

February 7, 2025

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VIA SMART COMMENT



Re: Minnesota Pollution Control Agency 2025-2027 Triennial Review

Dear Ms. Charles:

Thank you for the opportunity to comment on the Minnesota Pollution Control Agency (“MPCA”) 2025-2027 Triennial Review of Minnesota’s water quality standards. Minnesota Center for Environmental Advocacy (“MCEA”) is a nonprofit environmental advocacy organization that has defended Minnesota’s natural resources, water, air, and climate since 1974. MCEA is committed to ensuring that government decision making is grounded in fact, science, and law so that all Minnesotans can access clean water and enjoy our state’s biodiversity.

Because the triennial review is a process mandated by the Clean Water Act (“CWA”), MPCA should undertake the triennial review with the CWA’s goals and mandates in mind.¹ The CWA requires states to institute and update water quality standards to protect public health and welfare; enhance water quality; and serve the CWA’s core purposes² of protecting fish, shellfish, wildlife, and recreational opportunities.³ In order to protect these uses, states must establish water quality criteria based on scientifically defensible methods.⁴

Given this framework—and limited agency resources—MPCA should prioritize rulemaking that will address demonstrated and imminent threats to water quality and for which scientifically defensible data is readily available. MPCA already has data showing an urgent need and a scientific basis to support PFAS standards to protect human health and aquatic-life standards for nitrate. Accordingly, MPCA should prioritize its PFAS and nitrate standards proposals.

By identifying specific topics that should be prioritized, MCEA does not intend to imply that such topics are exclusive. MCEA recognizes that other commenters may present information showing that MPCA should prioritize other regulatory proposals. In particular, Tribal Nations have long expressed concerns about wild-rice waters, an area of expertise in which MCEA defers to the Tribes. Broadly speaking, however, MCEA urges MPCA to abide by the overarching principles set forth in the CWA: that rulemaking

¹ 33 U.S.C. § 1313(c)(1).

² *Id.* § 1313(c)(2)(A).

³ 40 C.F.R. §§ 131.2, .10(a).

⁴ *Id.* § 131.11(b).

proposals must be pursued for the purpose of *enhancing* water-quality protections where science shows a need.

I. MPCA should prioritize a Class 2 nitrate standard

For over a decade, MPCA has acknowledged a pressing need to address nitrate pollution. MCEA and the Minnesota Department of Natural Resources raised concerns about nitrate as early as the 2005-2008 Triennial Review. The Minnesota Legislature shared this concern, appropriating money in 2010 specifically for MPCA rulemaking on total nitrogen and nitrate nitrogen.⁵ That same year MPCA published a draft technical support document finding that nitrate concentrations in many Minnesota surface waters were within the range known to harm aquatic organisms.⁶ MPCA proposed updated criteria based on “sound scientific studies that provide[d] the data needed to characterize and quantify how pollutants affect aquatic organisms,”⁷ including toxicity tests performed by EPA Region 5 at Minnesota’s request.⁸ Analyzing that research, MPCA calculated a chronic value of 4.9 mg/L, with a more stringent 3.1 mg/L chronic value for Class 2A coldwater streams that support economically and ecologically valuable aquatic life.⁹

Notwithstanding these robust data and analyses, MPCA paused nitrate rulemaking, citing an EPA proposal to conduct further testing on aquatic life toxicity. In 2021, MPCA published its “Water quality standards work plan for 2021-2023,” which included the agency’s commitment to “completing all Water Quality Standards (WQS) projects in Group 1,” including nitrate for aquatic life.¹⁰ In October 2022, the MPCA updated the 2010 *Draft Aquatic Life Water Quality Standards Technical Support Document for Nitrate* with a new document that proposed a draft chronic value of 8.0 mg/L for Class 2B waters and a more stringent draft chronic value of 5.0 mg/L for Class 2A waters.¹¹ However, in December 2022 the MPCA informed lawmakers in a legislative report that it had “decided not to proceed with adoption at this time” of a numeric water quality

⁵ 2010 Minn. Laws, ch. 361, art. 2, § 4, subd. 1.

⁶ MPCA, *Draft Aquatic Life Water Quality Standards Technical Support Document for Nitrate*, at 4 (2010).

⁷ *Id.* at 5.

⁸ *Id.* at 7. See also EPA Region 5, *Final Report on Acute and Chronic Toxicity of Nitrate, Nitrite, Boron, Manganese, Fluoride, Chloride and Sulfate to Several Aquatic Animal Species*, EPA 905-R-10-002 (2010).

