and US Steel has minimally known for the last three years since the EPA letter that MPCA is obligated to enforce the standard. Instead, MPCA should work with US Steel to set forth a shorter timeline, potentially with a final compliance plan by March 1, 2026, and full compliance within three years of the permit issuance.

The limitation for sulfates in waters “used for the production of wild rice during periods when the rice may be susceptible to damage by high sulfate levels” is strictly set at 10 mg/L.⁴¹ Under the Clean Water Act, this is a federal standard with which US Steel must comply, and MPCA must enforce. It is critical to enforce this standard both to preserve the treaty-protected wild rice and protect humans from mercury pollution. MPCA has already made the Preliminary Determination that neither the Mine nor the Tailings Basin should receive a variance⁴² (a finding which should be formally reflected in the final permits). As such, the final permits should not provide five years for compliance with the existing standard for which US Steel does not have a variance.

IV. MPCA Should Include Deadlines for Compliance with the Functional Equivalence Analysis

In 2020, in *County of Maui v. Hawaii Wildlife Fund*, the U.S. Supreme Court determined that a discharge from a facility to groundwater must be regulated by a

³⁸ See *Draft Mine Permit*, at 17, 19, 40; *Draft Tailings Basin Permit*, at 21, 23, 46.

³⁹ Letter from Debra Shore, Regional Administration & Great Lakes National Program Manager, EPA, to Katrina Kessler, Commissioner, MPCA (Feb. 16, 2022), <https://www.epa.gov/system/files/documents/2022-02/mn-sulfate-session-laws-final-ltr-021622.pdf> (MCEA Ex. 8).

⁴⁰ See *US Steel Variance Request*, Appendix B.

⁴¹ Minn R. 7050.0224, subp. 2.

⁴² See *MPCA Preliminary Determination*.

NPDES permit if it is the “functional equivalent” of a discharge to groundwater.⁴³ The following year, the Minnesota Supreme Court explicitly stated that MPCA must conduct a functional equivalence analysis for the NPDES permit for US Steel’s other taconite tailings basin at the Minntac mine.⁴⁴ Following the instructions from these cases, MPCA must now determine whether discharges from the Keetac tailings basin are the functional equivalent of discharges to surface water.

Despite having years to prepare for this analysis, however, MPCA apparently did not gather, or require US Steel to gather, the information needed. Now that the permit is being reissued, this lack of information means that MPCA is only asking US Steel to collect monitoring data from surface water stations, internal waste stream stations, and surface discharge stations for two years, and then to itself conduct a functional equivalence analysis, which is due “180 days prior to permit expiration.”⁴⁵ This is insufficient, as it allows US Steel to continue, unchecked, any discharges that are the functional equivalent of a discharge to surface waters for at least five years, and potentially far longer.

First, it is unclear from the information in the permit whether the monitoring information US Steel gathers will be sufficient to conduct an appropriate functional equivalence analysis. Apparently, the monitoring information collected by Keetac under its previous NPDES permit was insufficient to conduct this analysis, and MPCA must ensure that more useful information is collected over the next five-year period so that the analysis can be conducted. Accordingly, the Draft Tailings Basin Permit should provide more specific guidance to US Steel to ensure that it collects information that will allow for a fair and robust *Maui* analysis, including information relating to all seven factors identified in the case.

Second, US Steel should not be the party conducting the functional equivalence analysis in the first instance. While US Steel may be required to gather the data, an unbiased analysis should be performed by the regulator, not the regulated party. Notably, the Minnesota Court of Appeals instructed MPCA to conduct the *Maui* analysis in the *Minntac* case – not to ask US Steel to do so.⁴⁶

⁴³ See *Cnty. of Maui, Hawaii v. Hawaii Wildlife Fund*, 140 S. Ct. 1462 (2020).

⁴⁴ *Matter of Reissuance of an NPDES/SDS Permit to United States Steel Corp.*, 954 N.W.2d 572, 582 (Minn. 2021).

