



Fond du Lac Band of Lake Superior Chippewa Resource Management Division

Administration; Conservation Enforcement; Environmental; Fisheries
Forestry; Land Information; Natural Resources; Wildlife

Stephanie Handeland
Minnesota Pollution Control Agency
520 Lafayette Rd N Saint Paul MN 551554194
stephanie.handeland@state.mn.us

September 22, 2025

Re: Reissuance of NPDES/SDS Permits MN0031879, MN0055948, and Preliminary Determination to deny Variance from Class 4A sulfate water quality standard

Ms. Handeland:

The Fond du Lac Band of Lake Superior Chippewa (the Band) appreciates this opportunity to provide comments on the Minnesota Pollution Control Agency (MPCA) reissuance of draft NPDES/SDS permits for the US Steel Keewatin Taconite (Keetac) Mine Area (MN0031879) and Tailings Basin (MN0055948) facilities, and the agency's preliminary determination to deny US Steel's request for a variance from the class 4A water quality standard (WQS) of 10 mg/L sulfate, applicable to waters used for the production of wild rice. The Band is a federally recognized Indian tribe that retains hunting, fishing, and other usufructuary rights that extend throughout the entire northeast portion of the state of Minnesota under the 1854 Treaty of LaPointe¹ (the "Ceded Territory").

Additionally, the Band has delegated water quality regulatory authority under §303(c) and §401 of the Clean Water Act (CWA) and has comprehensive water quality standards approved by the US Environmental Protection Agency (EPA) applicable to the waters of our reservation. The Band implements our water quality standards to be as protective as possible of all designated beneficial uses for our surface water resources, including aquatic life, cultural, recreational, ceremonial and subsistence uses. Although the Keetac facility lies predominantly outside our watershed and the boundaries of the 1854 Ceded Territory, the Band has long engaged with the MPCA on environmental review and permitting actions at this facility as its legacy environmental impacts continue to affect resources of critical importance to tribal members throughout Minnesota.

The Band appreciates the opportunities we have had to communicate with MPCA technical staff through the development of these NPDES permits, and submits the following

¹ Treaty with the Chippewa, 1854, 10 Stat. 1109, in Charles J. Kappler, ed., *Indian Affairs: Laws and Treaties*, Vol. II (Washington: Government Printing Office, 1904), available on-line at <http://digital.library.okstate.edu/kappler/Vol2/treaties/chi0648.htm> (last visited March 15, 2016).

comments, questions and concerns regarding the requirements defined in the draft permits and accompanying fact sheets:

PFAS Inventory Requirement

The Band is supportive of the new permit requirement for the company to conduct an inventory of PFAS compounds, and the clarification from an earlier permit draft that this inventory is due 18 months after permit issuance. Chemical additives are used at Keetac to treat make-up water for the recirculating non-contact cooling water system (corrosion inhibitors, descalers, and microbiocides), the wet scrubber and blowdown treatment system (pH control, coagulation, sulfate removal and clarification), and the vacuum seal water system and kiln (corrosion inhibitors/descalers). Chemical additives are also used in the reverse flotation process for beneficiation of blast furnace grade pellets (a collector, a frother, and a defoamer). Given the extensive list of chemical additives described for various facility processes, it is possible that PFAS compounds may be a component of these facility process waste streams, and it is currently unknown whether there may be a discharge/release to environment. This inventory is the necessary first step for informing future monitoring requirements and potentially new discharge limits, as the science behind the human health and ecological risk associated with various PFAS compounds further progresses.

New Surface Water Quality Monitoring Requirements

The Band is satisfied to see that both draft permits contain a substantial number of new parameter monitoring requirements, at various new and existing surface water and internal waste stream monitoring locations. These new data may inform the need for future effluent limits (i.e., nitrogen); for consistency with Minnesota's nutrient reduction strategy (i.e., phosphorus); and for conducting a functional equivalency analysis (required by regulators to consider whether discharges of wastewater from a facility to groundwater are functionally equivalent to direct discharges of the wastewater to surface water).

Additional mine site parameter monitoring requirements include sulfate, total dissolved solids (TDS), specific conductance (SC), nitrite + nitrate nitrogen, total Kjeldahl nitrogen (TKN), total nitrogen (TN) and total phosphorus (TP); dissolved mercury along with total suspended solids (TSS) (according to *MPCA Permitting Strategy for Addressing Mercury in Municipal and Industrial Wastewater Permits* (2013)). Mercury is also monitored in response to statewide mercury total maximum daily load or TMDL, approved by the USEPA in 2008.