⁹ MPCA, *Draft Aquatic Life Water Quality Standards Technical Support Document for Nitrate*, 2010 at 9.

¹⁰ MPCA. *Water Quality Standards Work Plan for 2021-2023*. July 2021.

¹¹ MPCA, *Aquatic Life Water Quality Standards Draft Technical Support Document for Nitrate*. October 2022.

standard for protection of aquatic life for nitrate.¹² Meanwhile, nitrate concentrations have continued to increase in many Minnesota waters, with 75% of monitored sites showing an increasing trend in the latest report to Congress on Minnesota water quality.¹³

In the current triennial review proposal, MPCA again proposes to include a nitrate aquatic life water quality standard under its “Group 1” priorities. After fifteen years of delay, nitrate rulemaking would be a wise use of agency resources and an overdue response to the requirements of the Clean Water Act and the pressing need for nitrate regulation in our state.

II. MPCA should accelerate its aquatic life standards for PFOS and PFOA and start developing statewide fish tissue standards for PFOA

MPCA should use recently published data from the Environmental Protection Agency (“EPA”) to accelerate its work on developing aquatic life standards for PFOA and PFOS, and the agency should also begin working towards statewide fish tissue standards for PFOA.

A. MPCA should use recently published criteria from EPA to accelerate its work towards developing statewide class 2 standards for PFOA and PFOS

MPCA’s current work plan shows that aquatic life standards for PFOA and PFOS are “In technical development,” and the chart outlining MPCA’s schedule of work states that these standards are in “initial evaluation and development.”¹⁴ This important work will culminate in statewide water quality standards for class 2 waters for two of the most toxic and persistent PFAS. Establishing class 2 standards for these PFAS will protect thousands of waterbodies across the state, and adopting formal rules for these two persistent and ubiquitous constituents will enable MPCA and other regulators to impose permit requirements curtailing use and discharge of these PFAS.

In September 2024, EPA published its final freshwater aquatic life ambient water quality criteria for PFOA and PFOS.¹⁵ These are the “final national recommended water

¹² MPCA, Legislative Report on the Inventory of Water Quality Standards, December 13, 2022. <https://www.lrl.mn.gov/docs/2022/mandated/221645.pdf>.

¹³ MPCA, *2024 Minnesota Water Quality Report to Congress of the United States*, November 2023, at 12.

¹⁴ Minn. Pollution Control Agency, *Draft Water Quality Standards Work Plan for 2025 to 2027*, <https://www.pca.state.mn.us/sites/default/files/wq-s6-71.pdf>.

¹⁵ EPA, *Final Freshwater Aquatic Life Ambient Water Quality Criteria and Acute Saltwater Aquatic Life Benchmark for Perfluorooctanoic Acid (PFOA)*, <https://www.epa.gov/system/files/documents/2024-09/pfoa-report-2024.pdf>; EPA, *Final Freshwater Aquatic Life Ambient Water Quality Criteria and Acute Saltwater Benchmark for Perfluorooctane Sulfonate (PFOS)*, <https://www.epa.gov/system/files/documents/2024-09/pfos-report-2024.pdf>

quality criteria . . . to help states and authorized tribes protect aquatic ecosystems from several PFAS.”¹⁶ These detailed and lengthy reports synthesize current research to set standards based on the effects these PFAS have on aquatic organisms. The conclusion of this work are standards where EPA believes “[c]oncentrations of these individual PFAS in water bodies above the relevant criteria or benchmark level may harm the growth and reproduction of aquatic organisms or kill them.”¹⁷

Given the detail and force of EPA’s final recommended aquatic life criteria, MPCA should review EPA’s work to quickly determine whether EPA’s criteria are acceptable standards for waters in Minnesota. If they are, MPCA should act swiftly to enact them as state standards and then shift its focus towards evaluating whether more restrict standards are defensible in Minnesota. In other words, absent any major concerns, MPCA should adopt EPA’s standards soon, and once these are in effect, decide whether more restrictive standards make sense. MCEA believes it is prudent for MPCA to establish class 2 water quality criteria for PFOA and PFOS swiftly, as this will have far-reaching effects on water quality across the state.

B. MPCA should start developing statewide fish tissue standards for PFOA

MPCA’s most recent workplan omits the development of a statewide fish tissue standard for PFOA. The agency is keen on developing tissue standards for PFOS, and MCEA applauds this effort. But given the overlapping distribution, persistence, and toxicological profile between PFOA and PFOS, it would be a mistake for MPCA not to set a fish tissue standard for PFOA. Like PFOS, PFOA is a long-chain PFAS that has bio-accumulative properties,¹⁸ is widespread in Minnesota,¹⁹ and is associated with significant adverse health outcomes.²⁰

¹⁶ EPA, *Fact Sheet*, <https://www.epa.gov/system/files/documents/2024-09/pfoa-pfos-pfas-final-factsheet-2024.pdf>.