⁴⁵ *Draft Tailings Basin Permit*, at 26.

⁴⁶ *Matter of Reissuance of NPDES/SDS Permit to United States Steel Corp.*, No. A18-2094, 2021 WL 2645505, at *7 (Minn. Ct. App. June 28, 2021) (“[W]e also remand for the MPCA to

Finally, and most importantly, MPCA should provide clear deadlines for regulation of any functionally equivalent discharges. Under the Draft Permit, US Steel has two years to collect monitoring data, and then another two and a half years to conduct the functional equivalence analysis.⁴⁷ The information is then due to MPCA 180 days before the expiration of the permit's five-year term,⁴⁸ ostensibly so that MPCA could regulate any functionally equivalent discharges in a new permit. However, as all parties are aware, this Draft Permit is likely to remain in effect far longer than its five-year term. *Maui* was already decided five years ago, but US Steel was required to do nothing to regulate its discharges during those five years. Under the Draft Tailings Basin Permit, US Steel is receiving *another* five-year reprieve from having any functionally equivalent discharges regulated. And because of MPCA's record of failing to promptly update expired NPDES permits, US Steel could then receive *another* years' long—or even decades' long—reprieve before any limits might be included in its next permit. This is not how the Clean Water Act is supposed to work.

Instead, MPCA should (a) require US Steel to gather and submit the necessary information within two years of permit issuance, (b) conduct a functional equivalence analysis itself over the subsequent 12 months, and (c) indicate in the Draft Tailings Basin Permit that the process of permit modification to impose limits on functionally equivalent discharges will be begun, if appropriate based on the analysis, over the next 12 months. This would ensure that during the actual term of the Draft Tailings Basin Permit, progress is made toward regulating groundwater discharges instead of merely allowing them to continue unchecked potentially for decades.

V. The Draft Permits Improperly Focus on Data Collection in Lieu of Actionable Requirements to Reduce Pollution.

The Draft Permits contain useful monitoring provisions, but they provide no pathway for the monitoring data to be used during this permit cycle. As these permits may control discharges for decades,⁴⁹ it is imperative that the final permits include not

conduct the functional-equivalence analysis under the standards set forth in *County of Maui*.”).

⁴⁷ *Draft Tailings Basin Permit*, at 26 (noting that “The [functionally equivalent] evaluation shall include an analysis of monitoring data collected for a minimum of two years” and that the analysis is “due 180 days prior to permit expiration”).

⁴⁸ *Id.*

⁴⁹ See, e.g., Dan Kraker, *State Officials Issue Permit for Minntac Tailings Basin*, MPR NEWS (Nov. 30, 2018), <https://www.mprnews.org/story/2018/11/30/minntac-minnesota->

just monitoring requirements, but actionable steps to reduce pollution if it is identified. The lack of substantive permitting requirements is especially concerning regarding nitrogen, mercury, and PFAS, but also applies to other pollutants.

Under the Minnesota Rules, MPCA has the authority to modify a permit if the agency receives previously unavailable information that shows the permit terms “do not accurately represent the actual circumstances” of the permitted facility, or if the agency “finds the permitted facility . . . endangers human health or the environment” and a change in its operation would remove that danger.⁵⁰ If the monitoring activity demonstrates that the Mine or Tailings Basin are discharging nitrogen, mercury, or PFAS that could cause or contribute to violations of water quality standards, MPCA should make it clear at the beginning of the permit term that it will modify the permit to impose water quality based effluent limits, instead of merely requiring monitoring.

