Wisconsin Rural Water Association
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December 9, 2021

Department of Natural Resources
Attn: Adam DeWeese - DG/5
P.O. Box 7921
101 S. Webster Street
Madison, WI 53707-7921

Re: Comments on DG-24-19 Revisions to ch. NR 809 related to the promulgation of new drinking water MCLs for PFOA and PFOS

The Wisconsin Rural Water Association (WRWA) submits these comments relating to clearinghouse rule DG-24-19 - revisions to ch. NR 809 related to the promulgation of new drinking water MCLs for PFOA and PFOS. WRWA is a nonprofit association that represents 586 municipal water and wastewater system members and provide services to over four million Wisconsin residents and is focused on assisting small and rural communities that serve less than 10,000 people.

We understand and acknowledge the concerns of PFAS in our environment. The public wants to know what levels of PFAS in drinking water are safe or unsafe. As the public stewards of safe drinking water, our members want to address this issue – however we strongly impress that PFAS standards be based on credible science, ratepayer effects, and due deliberation of costs.

WRWA members believe the best course for the state at this juncture is to not set a state-specific standard, but rather defer to the federal government to regulate and set the PFAS standards. Since the department began the rulemaking process, EPA has taken significant steps forward to regulate PFAS in drinking water. In October 2021, EPA published a PFAS Strategic Roadmap and committed to "establishing a national primary drinking water regulation for PFOA and PFOS that would set enforceable limits and require monitoring of public water supplies, while evaluating additional PFAS and groups of PFAS." EPA estimates the proposed rule will be released in the fall 2022 and the final rule in fall of 2023.

To date, all of Wisconsin's drinking water standards have been set using the standard setting process under the Safe Drinking Water Act (SDWA). Under the SDWA process, the MCL is set weighing the marginal benefit of a stricter standard versus the incremental cost to meet such a standard. As such, a stricter standard will generate more costs, which could outweigh any health benefits.

This is especially critical for small systems. Currently, when the EPA sets new primary standards, they consider the compliance costs and affordability for small systems (under 10,000).

Research has found that even the known treatments for PFOA and PFOS vary depending on the type of method (e.g. granular activated carbon, ion exchange, reverse osmosis) and the corresponding MCL limit. For these reasons, WRWA requests the state adopt the federal standard to ensure that the PFAS standards are set under the SDWA process.

Revised EIA

WRWA members continue to have concerns that the fiscal estimates reflected in the revised Economic Impact Analysis are not reflective of all costs a system could face to comply.

For example, the department states in the EIA that there are three options for systems to mitigate PFAS in drinking water – 1) drill a new well, 2) abandon the affected source, or 3) install treatment. We believe this is an oversimplistic way to consider the costs to municipal water utilities, as there are other related costs with all these options.

The department assumes that a new well at a small community system is estimated to average $50,000. This is drastically lower than the costs our members report. A basic well generally costs between $1 million-$1.5 million. If the well needs to be relocated some distance away from the present location this leads to land costs, test boring costs, test costs, new buildings, new treatment equipment and chemicals and could increase costs substantially. If several wells are condemned and re-built, this cost could be multiplied several times. This is a significant impact to a small community and subsequently those costs would impact the water utility's ratepayers.

WRWA appreciates the department's willingness to consider the impact on water utilities from across the state. Based on the information from the National Rural Water Association, WRWA is confident that EPA is moving expeditiously to set a MCL standard for PFOA and PFOS. WRWA supports national-based standards to avoid confusion and uniformity of testing and treatment protocols.

Thank you for your consideration of these comments.

Sincerely,

Chris Groh
Executive Director
Wisconsin Rural Water Association

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Submitted electronically via email: DNRAdministrativeRulesComments@wisconsin.gov
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December 8, 2021

Adam DeWeese – DG/5
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Re: Comments on Proposed Rule DG-24-19, Amendments to NR809

Dear Mr. DeWeese:

The 3M Company ("3M") appreciates the opportunity to comment on the proposed amendments to NR809 ("Proposed Rule"), relating to the promulgation of new drinking water maximum contaminant levels (MCLs) for per- and polyfluoroalkyl substances (PFAS) including Perfluorooctanesulfonic acid (PFOS) and Perfluorooctanoic acid (PFOA). 3M is a science-based company with substantial experience, expertise, and product stewardship related to PFAS. It is with that background 3M offers comments on the Proposed Rule.

The standards proposed by the Department of Natural Resources (DNR) do not reflect the body of scientific literature on health effects from exposure to PFOS and PFOA. Nor do the proposed standards reflect public comments on significant insufficiencies in the draft Economic Impact Analysis (EIA) supporting the proposal. As a result, the proposed MCLs are overly conservative, technically flawed, and provide no additional protection compared to EPA's current drinking water health advisories.

I. THE PROPOSED RULE IS NOT BASED ON THE BEST AVAILABLE SCIENCE

The Proposed Rule ignores the best available scientific evidence and arbitrarily selects a number for an MCL without scientific support and without properly assessing the ability to test for (and therefore implement) such low values. The Proposed Rule does not cite to any sources when describing the purported health effects of exposure to PFOA and PFOS, and DNR's corresponding draft EIA cites only to a single source – a "U.S. EPA Study." The "study," however, is an EPA webpage[1] answering questions about the EPA's Health Advisory Levels issued for PFOA and PFOS. The EPA webpage similarly provides only a few sentences

[1] https://www.epa.gov/ground-water-and-drinking-water/drinking-water-health-advisories-pfoa-and-pfos#:~:text=These%20studies%20indicate%20that%20exposure,)%2C%20liver%20effects%20(e.g.%2C

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regarding alleged health effects.[2] The text of the draft EIA, the text of the Proposed Rule, and the EPA webpage all lack the analysis and quantification of the health impacts required by the Wisconsin Administrative Procedures Act. Wis. Stat. Ann. §§ 227.01, *et seq.*

DNR references the U.S. EPA's Health Advisory Level (HAL) and underlying studies to demonstrate purported adverse health effects of exposure to PFAS and the necessity for an MCL. However, the EPA's health advisory is currently 70ppt, which is significantly higher than the 20ppt MCL that DNR proposes. Nowhere in the Proposed Rule or supporting documents does DNR explain why it selected 20ppt for the MCL and why an MCL of 20ppt is necessary to protect human health and the environment.

The draft EIA and Proposed Rule allege that PFOS and PFOA exposure may lead to increased risk of certain cancers, developmental effects for fetuses, liver damage, and adverse thyroid effects, such as changes in cholesterol, (implying increased levels). The health effects asserted do not reflect the current state of the science. 3M addresses each of these assertions in turn below.

A. DNR's Statement that Exposure to PFOS and PFOA Leads to an Increased Risk of Cancer is Baseless

DNR's conclusion that exposure to PFOS and PFOA leads to an increased risk of cancer lacks support and is contrary to the conclusions of several well-respected scientific agencies. The Proposed Rule states that PFOS and PFOA exposure can lead to an "increased risk of certain cancers" without identifying the type of cancer and what that increased risk would be. The draft EIA declares that exposure to PFOA and PFOS causes cancer, "(e.g. testicular, kidney)" without citing any sources. In making these conclusory statements, DNR failed to consider the full body of scientific evidence on PFOS and PFOA exposure and cancer, including kidney and testicular cancer. This failure deprives the public of the opportunity to provide comments on specific health effects and related studies considered and relied on by DNR.