¹⁷ *Id.*

¹⁸ Center for Disease Control and Prevention, *Per- and Polyfluorinated Substances (PFAS) Factsheet*, https://www.cdc.gov/biomonitoring/PFAS_FactSheet.html.

¹⁹ See Env’tl. Working Grp., *PFAS Contamination in the United States* (2021), https://www.ewg.org/interactive-maps/pfas_contamination/map/.

²⁰ See, e.g., Bevin E. Blake et al., “Associations Between Longitudinal Serum Perfluoroalkyl Substance (PFAS) Levels and Measures of Thyroid Hormone, Kidney Function, and Body Mass Index in the Fernald Community Cohort,” 242(A) *Env’tl. Pollution* 894-904 (2018), available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6309414/>; *Probable Link Evaluation for Chronic Kidney Disease*, C8 Sci. Panel, (Oct. 29, 2012), http://www.c8sciencepanel.org/pdfs/Probable_Link_C8_Kidney_29Oct2012.pdf; U.S. Agency for Toxic Substances & Disease Registry, *Toxicological Profile for Perfluoroalkyls: Draft for Public Comment Chapter*, at 5 (2009), available at <https://www.atsdr.cdc.gov/toxprofiles/tp200-c2.pdf>.

III. MPCA must achieve the highest attainable uses for Minnesota waters and should not downgrade designated uses based on inadequate data

MPCA's work plan includes a Group 1 priority to modify beneficial use designations for Class 2A (cold water) and Class 2B (cool and warm water) waters statewide. In February 2023, MCEA submitted a comment on proposed changes to rules for Use Classification 2 Water Quality Standards.²¹ In it, MCEA noted that the principal function of designated uses in water quality standards is to communicate the desired state of surface waters which then informs both numeric and narrative standards. If a stretch of stream becomes polluted or is otherwise not attaining its designated use, the MPCA must attempt to restore it to the appropriate use.

The largest proportion of stretches in the proposed rulemaking (123 stretches comprising 539 miles of stream) were being downgraded from a Class 2B "general" use to a "modified" use. The biocriteria associated with the redesignation of stream reaches from 2B general to 2B modified use include lower numeric thresholds for aquatic life communities (both fish and macroinvertebrates) and may therefore negatively impact water quality and the natural resource management of these streams. Therefore, MPCA can only take such action if it complies with the Clean Water Act's limitations on downgrading attainable uses.

The Clean Water Act limits the ability to redesignate uses in a way that removes protections. To remove a use that is not an existing use, MPCA must 1) complete a review of the biological condition of the streams and 2) determine if a general use was attained or channel modifications occurred after November 28, 1975. As MCEA noted in its February 2023 comment, the MPCA's determinations that the habitat in the proposed downgraded stream reaches could not be restored, that the modifications were done legally before 1975, and that the stretch had not attained a general use at any point after 1975 are based on limited data that was not provided for public review as part of the proposed redesignation. MPCA has itself noted the limited availability of electronic drainage records to verify whether ditches were modified legally before 1975.²² However, MPCA has also recognized that stream reaches channelized *after* November 28, 1975, would *not* be eligible for a modified use redesignation.²³

MCEA reiterates in this comment that, to allow review of any proposal to downgrade Class 2 stream reaches from a general to a modified use, MPCA must provide publicly accessible data to verify that these waters, if ditched, were legally modified

²¹ MCEA letter to OAH Judge Todnem *RE: In the Matter of the Proposed Amendments to Rules Governing Water Quality Standards – Use Classification 2, Minnesota Rules, Chapter 7050*. February 3, 2023.

²² MPCA, *Technical Guidance for Reviewing and Designating Aquatic Life Uses in Minnesota Streams and Rivers*, 2018.

²³ *Ibid*, see 16.

under Minnesota drainage law and meet the requirements of the Clean Water Act for redesignation.

IV. Conclusion

MPCA's highest priority should be rulemaking for which there is a pressing need and for which robust scientific research is available. Accordingly, MPCA should prioritize promulgating Class 2 aquatic-life criteria for nitrate and moving forward with PFAS rulemaking. All of these standards are needed, and sound data is available to support them. In addition, MPCA must provide adequate public data to validate that any proposed re-designations of Class 2 waters meet the requirements of the Clean Water Act.

Respectfully submitted,

/s/ Jay Eidsness

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