Additional tailings basin monitoring requirements are established (SD 001, SD 005) for calcium, total iron, magnesium, potassium, sodium, manganese, chloride, alkalinity, fluoride, TDS, SC and oxidation reduction potential, to aid in determination of whether the tailings basin seepage is a functional equivalent of point source discharge. Sulfate monitoring is also required twice/month to demonstrate compliance with interim and final water quality-based effluent limits or WQBELs.

Whole Effluent Toxicity Testing

The Band appreciates seeing the requirement for quarterly Chronic Whole Effluent Toxicity Testing (WET testing) commencing in year 3 of the permit, at SD 001, SD 005, SD 009, rather than waiting until after the final WQBELs become effective. This change from an earlier draft permit is consistent with EPA's recommendation, in order to assess the need for future WQBELs.

Biological Monitoring

Biological (fish and benthic macroinvertebrates) monitoring in the Hay Creek watershed is a new requirement in the tailings basin permit, but it is only required to be conducted once during the five-year permit period. The MPCA watershed assessment team concluded, based upon a single sampling effort in 2015, that the fish community IBI score was excellent, but the macroinvertebrate IBI score for one of the sites was below the general use threshold and at the lower confidence interval of the macroinvertebrate IBI criteria.

There has been a 23-point decline in the macroinvertebrate IBI score at the site in question (15UM070) since previous sampling in 1999, and a decline in the fish IBI score as well. Staff recommended an additional macroinvertebrate score be collected to confirm a 'full support' decision under the tiered aquatic life use framework, recognizing that the stream appears to be in a declining pattern and likely in need of additional protection, and recommended placing it in the 'vulnerable' category. Yet subsequently, the assessment team determined that the stream is "meeting aquatic life parameters and recommends 'full support.'"

Decades of untreated discharge of Keetac process wastewater through tailings basin "seeps" and direct surface discharges represents a cumulative impact to populations of sensitive biological communities in this ecoregion. For instance, multiple EPA studies and peer-reviewed literature document that salts and ionic pollutants at highly elevated concentrations (especially as compared to ambient conditions) are toxic to benthic macroinvertebrates and fish and may also be harmful to wildlife.² The Band urges MPCA to require at least two biological sampling efforts, with the first one occurring in the first year of this permit period. We also strongly recommend that a reference site, outside the influence of the tailings basin, be included in the monitoring program. The reference site can provide clearer context for future assessment decisions, particularly for a site where there is a documented decline in biological community scores over the past several decades of receiving untreated mine waste discharge. Reference site data may also be a supporting line of evidence in a functional equivalency analysis.

New Permit Effluent Limits/Reasonable Potential Analysis

Reasonable potential analysis was conducted during the previous permit development (2011) for SD 001 and SD 005 (and SD 009, when activated) for the tailings basin permit, and for SD

² See e.g., EPA, A Field-Based Aquatic Life Benchmark for Conductivity in Central Appalachian Streams, Final Report, EPA/600/R-10/023F, March 2011; S.A. Mitcham & G. Wobeser, Effects of sodium and magnesium sulfate in drinking water on mallard ducklings, J. Wildlife Diseases, Jan. 1988, Vol. 24, No. 1, pp. 30-44."

002, SD 003, and SD 012 for the mine site permit, and concluded there was a need to establish WQBELs for sulfate in both permits. Hay Lake, a wild rice water downstream of these discharges, has subsequently been listed by the MPCA as impaired for sulfate, further justifying the need for the WQBELs calculated in 2011 remain in these new permits. Interim effluent limits for sulfate at SD 002, SD 003 and SD 012 are the concentrations that are currently achievable; they are applicable until the facility attains compliance with the final effluent limits established in the compliance schedule. Keetac must attain compliance with the final sulfate effluent limits as soon as possible, but no later than April 30, 2030. The Band's disappointment with this continuing delay in compliance with clearly justified effluent limits is further articulated in our comments on the compliance schedules and anti-backsliding.

The MPCA states that since 2014 the maximum reported specific conductance value was 1028 $\mu\text{S}/\text{cm}$, never exceeding the agricultural criterion of 1500 $\mu\text{S}/\text{cm}$; therefore, a specific conductance effluent limit is not needed to protect irrigation. However, the Band is not concerned about whether Keetac's effluent will meet the state's irrigation standards; we are, instead, highly concerned about protecting aquatic life and compliance with class 2 standards. The failure to conduct reasonable potential analysis in these draft permits is, unfortunately, the realization of the Band's comments on the state's 2019 rulemaking on Class 3 & 4 WQS (Attachment 1), specifically around implementation of narrative class 2 WQS and the removal of existing state numeric criteria for ionic pollutants.