The U.S. Agency for Toxic Substances and Disease Registry (ATSDR) is directed by congressional mandate to perform specific functions concerning the effect on public health of substances of concern in the environment. In its Toxicological Profile for Perfluoroalkyls, ATSDR characterized the toxicologic and adverse health effects information for perfluoroalkyls including PFOS based on "all relevant toxicologic testing and information that has been peer-reviewed," reflecting data from hundreds of studies. ATSDR concluded regarding the carcinogenicity of perfluoroalkyls: "The available human studies have identified some potential targets of toxicity;

[2] Even if DNR presumably intended to cite to the health effects support documents linked at the bottom of the EPA webpage, such references are more than seven years old and still do not satisfy the statutory requirement that DNR must explain the risks at it is seeking to address in the EIA.

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however, *cause and effect relationships have not been established for any of the effects, and the effects have not been consistently found in all studies*" (emphasis added).[3]

The Expert Health Panel for per- and poly-fluoroalkyl substances (PFAS) was established to advise the Australian Government on the evidence for potential health impacts associated with PFAS exposure. In its 2018 assessment of the latest available systematic reviews of human epidemiological studies and national/international governmental studies on PFAS, the Panel concluded "there is mostly limited or no evidence for any link with human disease" and that "there is no current evidence that supports a large impact on a person's health as a result of high levels of PFAS exposure."[4] The Panel reviewed five key national and international reports and three systematic reviews compiling studies that analyzed human epidemiological evidence regarding exposure to PFAS (primarily PFOS and PFOA) and cancer. Like ATSDR, the Australian Expert Health Panel analyzed hundreds of studies in reaching this conclusion. With respect to cancer, the Panel concluded "there is no current evidence that suggests an increase in overall cancer risk."

Specifically with regard to testicular cancer, the published studies that have reported more than 5 testicular cancer cases (or deaths) with exposure to PFOA are the community worker cohort study by Barry et al. (2013)[14] (n = 17 cases) and an ecological/case-control study of the same regional area by Vieira et al. (2013)[5] (n = 18 cases). However, these two studies likely had considerable overlap in their reported cases. The amount of this overlap remains unknown today despite the former three C8 Science Panel members' recent updating of the evidence on PFOA published since their original research (Steenland et al. 2020).[6] Furthermore, neither Barry et al. nor Vieira et al. reported the histology of the testicular cancers, of which approximately 95% are of germ-cell origin in humans, as opposed to the pathophysiologically distinct Leydig cell tumors reported in some rat carcinogenicity studies of PFOA. The Leydig cell adenomas reported in two of the three Sprague Dawley rat bioassays have a mode of action (MOA) that likely involves one of two possible pathways.[7] One pathway involves activation of PPARalpha, increased CYP19a1 (aromatase) or increased interstitial estradiol, TGFalpha, and subsequent Leydig cell proliferation. The other pathway involves decreased testosterone production with compensatory increases in luteinizing hormone (LH), which could lead to increased Leydig cell proliferation. LH activity is known to be >10x greater in the rat than the human. Neither of these pathways were considered likely relevant for humans.[8] The published epidemiology of testicular cancer data (Barry et al 2013[9]; Vierra et al. 2013[15]) relative to PFOA exposure can only offer suggestive evidence, at best,

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[3] Agency for Toxic Substances and Disease Registry (ATSDR). 2018. Toxicological profile for Perfluoroalkyls. (Draft for Public Comment), https://www.atsdr.cdc.gov/toxprofiles/tp200.pdf. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

[4] Australian Government, Department of Health. 2018. Expert Health Panel for PFAS Report, https://www1.health.gov.au/internet/main/publishing nsf/Content/ohp-pfas-expert-panel.htm.

[5] Vieira et al. 2013 Environ Health Perspect 121 318-323.

[6] *Id*. at page 2.

[7] Klaunig et al. 2012 Reprod Toxicol 33 410-418.

[8] Corton et al. 2014 Crit Rev Toxicol 44 1-49.

[9] *Id.* at page 3.

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as unresolved overlapping of the relatively few testicular cancer cases in these two studies, as well as the fact that Leydig cell tumors diagnoses are quite rare in humans.

The collective epidemiologic and toxicologic evidence for kidney cancer in relation to PFOS and PFOA exposure remains, at best, suggestive. Shearer et al. (2020)[10] conducted a matched case-control study (n = 324 cases) that showed an imprecise odds ratio (OR) of 2.6 (95% CI 1.33 – 5.20) in kidney cancer risk at the highest exposure level which became non-statistically significant when adjusted with other PFAS compounds (OR = 2.19, 95% CI 0.86 - 5.61). All of the study subjects (cases and controls) were from the general population and therefore, like the Danish study by Eriksen et al., this study lacked the exposure response contrasts seen in the occupational cohort and community studies. In fact, all 324 subjects would likely have been included in the reference groups in these other studies. It should be noted that an excess of kidney tumors was not observed in the three Sprague Dawley lifetime bioassays. Renal papilla hyperplasia, however, was observed in the NTP female rats (not male rats). This was considered to be the consequence of the rapid elimination of high doses of PFOA in these female Sprague Dawley rats.

B. DNR Provides Neither Context Nor Support for its Assertion that Exposure to PFOS and PFOA cause Developmental Effects on Fetuses during Pregnancy or to Breastfed Infants

DNR's Proposed Rule states that exposure to PFOS and PFOA is associated with developmental effects on fetuses and to breastfed infants. DNR does not provide any information about what these effects are, at what level of exposure they occur, or what sources it is referring to in reaching this conclusion.

C. DNR Mistakenly Concludes that PFOS and PFOA Adversely Affect the Liver, Immune System, and Thyroid

DNR asserts that exposure to PFOS and PFOA is associated with liver tissue damage. While it is unclear what specific type of damage DNR is referring to because the Proposed Rule does not specify, studies have shown that there is no association between PFOA exposure and liver disease, including an enlarged liver, fatty liver, or cirrhosis.[11] Additionally, PFOS exposure has not been shown to have any impact on liver function where PFOS serum concentration reached as high as 175,000 ppb.[12]

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[10] Shearer et al. 2020 J Natl Cancer Inst, see https://doi.org/10.1093/jnci/djaa143.

[11] *See* Statement of C8 Science Panel, "Probable Link Evaluation for Liver Diseases" (October 29, 2012) *available at* http://www.c8sciencepanel.org/pdfs/Probable_Link_C8_Liver_29Oct2012.pdf

[12] *See e.g.*, Chang, S., Allen, B.C., Andres, K.L., Ehresman, D.J., Falvo, R., Provencher, A., Olsen, G.W., and Butenhoff, J.L. (2017). Evaluation of serum lipid, thyroid, and hepatic clinical chemistries in association with serum perfluorooctanesulfonate (pfos) in cynomolgus monkeys after oral dosing with potassium pfos. *Toxicol Sci* 156, 387-401.