MPCA has identified nitrogen, mercury, and PFAS as pollutants of concern. The agency’s new draft Nutrient Reduction Strategy continues to call for a 45% reduction in total nitrogen to the Mississippi River drainage basin by 2040, compared to the 1980-1996 baseline;⁵¹ the Mercury Total Maximum Daily Load (Mercury TMDL), while focusing on air emissions, highlights the negative impact of mercury on our waters, fish, and health, and seeks to drastically reduce mercury pollution;⁵² and MPCA has issued updated guidance on monitoring for PFAS and risks to human health.⁵³

Even though MPCA has made reduction of these pollutants a priority, the Draft Permits include only cursory monitoring requirements for nitrogen and mercury,⁵⁴ and an inventory for PFAS.⁵⁵ For nitrogen and mercury, the Draft Permits do not explicitly

issues-permit-tailings-basin (noting that Minntac had been operating on a permit that expired in 1992) (MCEA Ex. 9).

⁵⁰ Minn. R. 7001.0170(B), (F).

⁵¹ Minn. Pollution Control Agency, *Minnesota Nutrient Reduction Strategy – Draft*, at 20 (July 2025), available at <https://www.pca.state.mn.us/sites/default/files/wq-s1-87a.pdf>.

⁵² See MINN. POLLUTION CONTROL AGENCY, MINNESOTA STATEWIDE MERCURY TOTAL MAXIMUM DAILY LOAD (2007), <https://www.pca.state.mn.us/sites/default/files/wq-iw4-01b.pdf>

⁵³ See generally Minn. Pollution Control Agency, *PFAS Monitoring Plan: Initial Findings and Next Steps* (May 2024), <https://www.pca.state.mn.us/sites/default/files/p-gen1-22h.pdf>; Minn. Pollution Control Agency, *PFAS*, <https://www.pca.state.mn.us/pollutants-and-contaminants/pfas> (last visited Sept. 18, 2025).

⁵⁴ See *Draft Mine Permit*, at 16, 42-47, 49; *Draft Tailings Basin Permit*, at 19, 49-54.

⁵⁵ *Draft Mine Permit*, at 22-23, 40-41; *Draft Tailings Basin Permit*, at 27.

contemplate future permit modifications based on the results of the monitoring data. Additionally, the Draft Permits only require nitrogen monitoring once per *year*.⁵⁶ In light of the risks posed by these pollutants, MPCA should (1) increase the monitoring requirements to ensure representative samples and (2) explicitly include a notation in the permit that indicates that the agency will modify the permits if appropriate based on the data from the monitoring process.

MCEA is grateful for the inclusion of the PFAS inventory in the Draft Permits. Nevertheless, the Draft Permits fail to include next steps upon identification of PFAS. MCEA recommends that MPCA include language in the Draft Permits indicating that MPCA will modify the permits in the future to reflect results of the PFAS inventory, which could include monitoring requirements or other mitigation measures.

In sum, the current Draft Permits' monitoring provisions set the stage for future permit requirements without providing meaningful requirements with respect to nitrogen, mercury, and PFAS in *these* permits. Although the monitoring data may be useful in determining future limits and mitigation requirements, the reality is that these permits may remain in place for a considerable time. As a result, Minnesotans may not see the benefit of the monitoring data and accompanying future permit requirements for decades. Instead of waiting for an as-yet undetermined future permit, MPCA should include specific language in the final permits regarding the potential use of the monitoring data to modify permits requirements for the above-discussed pollutants, if monitoring information shows limits are needed.

VI. Conclusion

The Draft Permits represent an opportunity for MPCA to avoid and mitigate adverse impacts on the quality of wetlands, streams, rivers, and lakes near the Mine and Tailings Basin. To fulfil its mandate, MPCA should affirm its Preliminary Determination that neither the Mine nor the Tailings Basin qualify for variances with respect to the sulfate limit for waters used in wild rice production; provide an accelerated deadline for compliance with the sulfate standard; ensure functionally equivalent discharges are regulated before the end of the five-year permit term; and add explicit notations regarding the potential permit modifications in response to monitoring data. At a time when Minnesota is facing even more dangerous mining proposals, it's critical for MPCA to ensure strong environmental protections from the existing mines in the state.

⁵⁶ See *Draft Mine Permit*, at 43-46; *Draft Tailings Basin Permit*, at 49, 51, 53.

Respectfully submitted,

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