In the tailings basin permit fact sheet, the MPCA presents a rationale that since compliance with the final sulfate effluent limits will "protect Minnesota's class 2 aquatic life narrative standard from excess total salts and specific conductance, no additional specific conductance limits are needed in this permit". The agency states that "...compliance with sulfate limits would reduce those levels by over 10, 6, 2-fold. After compliance with sulfate limits, it is unlikely that specific conductance would be a stressor for aquatic life in downstream waters." The Band does not agree that this is a valid assumption. And in their comments on an earlier draft of the permit, EPA provided a clear recommendation that the agency "add to the record an analysis of the discharge of specific conductance or constituent ions to determine whether pollutants will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standards, including narrative water quality standards."³ EPA did not agree that a plan to address sulfate should be a substitute for an analysis that directly addresses specific conductance or its non-sulfate constituent ions.

This thorny situation presents precisely the complications the Band communicated to the agency in April of 2019, when we provided detailed and critical technical comments on the MPCA request for comments on planned amendments to rules governing Water Quality Standards— Use Classifications 3 and 4, Minnesota Rules, chapters 7050 and 7053. The technical support document (TSD) for that rulemaking assured that the agency fully recognized and acknowledged that for some pollutants, Classes 3 and 4 contain the *only* existing or most stringent numeric standards. EPA also provided comments during this

³ Letter from EPA Region 5 to Theresa Haugen, Manager, Water and Mining Section, Re: Review of Two Draft NPDES Permits, U.S. Steel Keetac Mining Area (MN0031879) and U.S. Steel Keetac Tailings Basin (MN0055948), Keewatin, Minnesota. September 6, 2024.

rulemaking, explicitly advising MPCA that, to satisfy the requirements of Federal regulations at 40 C.F.R. §122.44(d)(1)(i), limitations in state-issued permits “must control all pollutants or pollutant parameters (either conventional, nonconventional or toxic pollutants) which the Director determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above **any** State water quality standard, including State narrative criteria for water quality.”⁴ The Band submitted further comments to the Administrative Law Judge in 2021, orally and in writing (Attachment 2), as did multiple Minnesota tribes,⁵ calling out the CWA deficiencies in this rulemaking.

However, the agency claimed they did not anticipate there would be significant increases in ionic pollutants or specific conductance relative to existing conditions, *because of their plans to develop detailed implementation procedures for the narrative standards under consideration* (emphasis added). During this rulemaking, MPCA provided their assurance, including preparing a white paper summarizing how it would evaluate the need for specific conductance conditions in implementing its standards, as ionic pollutants were identified as being of possible concern for waters downstream of some facility discharges.

Narrative standards provide a clear statement of the conditions that should be present in waterbodies, but do not provide numeric values that must be met to ensure those conditions. It is more difficult to use narrative standards to craft NPDES permit conditions, and an additional narrative translator step is needed in order to implement narrative standards in discharge permits. MPCA finalized the changes to the class 3 & 4 standards but delayed developing the process to translate the narrative standard into a numeric value. Instead, after the rulemaking, the MPCA proposed to work collaboratively with stakeholders and others to develop the process and publish a guidance document.

Since then, however, MPCA has made no apparent attempt to review the existing science, their own extensive water quality data, or conduct the studies necessary to develop protective criteria for these pollutants and adopt them as Class 2 numeric standards. And despite consistent comments and recommendations from the Band, other tribal agencies, NGOs, and the public, the MPCA moved forward with the removal of numeric specific conductance and so-called “salty parameters” criteria without first promulgating numeric criteria for these pollutants applicable to Class 2 waters (aquatic life use). By removing the existing numeric criteria found in Class 3 and Class 4 waters, without an equally or more stringent standard in place under another designated use class, the agency is failing to protect all designated uses for waters of the state.

Compliance Schedule/Anti-backsliding

The permits issued in 2011 for the Keetac mine area and tailings basin required effluent limits for total sulfate, to be attained by no later than August 17, 2019. MPCA cites Minnesota

⁴ EPA Class 3 & 4 revisions enclosure 4-8-16, attachment to Electronic Transmittal of EPA’s comments on Minnesota Pollution Control Agency (MPCA) Request for Comments on Planned Amendments to Rules Governing Water Quality Standards-Use Classifications 3 and 4, Minnesota Rules, Chapter 7050

⁵ Minnesota Tribal Comments on Proposed Amendments to Rules Governing Water Quality Standards, Minnesota Rules chapters 7050 and 7053; Revisor ID No. 4335; OAH Dkt. No. 65-9003-37102.