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The two largest occupational PFOA exposure cohort studies by Steenland and Woskie (2012)[13] and Raleigh et al. (2014)[14] reported no associations between PFOA and liver cancer mortality (combined total of 17 deaths). Between these two studies, there was only one liver cancer death reported in the highest quartile exposure categorizations. A third, much smaller occupational cohort study of the Miteni plant, located in the Veneto region of Italy, observed quite different findings based on a total of 7 liver cancer deaths (Girardi and Merler 2019).[15] They reported large, but extremely imprecise, unadjusted relative risks of liver cancer across tertiles of estimated high cumulative serum PFOA exposure. Among the mid-Ohio river community worker cohort study, Barry et al. reported 9 liver cancers cases (8 in community members), with no exposure response trend in estimated cumulative serum PFOA. The Danish case-cohort study by Eriksen et al. (2009)[16] studied 67 liver cancer cases whose serum PFOA concentrations were consistent with time-dependent general population levels observed in the United States. Eriksen et al. did not observe a trend with liver cancer across the limited range of exposures of the study subjects.

DNR alleges that exposure to PFOS and PFOA causes a decreased immune response. However, studies report inconsistent associations with increased risk of infectious disease outcomes. Because of this, several regulatory bodies have concluded that there is a lack of evidence connecting PFAS and immune problems. Those regulatory bodies include the Australia Expert Health Panel ("the human dose-response/threshold for potential immune effects is very poorly characterized, and the overall human evidence is weak");[17] Food Standards Australia New Zealand ("to date there is no convincing evidence for increased incidence of infective disease associated with PFOS or PFOA effects on human immune function");[18] and Health Canada ("a low level of consistency was observed across studies").[19]

Finally, the DNR's draft EIA asserts that PFOS and PFOA exposure causes thyroid effects such as changes (presumably increases) in cholesterol. However, there are recent studies in which PFOA exposure is associated with decreased cholesterol.[20] Further, a clinical

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[13] Steenland and Woskie 2012 Am J Epidemiol 176 909-917.
[14] Raleigh et al. 2014 Occup Environ Med 71 500-506.
[15] Giradi and Merler 2019 Environ Res 179:108743.
[16] Eriksen et al. 2009 JNCI 101 605-609.
[17] PFAS Expert Health Panel. 2018. Australia PFAS Expert Health Panel - Report to the Minister. http://www.health.gov.au/internet/main/publishing nsf/Content/C9734ED9736BE9238EC9730CA2581BD00052C00003/$File/expert-panel-report.pdf.
[18] FSANZ. 2017. Perfluorinated chemicals in food. http://www.health.gov.au/internet/main/publishing nsf/Content/2200FE2086D480353CA482580C900817CDC/$File/Consoldiated-report-perflourianted-chemicals-food.pdf.
[19] Health Canada. Perfluooctane Sulfonate (PFOS) in Drinking Water. https://www.canada.ca/content/dam/hc-sc/healthy-canadians/migration/health-system-systeme-sante/consultations/perfluorooctane-sulfonate/alt/perfluorooctane-sulfonate-eng.pdf.
[20] In an experimental study which included a transgenic mouse model that mimics human lipoprotein metabolism, PFOA was shown to cause a decrease in cholesterol at high concentrations. This observation is inconsistent with the DNR's observational epidemiologic associations showing higher cholesterol with markedly lower PFOA concentrations. Pouwer, M. G., Pieterman, E. J., Chang, S. C., Olsen, G. W., Caspers, M. P. M., Verschuren, L., Jukema, J. W., and Princen, H. M. G. (2019). *Dose Effects of Ammonium Perfluorooctanoate on Lipoprotein Metabolism in APOE*3-Leiden.CETP Mice*. Toxicol Sci 168, 519-534.

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evaluation of monkeys after exposure to PFOS was shown to have no change in thyroid hormone parameters.[21] Additionally, a separate investigation of thyroid hormone measurement issues in laboratory animals exposed to PFOS showed no effects on thyroid pathology.[22]

Taken together, these examples show that DNR did not adequately support the conclusory statements made in its Proposed Rule and corresponding EIA. DNR must revise its Proposed Rule to fully describe the body of scientific literature considered by DNR in developing these MCLs.

II. DNR DID NOT ADEQUATELY EXPLAIN ITS ANALYSIS

The Wisconsin Administrative Procedure Act[23] requires an agency proposing a rule to provide a summary of the "factual data and analytical methodologies used and how any related findings support the regulatory approach chosen." DNR purports to summarize the required information in only six sentences. DNR's opaque summary does not provide the information necessary to understand the basis for the Proposed Rule. Instead, DNR generally refers to the work and recommendations of the Department of Health Services ("DHS") with no citation to DHS's analysis.[24] DNR then states that "an analysis of the available research informed the decision to recommend groundwater enforcement standards… Generally, these standards are the same as the drinking water standards" in the Proposed Rule. DNR does not summarize factual data or analytical methodologies underlying its proposal, nor does DNR explain how any "related findings" support the MCL. DNR concludes that groundwater and drinking water standards should be identical without identifying any basis for that conclusion.

Moreover, DHS's analysis, which was not available for public comment, relies on flawed studies. DHS also listed *potential* effects of PFOS and PFOA, without qualifying its analysis to account for the lack of causal evidence.[25] Indeed, DHS notes the limitations of epidemiological studies and argues for relying on animal and modeling studies. The US EPA and National Toxicology Program (NTP) have issued cautionary guidance for making conclusions about health effects in humans based on evidence in laboratory animals because, in part, there are differences in the MOA between animals and humans.[26] For example, NTP states:

> *[c]onclusions regarding carcinogenicity in humans or experimental animals are based on scientific judgment, with*

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[21] Chang et al. 2017 Toxicol Sci 156 387-401.
[22] Seacat et al. 2002 Toxicol Sci 68 249-264; Luebker et al. 2005 Toxicol 215 149-169; Chang et al. 2007 Toxicology 234 21-33; Chang et al. 2008 Toxicology 243 330-339; Chang et al. 2009 Reproduct Toxicol 27 387-399.
[23] Wis. Stat. Ann. § 227.14(2)(a)(5).
[24] There are multiple documents on DHS's website that discuss standards for groundwater. Failing to provide even a citation to the applicable document obstructs public participation and violates standards of transparency required of public entities.
[25] https://www.dhs.wisconsin.gov/publications/p02434v.pdf
[26] Proposed OPPTS science policy: PPARa-mediated hepatocarcinogenesis in rodents and relevance to human health risk assessments, USEPA, 2003.

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> *consideration given to all relevant information. Relevant information includes, but is not limited to, dose response, route of exposure, chemical structure, metabolism, pharmacokinetics, sensitive sub-populations, genetic effects, or other data relating to mechanism of action or factors that may be unique to a given substance. For example, there may be substances for which there is evidence of carcinogenicity in laboratory animals, but there are compelling data indicating that the agent acts through mechanisms which do not operate in humans and would therefore not reasonably be anticipated to cause cancer in humans.* [27]

DHS's analysis should account for the lack of causal relationships between PFOA or PFOS exposure and particular health outcomes, as well as the problems arising from using animal studies to evaluate health effects in humans.

The lack of explanation for DNR's proposed action makes it difficult, if not impossible, to provide meaningful public input. DNR does not explain which animal studies it relied on, if any, to set the proposed standard. Nor does DNR explain how any such studies informed, or relate to, DNR's drinking water standard. DNR's work appears to be directly based on the technical work conducted by DHS in the Cycle 10 Recommended Groundwater Enforcement Standards. However, the Cycle 10 recommendations were not put forward for public comment, and therefore, the public has not had an opportunity to weigh in on either DHS's or DNR's analysis of the relevant technical data. DNR must revise its Proposed Rule to clearly state what studies it relied on and how, so that the public is provided with a meaningful opportunity to comment.

III. THE ECONOMIC IMPACT ANALYSIS IS INSUFFICIENT UNDER THE WISCONSIN ADMINISTRATIVE PROCEDURES ACT

In comments submitted on July 31, 2021, 3M noted that DNR's economic impact analysis (EIA) was woefully insufficient. *See* Attachment A. DNR's latest economic analysis, dated October 12, 2021, is similarly deficient and does not address the multitude of concerns that 3M raised in its initial comments.

A. DNR's Cost Estimates Lack Sufficient Explanation

Implementation and compliance costs of this rule are estimated by DNR to be roughly $5.6 million in the first year and $3.9 million for years two through six. However, in the following paragraph, DNR states that the compliance cost for each two-year period for years 2 to 6 are estimated to be $7.5 million, and that the cost is anticipated to "further decrease" after year 6. DNR does not provide sufficient support for these conclusory estimates.

[27] https://ntp niehs nih.gov/whatwestudy/assessments/cancer/criteria/index html, accessed August 22, 2021.

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DNR's only cost estimate for its recommended treatment method of a Granular Activated Carbon (GAC) system is based on a study from New Hampshire, which DNR does not cite to. According to DNR, the New Hampshire study states that a plant treating one million gallons of water per day would cost approximately $5.5 million to install or over $35 million annualized over a 20 year period. DNR further asserts that the maintenance of treatment of a GAC system is estimated to be $0.000959/gallon, which averages to $1,928,692 per year. However, DNR does not provide any sources, studies, or citations to provide commenters with any insight into how DNR arrived at this calculation and what DNR considered in doing so. These deficiencies deprive the public of meaningful review of the economic impact of the rule.

B. DNR Failed to Consider Costs to Certain Groups

The EIA states that the Proposed Rule will affect municipal community water systems, other water systems, non-transient community water systems, and laboratories certified to perform PFOS and PFOA analysis in drinking water. The impact analysis failed to consider the costs that wastewater treatment plants would incur as a result of the Proposed Rule.

C. DNR's Claims of Economic Benefits are not Based on Sound Science

The EIA asserts that Wisconsin will experience significant economic benefit as a result of reducing health problems caused by exposure to PFOS and PFOA. To make this assertion, DNR erroneously relies on two toxicological endpoints: PFOA-attributable low birthweight births, and PFOA correlation to hypertension. There is insufficient evidence of an association between exposure to any polyfluoroalkyl substance and pregnancy-induced hypertension or birthweight. Moreover, even if the associations cited by DNR for PFOA were indicative of causality, which they are not, they are specific to PFOA and do not support any conclusions related to PFOS.

For example, in examining the effect of PFOA and PFOS exposure on birthweight, DNR failed to examine adequately a large 24-study meta-analysis risk estimate of lower birthweight by Steenland et al. (2018), which concluded that: "Studies with a wide range of exposure, and studies with blood sampled early in pregnancy, showed little or no association of PFOA with birthweight. These are studies in which confounding and reverse causation would be of less concern."[28] Thus, the concern expressed for low birthweight is the effect of confounding and/or reverse causation of the maternal glomerular filtration rate (as a consequence of plasma volume expansion) during the course of pregnancy on a statistical association between fetal growth and the maternal measurement of PFOA or PFOS.

Several studies disprove an association between exposure to PFOS and PFOA and hypertension. For example, four studies from the mid-Ohio River Valley community studied the association between PFOA exposure and pregnancy-induced hypertension, and they have reported mixed results. Two of these studies (Nolan et al. 2010 and Savitz et al. 2012) showed

[28] Steenland, K., Barry, V., and Savitz, D. (2018). Serum Perfluorooctanoic Acid and Birthweight: An Updated Meta-analysis With Bias Analysis. Epidemiology 29, 765-776.

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no associations. The third study by Stein et al. (2009) described modest associations (although not statistically significant) between preeclampsia and exposure to PFOA and PFOS. The fourth study, Darrow et al. (2013), showed significant positive associations with pregnancy-induced hypertension and exposure to PFOA and PFOS but when categorized by quintiles such associations did not increase monotonically (in other words, effects were not shown to increase continuously as serum levels increased).

3M raised these points in comments to DNR's draft EIA, but DNR did not provide any additional rationale for its assertion in the final version. 3M suggests DNR review and consider more recent scientific literature addressing these issues when describing the healthcare costs that purportedly would be saved by implementing the MCLs.

3M appreciates the opportunity to provide comments on the Proposed Rule and respectfully encourages DNR to provide more transparency regarding its conclusions about the appropriate drinking water standards for PFOA and PFOS, as required by the Wisconsin APA. Further, 3M requests that DNR revise its proposed MCL to reflect the current state of the relevant science.

Attachment A

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Attachment A

July 31, 2021

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Submitted electronically via: DNRNR809Comments@wisconsin.gov

Re: Comments on Draft Fiscal Estimate and Economic Impact Analysis for Proposed Drinking Water Maximum Contaminant Levels, DG-24-19

Dear Mr. DeWeese:

The 3M Company ("3M") appreciates the opportunity to review and comment on the draft Fiscal Estimate and Economic Impact Analysis ("Economic Impact Analysis" or "EIA") issued by the Wisconsin Department of Natural Resources ("DNR") on June 17, 2021 to support DNR's proposed amendments to the Wisconsin Administrative Code relating to the promulgation of new drinking water maximum contaminant levels ("MCLs) for certain per- and polyfluoroalkyl substances ("PFAS") including perfluorooctanesulfonic acid ("PFOS") and perfluorooctanoic acid ("PFOA") ("Proposed Amendments").[29] As a science-based company with substantial experience, expertise, and product stewardship of these chemicals, 3M is well-positioned to provide input to DNR regarding its draft EIA in support of the proposed MCLs of 20 ng/L for both PFOA and PFOS.[30]

3M requests that DNR reassess the economic impacts as the draft EIA is deficient with respect to each of the three elements required under the Wisconsin Administrative Procedure Act ("WAPA"), Wis. Stat. § 227 *et seq.* First, the EIA does not accurately analyze or quantify the problem sought be addressed by the Proposed Amendments, but instead includes only vague assertions of public health concerns. *See* Wis. Stat. § 227.137(3)(a). Secondly, the EIA does not comply with the statutory requirement to provide an analysis and detailed quantification of the

[29] DNR is proposing to renumber and amend NR 809.205 (3) (4) and (5); to amend NR 809.20 (1) Table, 809.203 (2) Table CM and (4) Table D, 809.205 (2) (title), (intro.), (a), (b) and 1., and (6) (c), Appendix A to Subchapter V and Appendix A to Subchapter VII; and to create NR 809.04 (59h), 809.20 (2) (d), and 809.205 (1g) and (1r), relating to the promulgation of new drinking water maximum contaminant levels for PFAS.

[30] As requested by DNR, 3M does not comment here on the proposed MCL values proposed for any substance. However, 3M appreciates that DNR will provide an opportunity to comment on these issues during upcoming public comment periods.

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costs of the Proposed Amendments. *See* Wis. Stat. § 227.137(3)(b). Third, the draft EIA does not appropriately consider the potential benefits (or lack thereof) of the Proposed Amendments. *See* Wis. Stat. § 227.137(3)(c).