Session Law from 2016 (prohibiting agency enforcement of the state’s EPA-approved sulfate criterion for wild rice waters) as the reason why US Steel delayed compliance with the schedule, and still has not attained compliance, six years later. In the fact sheets for the current draft NPDES permits, MPCA cites a letter from EPA dated February 16, 2022, stating that “Minnesota is required to issued NPDES permits containing effluent limitations to meet all federally approved water quality standards as required by the Clean Water Act, federal regulations, and EPA-approved Minnesota laws and rules.” The agency presents this communication as the rationale by which they are now “free” to implement state water quality standards through NPDES permit limits and other regulatory requirements.

However, EPA had already clearly conveyed to the Legislature (State Senator Tom Bakk and State Representative David Dill), in a 2011 letter signed by Region 5 Water Division Director Tinka Hyde, that the proposed legislation in question would not be consistent with the state’s statutory responsibilities under the Clean Water Act. Further, any change to an approved state water quality standard or criterion would need to be scientifically defensible or EPA would not approve it. This letter closes with the statement:

“Additionally, should EPA determine that a state is not administering its federally approved NPDES program in accordance with requirements of the CWA, EPA has the authority to require the state to take corrective action, and if necessary, to withdraw authorization of the program, pursuant to 33 U.S.C. §§1342(c)(2)-(3).”⁶

The agency and the Minnesota Legislature were both well aware that the legislation in question was inconsistent with CWA requirements and in fact put MPCA’s NPDES authorization in jeopardy – yet the Legislature moved forward with it, the governor signed it, and the MPCA complied with it. That these 2025 draft permits include new compliance schedules that postpone Keetac’s requirement to attain the final sulfate effluent limits established in the 2011 permits until *five years from now* does in fact constitute backsliding. The interim effluent limits for sulfate are less stringent than the final effluent limits stipulated in the previous permit, which clearly conflicts with the backsliding prohibition in 33 U.S.C. §1342(o) and 40 C.F.R. §122.44(l)(1) unless one of the exceptions in those provisions apply, which is not the case.

Although MPCA has laid out a narrative justifying the compliance schedules in the new permits (and has included more specificity in the enforceable sequence of actions leading to compliance), the Band vehemently disagrees that factors relevant to whether a compliance schedule in these permits is appropriate under 40 C.F.R. §122.47(a) – how much time the permittee has already had to meet the WQBELs under prior permits, or the extent to which the permittee has made good faith efforts to comply with the WQBELs and other requirements in its prior permits – apply to this facility. On the contrary, US Steel has used every procedural tool at its disposal to avoid or actively contest their obligation to comply with Minnesota water quality standards for wild rice.

Both permit fact sheets describe a number of permit violations and administrative orders

⁶ EPA letter to The Honorable Thomas Bakk, The Honorable David Dill, dated May 13, 2011, in response to their May 9, 2011 letter requesting EPA review of two draft bills altering MPCA implementation of its approved sulfate standard.

issued by the state over the course of the current permits. But they fail to acknowledge that in 2024, the EPA, in its own compliance investigation, found that Keetac had violated its permit effluents limits for sulfate on nearly three hundred occasions over a three-year period, from 2019 through 2022 (Attachment 3). Resolution of this enforcement action is still pending.

The Band is disturbed that this regulated facility has been given a free pass to flout state and federal statutes for so long. We are guardedly optimistic that these draft NPDES permits represent a clear rejection of the extraordinary and extralegal political measures taken on behalf of the industry and this facility that *have no basis in the CWA* and have only served to delay compliance and environmental protection. Tribal rights to clean and healthy water resources, guaranteed under treaties with the federal government, requires all permitted dischargers to comply with the Clean Water Act and Minnesota Rules. The rights of all Minnesota citizens are contingent upon the same.

Functional Equivalency Analysis

The permit includes a requirement for the permittee to conduct additional sampling at various surface water and internal waste stream monitoring locations, and to submit an evaluation prior to permit expiration with the facility's determination of functional equivalency of a direct discharge (FEDD) to a surface water from a discharge to groundwater at the tailings basin. New surface water monitoring stations (SW 002, SW 003, SW 004, SW 005, SW 006, SW 007, SW 008) have been added, for the same chemical parameters as the tailings basin. New internal monitoring locations (SW 003, SW 004) are also required for these same parameters.

The Band is puzzled why the draft permit has no groundwater monitoring requirements. It identifies only "Dike Seepage Survey" requirements. The tailings basin is principally underlain by glacial till and glaciofluvial deposits, per the fact sheet, with surface drainage further described. The probability of tailings basin seepage from hydrostatic pressure underneath the basin, not just through the dike walls, is exceptionally high. In order to provide a clear and compelling analysis for the functional equivalent of a direct discharge, there should be groundwater monitoring wells for these same water quality parameters, potentially located near SW 001, SW 005 and SW 006.

While it obviously is the permittee's responsibility to appropriately collect and timely report these data, the Band is not in support of relying upon US Steel to *prepare* this functional equivalency determination. We have seen far too many instances of suspect data analysis and interpretation from mine facility permittees to place any confidence in their results. The Band recommends that MPCA use the required reported data to conduct the FEDD analysis themselves.

Additional New Requirements

The draft permits also require the company to submit a Stormwater Annual Report by March 31 of each year following permit issuance. This is an important exercise for determining the efficacy of their site stormwater infrastructure maintenance and management practices and will hopefully incentivize comprehensive stormwater management at a time where climate change and extreme storm events elevate the need for effective controls.

The Band also appreciates the new requirement for the facility to host an annual public meeting to disclose factual information to community regarding facility operations, changes or plans for pollutant reductions, and compliance with permit conditions and effluent limits. This also is a crucial step for ensuring transparency and responsiveness to the local and regional community.

Denial of Variance Request

The Band wholeheartedly supports the agency's preliminary determination to deny US Steel's request for a variance from the wild rice sulfate standard. This well-justified determination is consistent with the March 31, 2025 Minnesota Court of Appeals decision to uphold the MPCA's denial of US Steel's application for a site-specific sulfate standard for Hay Lake⁷. The Court disagreed with US Steel's arguments that the MPCA decision was arbitrary and capricious, unsupported by substantial evidence, or based on legal error; and the agency legally erred by basing its decision on an unpromulgated rule.

The company's "Factor 3" (from EPA's Interim Economic Guidance, 1995) arguments are fatuous and circular; Factor 3 issues are typically considered in scenarios where the pollution is from indirect cause, outside the control of the permittee. Secondly, they do not demonstrate either the pollutant cannot be remedied (on the contrary, their studies demonstrate that it *can* be remedied), or that treating the pollutant will cause more environmental damage to correct than to leave in place. Their environmental cost arguments focus solely on increased carbon emissions from increased energy use and waste management but completely fail to consider or quantify the environmental *benefits* of treatment. This is, sadly, a common scenario; one that fails to account for the past, present and future costs to society of a degraded environment. Those are costs that the public bears, and in the case of diminished access to treaty protected resources like wild rice, disproportionately borne by tribal members.

The company's "Factor 6" arguments, or substantial and widespread economic and social impacts, are also unsupported by the math. Financial analysis of metrics for US Steel over the past three years establish that:

- US Steel is sufficiently profitable each year to pay for pollution control costs;
- the Permittee is not facing serious liquidity problems;
- the company long-term solvency ratio is higher than EPA's recommended threshold; and
- the company's debt-to-equity ratio indicates it has the capacity to take on debt if necessary to pay for pollution controls.

MPCA therefore (rightfully) concludes that substantial impacts on the Permittee will not result from compliance with WQS. From a variety of publicly available information, it is highly unlikely that Nippon Steel's recent purchase of US Steel diminishes any of these financial

⁷ *Application for a Sulfate Site-Specific Standard for Hay Lake (AUID 31-0037-00)*, A24-0428 (Minn. App. Mar 31, 2025)

metrics, particularly as the Japanese corporation has publicly hyped its planned significant investments in modernizing US Steel facilities⁸. Further, the current federal administration has taken extreme measures to protect the domestic steel industry, in the form of steep tariffs on imported steel⁹. These actions were taken specifically to reduce foreign competition, stimulate local investment, increase local production capacity, and create US jobs in the industry. The company's economic hardship arguments for continuing to reject CWA compliance are simply not compelling.

The Band looks forward to seeing meaningful progress over the next five years towards protecting Minnesota waters under the MPCA's implementation and enforcement of these NPDES permits. We are anxious to see this regulatory approach expanded to other facilities that have, for decades, been enabled to avoid their responsibilities under Minnesota Rules and the Clean Water Act.

Sincerely,

A handwritten signature in blue ink that reads "Nancy Schuldt". The signature is written in a cursive, flowing style.

Nancy Schuldt, Water Projects Coordinator
Fond du Lac Environmental Program

⁸ [Nippon Steel finalizes \\$15B takeover of US Steel after sealing national security agreement | AP News](#), last visited 9/22/2025

⁹ [Trump expands steel and aluminum tariffs to 407 more products](#), last visited 9/22/2025