I. The Draft EIA's Conclusory Statements on the Potential Health Effects of PFOA and PFOS are Unsupported and Not Based on the Best Available Science

As a science-based company, 3M has significant concerns with the drinking water standards being proposed by DNR because they do not reflect the best and latest science regarding PFOS and PFOA. WAPA requires DNR to issue "an analysis and quantification of the problem, including any risks to public health or the environment, that the rule is intending to address." Wis. Stat. § 227.137(3)(a). The analysis included is cursory, overly conservative and does not adequately inform the public of the risks sought to be addressed. While the DNR states it will "solicit information from the [Wisconsin Department of Health Services] on these adverse effects and any data that may be available" that does not cure the draft's shortcomings. DNR must reissue its analysis after reviewing newly collected information to satisfy its statutory duties.

The conclusory statements in the draft EIA regarding purported health effects of PFOA and PFOS are not based on complete and best available scientific literature. For example, the draft EIA cites a single source when describing the health effects of PFOA and PFOS – a "U.S. EPA Study." The "study," however, is an EPA webpage[31] answering questions about the EPA's Health Advisory Levels issued for PFOA and PFOS. The EPA webpage similarly provides only a few sentences regarding alleged health effects.[32] Neither the response in the text of the draft EIA, nor the EPA webpage provides the analysis and quantification of the problem required by statute. Furthermore, the health effects asserted do not reflect the current state of the science. The draft EIA alleges among other detrimental effects, PFOS and PFOA exposure may lead to changes in cholesterol, implying increased levels. However, there are recent studies in which PFOA exposure is associated with decreased cholesterol.[33] Moreover, this is not consistent with how DNR characterized the same issue in the draft EIA regarding proposed groundwater standards.

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[31] https://www.epa.gov/ground-water-and-drinking-water/drinking-water-health-advisories-pfoa-and-pfos#:~:text=These%20studies%20indicate%20that%20exposure,)%2C%20liver%20effects%20(e.g.%2C

[32] Even if DNR presumably intended to cite to the health effects support documents linked at the bottom of the EPA webpage, such references are more than seven years old and still do not satisfy the statutory requirement that DNR must explain the risks at it is seeking to address in the EIA.

[33] In an experimental study which included a transgenic mouse model that mimics human lipoprotein metabolism, PFOA was shown to cause a decrease in cholesterol at high concentrations. This observation is inconsistent with the DNR's observational epidemiologic associations showing higher cholesterol with markedly lower PFOA concentrations. Pouwer, M. G., Pieterman, E. J., Chang, S. C., Olsen, G. W., Caspers, M. P. M., Verschuren, L., Jukema, J. W., and Princen, H. M. G. (2019). *Dose Effects of Ammonium Perfluorooctanoate on Lipoprotein Metabolism in APOE*3-Leiden.CETP Mice*. Toxicol Sci 168, 519-534.

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DNR also asserts that exposure to PFOS and PFOA is associated with liver damage. There is no association between PFOA with liver disease, including an enlarged liver, fatty liver, or cirrhosis,[34] and PFOS exposure has not been shown to have any impact on liver function where PFOS serum concentration reached as high as 175,000 ppb.[35] The draft EIA further asserts that exposure to PFOS and PFOA can lead to decreased antibody response to certain vaccines. Contrary to this assertion, considerable inconsistencies have been observed among the epidemiological studies that have examined PFOA exposure to antibody responses to distinct vaccine antigens. Because of these inconsistencies, these studies do not support an association between PFOA exposure and decreased vaccine response in humans. Lastly, DNR's draft EIA states that PFOS and PFOA exposure can lead to pregnancy-induced hypertension, but there is insufficient evidence of an association between exposure to any polyfluoroalkyl substance and pregnancy-induced hypertension.[36] 3M suggests DNR review and consider more recent scientific literature addressing these issues when describing the risks sought to be addressed by the Proposed Amendments.[37]

Additionally, while the draft EIA lists certain purported health impacts of PFOA and PFOS, it does not analyze or quantify whether those purported health effects are relevant at the levels of exposure contemplated by the Proposed Amendments. Although 3M understands that comments regarding the technical and scientific bases for the Proposed Amendments will be accepted during a separate public comment period, to the extent those bases contribute to identifying and quantifying risks sought to be addressed, WAPA requires their inclusion in the draft EIA.

II. DNR Should Make Additional Efforts to Evaluate the Costs Associated with the Proposed Amendments.

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[34] *See* Statement of C8 Science Panel, "Probable Link Evaluation for Liver Diseases" (October 29, 2012) *available at* http://www.c8sciencepanel.org/pdfs/Probable_Link_C8_Liver_29Oct2012.pdf

[35] *See e.g.,* Chang, S., Allen, B.C., Andres, K.L., Ehresman, D.J., Falvo, R., Provencher, A., Olsen, G.W., and Butenhoff, J.L. (2017). Evaluation of serum lipid, thyroid, and hepatic clinical chemistries in association with serum perfluorooctanesulfonate (pfos) in cynomolgus monkeys after oral dosing with potassium pfos. *Toxicol Sci* 156, 387-401.

[36] Four studies from the mid-Ohio River Valley community studied the association between PFOA exposure and pregnancy-induced hypertension, and they have reported mixed results. Two of these studies (Nolan et al. 2010 and Savitz et al. 2012) showed no associations. The third study by Stein et al. (2009) described modest associations (although not statistically significant) between preeclampsia and exposure to PFOA and PFOS. The fourth study, Darrow et al. (2013), showed significant positive associations with pregnancy-induced hypertension and exposure to PFOA and PFOS but when categorized by quintiles such associations did not increase monotonically (in other words, effects were not shown to increase continuously as serum levels increased).

[37] *See, e.g.,* Kyle Steenland, Tony Fletcher, Cheryl R. Stein, Scott M. Bartell, Lyndsey Darrow, Maria-Jose Lopez-Espinosa, P. Barry Ryan, David A. Savitz, "Review: Evolution of evidence on PFOA and health following the assessments of the C8 Science Panel," Environment International, Volume 145, 2020 (*available at* https://doi.org/10.1016/j.envint.2020.106125); Kyle Steenland and Andrea Winquist, *PFAS and Cancer, a Scoping Review of the Epidemiologic Evidence,* 194 *Env't Resch.* 110690 (2021), https://doi.org/10.1016/j.envres.2020.110690.

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The draft EIA is also insufficient under WAPA in that it does not include: "[a]n analysis and detailed quantification of the economic impact of the proposed rule, including the implementation and compliance costs that are reasonably expected to be incurred or passed along…" Wis. Stat. § 227.137(3)(b). A revised draft EIA containing such information should be resubmitted for public comment.

Beyond the DNR's estimate that "the initial monitoring costs for all systems [will] be $1.025 million," DNR provides only that, "[m]itigation and monitoring costs are unknown." While 3M agrees with DNR that some compliance costs depend on highly variable site-specific conditions, DNR should put forward a range of potential site costs, or at the very least give some examples for significant sites and relevant criteria for affected parties and the public to determine expected costs. While site-specific information is required to achieve a precise cost estimate, DNR should have access to at least the range of costs to address various substances at sites. That DNR suggests it will seek this information as part of the public comment period for the draft EIA does not satisfy the requirement.

Contradictorily, DNR later mentions a range of mitigation costs and includes a table of treatment cost examples in an appendix. But this list of examples is so wide-ranging as to be meaningless. DNR notes that treatment options range in cost from $1 million to $150 million. Such an enormous range in potential costs presented does little to instruct impacted businesses and sectors on how to best prepare for potential rule implementation. The costs are not broken down by treatment option or even by the size of the entity, so an impacted entity cannot clearly identify the potential scope of the Proposed Amendments' impact. This cursory estimate is not nearly detailed enough to provide the regulated community a meaningful opportunity to comment on the draft EIA or Proposed Amendments. Likewise, the table of treatment examples does not provide enough relevant data to be useful. It includes facilities from several different states, but does not mention the regulatory limits required in these jurisdictions. As with many substances, it is far more expensive to treat PFOA and PFOS down to lower thresholds. Without knowing the regulatory limits, impacted facilities cannot determine if the table provides relevant examples.

The draft EIA further does not estimate the number of entities that will exceed the Proposed Amendments, stating that it "has not conducted a comprehensive study" and that it "will be reassessed in light of the public comments received." This estimate is critical to understanding the mitigation and future monitoring costs reasonably expected to be incurred or passed along to the public. DNR should make available for public comment its reassessment in light of this information.

III. The Draft EIA does not Analyze the Benefits of the Proposed Amendments

The draft EIA also does not include an economic impact analysis that includes "[a]n analysis of benefits of the rule, including how the rule reduces the risks and addresses the problems that the rule is intended to address." Rather, without any identified support or basis,

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the draft EIA concludes the "economic benefits of the avoided costs on human health may greatly outweigh[] the costs of treating water or drilling a new well." The public has no way of evaluating that conclusion. As noted above, DNR alternatively states that compliance costs are unknown or that they fall somewhere within a range so large as to be meaningless. It provides no measure of benefits at all. DNR should reissue a revised EIA that includes such an analysis.

What is more, the draft EIA provides no information on what additional benefits the Proposed Amendments will generate when compared to EPA's current drinking water health advisories or any of the other state MCLs listed. The draft EIA includes various alternatives but never discloses what drove the decision to select 20 ppt. Indeed, in evaluating the risks purportedly presented by PFOA and PFOS, DNR appears to have relied exclusively on EPA's Health Advisory Levels. Yet, the draft EIA provides no explanation of what benefits are generated with MCLs more than three times lower than the value EPA chose.

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3M appreciates the opportunity to provide comments and encourages DNR to provide more transparency regarding its conclusions about the economic impacts of the proposed MCLs for PFOA and PFOS. 3M looks forward to reviewing more comprehensive scientific data underlying DNR's statements regarding potential health effects of PFOS and PFOA and the corresponding compliance, implementation, and remediation costs. Thank you for your consideration.

TO: Adam DeWeese – DG/5

FROM: Wisconsin Manufacturers & Commerce
Wisconsin Paper Council
Wisconsin Civil Justice Council
Wisconsin Water Alliance
Midwest Food Products Association
American Chemistry Council

DATE: December 8, 2021

RE: Comments on DG-24-19 (NR 809) – Maximum contaminant levels for PFOS and PFOA

Summary:

The above referenced organizations – Wisconsin Manufacturers & Commerce, Wisconsin Paper Council, Wisconsin Civil Justice Council, Wisconsin Water Alliance, Midwest Food Products Association, and American Chemistry Council – appreciate the opportunity to comment on DG-24-19 (NR 809), which establishes a combined drinking water standard of 20 ppt for Perfluorooctanesulfonic acid (PFOS) and Perfluorooactanoic acid (PFOA).

PFOA and PFOS are the two most widely studied of a family of more than 5,000 PFAS compounds. Our organizations support the EPA doing reasonable, science-based maximum contaminant levels (MCL) of PFOA and PFOS. However, these regulations must be lawful, properly applied, and use the best available, peer-reviewed science. Unfortunately, that is not what the Wisconsin Department of Natural Resources (DNR) is seeking to do with the proposed NR 809.

Our organizations have a number of concerns with the draft rule. To emphasize our major concerns:

1. DNR lacks statutory authority for this rule: The DNR is proposing a combined standard, which is not permitted by state statute. Moreover, if any standard is to be proposed, the state should be following the U.S. Environmental Protection Agency (EPA)'s health advisory level of 70 ppt.

2. The compliance costs for this rule exceed statutory limitations: The DNR is both underestimating the total costs of the rule *and* misapplying the estimated costs it included in its final EIA. If costs are properly estimated and applied, the rule exceeds statutory limitations under chapter 227 rulemaking requirements.

3. The proposed standard lacks proper scientific justification: The suggested 20 ppt combined standard for PFOA and PFOS was proposed due to science that was, at best, misapplied.

Finally, it must be emphasized that the DNR is seeking to take unprecedented action with this rule. To the best of our knowledge, the DNR has previously never sought to impose a chemical MCL under a drinking water standard prior to the EPA proposing standards under the Safe Drinking Water Act. In addition, EPA-mandated drinking water standards are expected to be proposed by next fall. This is all the more reason to allow the experts at the EPA to propose national standards. Instead, this rule proposes to adopt Wisconsin-only standards for substances mere months before national standards are announced.

Our organizations respectfully ask the DNR to *stop* its work on the drinking water standards under NR 809 and instead allow the EPA to propose national standards under the Safe Drinking Water Act. This action would allow local governments, homeowners, businesses and others to avoid compliance costs associated with expensive "Wisconsin-only" drinking water standards when federal standards are imminent. This also would ensure a rigorous process for standard setting that follows federal requirements under the Clean Water Act.

Background on Coalition:

Our organizations represent a diverse coalition of stakeholders interested in sound, peer-reviewed standards for PFAS, including PFOA and PFOS:

Wisconsin Manufacturers & Commerce (WMC) is the largest general business association in Wisconsin, representing approximately 3,800 member companies of all sizes, and from every sector of the economy. Since 1911, our mission has been to make Wisconsin the most competitive state in the nation to do business. WMC members depend on fair, predictable environmental standards that do not unduly target or harm Wisconsin businesses.

The **Wisconsin Paper Council (WPC)** is the premier trade association that advocates for the papermaking industry before regulatory bodies, and state and federal legislatures to achieve positive policy outcomes. WPC also works to educate the public about the social, environmental, and economic importance of paper, pulp, and forestry production in Wisconsin and throughout the Midwest.

The **Wisconsin Civil Justice Council's (WCJC)** mission is to promote fairness and equity in Wisconsin's civil justice system, with the ultimate goal of making Wisconsin a better place to work and live. WCJS's positions are set by its board that consists of representatives of Wisconsin's leading business and professional organizations.

The **Wisconsin Water Alliance (WWA)** is a non-partisan statewide organization. Its mission is to help protect the state's water resources and advocate for sound water policies that benefit current and future generations of Wisconsin families, cities, businesses, farmers and others.

The **Midwest Food Products Association (MWFPA)** is a trade association founded in 1905 representing the food processing industry in the states of Wisconsin, Minnesota and Illinois. MWFPA's purpose includes advocating on public policy issues including food safety, workforce, and environmental regulations.

The **American Chemistry Council (ACC)** is America's oldest trade association of its kind, representing more than 190 companies engaged in the business of chemistry – an innovative, economic growth

engine that is helping to solve the biggest challenges facing our country and the world. Its members are the leading companies engaged in all aspects of the business of chemistry. ACC believes that if America is to remain a country that innovates and competes globally, it must do so with a thriving American chemical industry.

Background on Rule:

The proposed rule (DG-24-19) would revise NR 809 of the administrative code to incorporate an individual maximum contaminant level (MCL) and a combined MCL of 20 ppt for PFOA and PFOS. The standard is based on recommendations from the Wisconsin Department of Health Services (DHS). There is no current standard for either compound in the current administrative code.

The actions by the DNR in this rulemaking to set this MCL appear to be unprecedented in the following ways:

1. The DNR has never before set a state MCL for a chemical prior to a national MCL being proposed.
2. The DNR has never before proposed a combined MCL for two (or more) chemical compounds.

In reference to this rule's timeline, DNR staff is scheduled to brief the Natural Resources Board (NRB) on this rule and two other PFAS rules today (Wednesday, December 8). Agency staff has indicated that the goal is to have this rule be considered by the Natural Resources Board at their February monthly meeting. According to an agency webpage,[1] the DNR intends to have this rule become effective in "Summer 2022."

The proposed rule impacts businesses and other regulated entities in a number of ways. Businesses that operate non-transient non-community public water systems will be required to meet the 20 ppt standard directly. In addition, many businesses and other water ratepayers will be indirectly impacted due to higher water utility rates, as public water systems will need to raise rates to meet the costs of this state mandate.

As a preliminary matter, it should also be noted that the relating clause and analysis within the draft rule continue to improperly imply that the proposed NR 809 will regulate PFAS as a *class of chemicals*. With respect to the relating clause, it states that the content of the rule is "relating to the promulgation of new drinking water maximum contaminant levels for Per- and Polyfluoralkyl Substances (PFAS) including Perfluoroactanesulfonic acid (PFOS) and Perfluorooctanoic acid (PFOA)." However, the rule only proposes new standards for PFOS and PFOA and no other PFAS compound.

The relating clause and subsequent rule analysis should be modified to clarify that the rule *only* proposes MCLs for PFOA and PFOS. PFAS compounds are a diverse family of chemistry – not all PFAS compounds are the same. The rule's relating clause implies that the DNR is attempting to impose MCLs on PFAS as a class, which is not what the rule does and would be unlawful under Wisconsin statutes.

Concerns:

The primary concerns of our organizations are outlined below. Many of these concerns echo those already raised during the various public comment opportunities, including comments filed on the

[1] DNR webpage: NR 809 Safe Drinking Water Standards Update – Cycle 10 Rulemaking Timeline; https://dnr.wisconsin.gov/topic/DrinkingWater/NR809.html.

preliminary scope statement, comments filed on the draft economic impact analysis (EIA), and concerns raised during various stakeholder meetings held by the Department. While the Department has adjusted its rule analysis and released a revised EIA, the rule remains fundamentally flawed and unlawful.

1. **The final EIA continues to underestimate costs.**

WMC, WPC, and other stakeholders submitted comments during on the draft EIA in July. At that time, it was noted that the initial EIA was woefully inadequate and failed to make a basic estimate of many costs incurred by the regulated community. As a result, multiple stakeholders asked the Department to compile and prepare a revised EIA with a new public comment period. This would have allowed the regulated community an opportunity to provide thoughtful feedback on estimated costs prepared by the agency, as required by ch. 227 rulemaking requirements.

Unfortunately, the Department ignored the request to provide a revised EIA for public comment. Since that request was ignored, our comments on the revised EIA are incorporated into these comments on the rule itself.

To begin, it should be acknowledged that the final EIA is an improvement over the original, draft EIA. The original EIA merely identified $1,025,000 for "initial monitoring costs" and indicated other costs were "unknown." The agency punted on all other costs – including costs to install treatment systems and costs associated with constructing new wells. In so doing, it ignored basic rulemaking requirements of ch. 227 of the Wisconsin statutes. Specifically, s. 227.137(3)(b)(1) requires the agency to express all compliance costs "as a single dollar figure," and does not provide an exemption for unknown costs.

Conversely, the final EIA indicates that "the maximum implementation and compliance costs in any two consecutive years is estimated to be $9,350,949.15." The department assumes that 26 water systems (13 community and 13 non-transient non-community) will exceed the proposed 20 ppt combined standard for PFOA and PFOS.

According to the Department, the primary cost driver is the installation of nine granular activated carbon (GAC) treatment systems by municipalities to comply with this rule. For the other 17 systems expected to exceed the state's standard, the Department assumes new wells will be installed. The agency assumes that six community systems will drill new wells at an average cost of only *$50,000* per well. In addition, it is assumed that thirteen non-community systems will install new wells at an average cost of $15,000 per well.

These estimated costs for these well installations are absurdly low. First, it is unclear how the Department justifies a cost estimate of $50,000 for a municipal well. In July, the Wisconsin Rural Water Association (WRWA) submitted comments on the draft EIA for this rule to the Department. At that time, WRWA indicated that "a basic well generally costs between $1 million-$1.5 million. If the well needs to be relocated some distance away from the present location this leads to land costs, test boring costs, test costs, new buildings, new treatment equipment and chemicals and could increase costs substantially."

Moreover, the agency estimate of $50,000 for a municipal well is inconsistent with previous estimates submitted by the Department. For example, in June the DNR released a fiscal estimate for Assembly Bill

392,[2] which would create a PFAS municipal grant program. In that cost estimate, the agency estimated that "replacement of municipal wells can cost anywhere from $1 million to $3 million to install."

The DNR's estimate of $15,000 to replace a non-transient non-community well is also too low. Again, the DNR's fiscal estimate for AB 392 estimates that private well replacement "can vary significantly based on the local environment, but can cost anywhere from $25,000 to $50,000 per well."

In the final EIA, the DNR's total estimate for the cost of well replacement is $480,802.50 [see Table 5 on pg. 6 in the final EIA]. For the purposes of compiling a more accurate estimate, we assume the following average costs:

- Average cost to replace a municipal well = $1.25 M (This is the average cost to replace a "basic" municipal well as estimated by the WI Rural Water Association.)
- Average cost to replace a non-transient non-community well = $37.5 K (This is the average cost to replace a private well estimated by the DNR for AB 392.)

Table 1: Total Estimated Cost to Replace Wells

	DNR Estimate	Coalition Estimate
Community System (6 wells)	$292,275.00	$7,500,000
Non-Community System (13 wells)	$188,527.50	$487,500
Total Estimate	**$480,802.50**	**$7,987,500**

Thus, we estimate the final EIA from the DNR to replace 19 wells (6 community, 13 non-community) is low by *at least* $7.5 million in upfront costs. This is determined simply by applying cost estimates from industry experts as well as the agency's own estimates.

Moreover, if anything, this is a significant <u>underestimate</u> of the compliance costs associated with replacing these wells. It assumes each newly installed well can be located close to the existing well, and that each new well will meet the proposed standard. If the well must be located further away, or the new well also fails to meet the proposed standard, costs increase substantially.

If we incorporate our estimate into the DNR's total estimated compliance cost table [see Table 6 on pg. 7 on the final EIA], we can calculate the following:

Table 2: Cost Estimate incorporating Higher Costs to Replace Wells

Cost	One-time Cost (Year 1)	Annual Year 2	Total Over First Two Years
Monitoring	$1,428,375	$59,333	$1,487,708
Mitigation	$11,678,719.57*	$3,691,220	$15,369,940

[2] Source: WI DNR Cost Estimate of Assembly Bill 392, dated June 29, 2021. https://docs.legis.wisconsin.gov/2021/related/fe/ab392/ab392_dnr.pdf

Total Estimate	$13,107,094.57	$3,750,553.00	$16,857,648

**Replaces $480,802.50 from DNR's compliance cost estimate.*

In other words, if we apply more reasonable estimates to show the actual costs to replace each well, this simple estimate shows that compliance costs for the rule exceeds $10 million over the first two years. This triggers the requirements under s. 227.137(3)(b)(2). Under this statute, the DNR cannot move forward with promulgating this rule without passage of a bill.

Finally, it must be emphasized that we are only examining one small aspect – well replacement – of the DNR's final EIA. In these comments, we did not examine whether or not the revised cost analyses for treatment systems, well monitoring, or other compliance costs are appropriate.[3] Nor did we evaluate whether the DNR has determined an appropriate number of water systems that will require treatment or replacement (though this number is likely too low). Again, it is deeply unfortunate that the DNR ignored the request of stakeholders for a separate public comment period for the revised EIA, since the original EIA failed to meet basic requirements of ch. 227 rulemaking.

2. The final EIA misapplies included costs, and fails to meet other statutory requirements.

The prior section of these comments evaluates a significant shortcoming with the Department's final EIA, and provides an alternative analysis using more reasonable estimates of certain (but not all) compliance costs. However, it should be emphasized that the final EIA also fails to meet ch. 227 rulemaking requirements by misapplying compliance costs. Cost figures from the DNR's own analysis plainly show that estimated costs incurred exceed $10 million over the first two years.

In particular, the DNR estimates that nine municipal water systems that fail to meet the proposed combined standard of 20 ppt will need to install treatment plants, with an expected cost of $30.3 million.[4] Such an amount would clearly exceed the $10 million threshold under ch. 227. However, the analysis *then* assumes that municipal governments will annualize these costs via a *20-year loan*, and assumes annual costs of $1,762,527 total for these municipalities.

Simply put, the statutes do not allow the Department to utilize an amortization schedule to calculate these compliance costs. Section 227.137 of the statutes requires the Department to analyze when costs are "incurred" by local governments and businesses. Such costs are "incurred" when there is a commitment to pay the costs, regardless of whether they are paid up front or financed over a period of time. Under the DNR's strained interpretation of the law, it would need to examine how all impacted entities would fund rule-related costs to determine if the $10 million cost threshold was met.

Moreover, such a practice is wholly inconsistent with the intent of the applicable statute – the REINS Act (2017 WI Act 57). The purpose of the statute was to give policymakers and the public an accurate representation of the costs associated with the rule – and ensure that bureaucrats could not unilaterally impose expensive mandates on businesses and taxpayers. The goal was not to ensure the regulated community sought every available financing option to comply with such mandates.

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[3] Numerous stakeholders - representing WMC, WPC, Wisconsin Dairy Alliance, Venture Dairy Cooperative, and the League of Wisconsin Municipalities - submitted detailed comments on the draft EIA in July showing compliance costs exceeding tens of millions of dollars over a two-year period.

[4] See the 2nd bullet point on pg. 6 of the DNR's final EIA.

Finally, the final EIA fails to provide a full estimate of the implementation and compliance costs of the rule. The DNR estimates (incorrectly) that "the maximum implementation and compliance cost in any two consecutive years is estimated to be $9,350,949.15" in Section 9 of the EIA. However, the applicable statute in this section of the EIA is s. 227.137(3)(b)1. This statute, in full, states the following:

An estimate of the total implementation and compliance costs that are reasonably expected to be incurred by or passed along to businesses, local governmental units, and individuals as a result of the proposed rule, ***expressed as a single dollar figure [emphasis added]****. With respect to an independent economic impact analysis prepared under sub. (4m) or s. 227.19 (5) (b) 3., the person preparing the analysis shall provide a detailed explanation of any variance from the agency's estimate under this subdivision.*

However, neither Section 9 of the EIA, nor anywhere else in the analysis does the DNR provide an estimate of the total compliance costs "expressed as a single dollar figure." Based on the information provided, total compliance costs are approximately $69 million[5] over 20 years *for the nine GAC treatment systems alone*. Once again, this $69 million figure is still an underestimate that only uses some of the compliance costs estimated by the Department. The agency's failure to fully and plainly disclose these costs is a disservice to the public, and an unlawful violation of ch. 227 rulemaking requirements.

In summary, the DNR's final EIA is unlawful as it both fails to correctly calculate incurred compliance costs, and also fails to disclose the full costs of the proposed rule.

3. The DNR is misapplying research from DHS in proposing the 20 ppt combined standard for PFOA and PFOS.

As previously noted, the DNR is proposing to adopt a combined standard of 20 ppt for PFOA and PFOS in DG-24-19. This proposed standard is based on a recommendation by the Department of Health Services (DHS). Notably, this recommendation is not peer-reviewed. Moreover, the DHS recommendation misinterprets the principal study it cited in its recommendation.

Generally speaking, Wisconsin law requires state agencies to set daily intake values for chemicals that follow federal values set by the EPA. However, s. 160.13(2)(b)2. allows DHS to recommend an alternative value if there is "significant technical information which is scientifically valid and which was not considered when the federal value was established" to set a different value. In its Cycle 10 recommendations for values for PFOA and PFOS, DHS relied heavily on its interpretation on the results of a 2018 paper by KK Kieskamp on pregnancy and lactation in mice to propose the 20 ppt combined standard. In fact, DHS called the Kieskamp paper its "principal study" in recommending a 20 ppt standard for PFOA.[6]

The Kieskamp paper concludes that dosimetry for pregnant/lactating mothers "should be considered when developing health-based toxicity values." However, it's important to understand that the Kieskamp paper ***is not*** a toxicology study. It is a modeling paper that attempts to estimate dosimetry guidelines for pregnant/lactating mothers using modeled results based upon effects observed on mice. As with any use of modeling, there is inherent uncertainty in the accuracy of the modeled results. This uncertainty is compounded by the fact that Kieskamp utilized a mice study that actually used some

[5] According to the final EIA, the upfront cost for the nine GAC systems is $30.3 million. In addition, annual GAC maintenance costs are $1,928,692.15 (or $38,573,840 over 20 years). Added together, the cost is $68.9 million.
[6] Cycle 10 Recommendations on PFOA – 2019; https://dnr.wi.gov/topic/Contaminants/documents/pfas/PFOAScientificSupport.pdf

pharmacokinetic parameters obtained from rats – not mice.[7] In addition, the paper modeled milk-to-plasma partition coefficients for both mice and humans as being constant, despite acknowledging that this modeling parameter may change during lactation, which would skew the results.

Finally, the Kieskamp paper further acknowledges that "additional human pharmacokinetic data and reporting of internal PFOA tissue levels over time ***will greatly improve*** the application of the approach proposed in this study" [Emphasis added]. This acknowledgement suggests that the science is far from settled with respect to utilizing the Kieskamp paper as the basis for establishing regulatory standards.

Rather than using health-based toxicity values like those utilized by the Obama EPA when it developed its 70 ppt health advisory for PFOA and PFOS, Kieskamp attempts to reinvent the science based upon computer modeling with the shortcomings referenced above. There is not a scientifically justifiable reason for doing so, especially when considering the fact that even Kieskamp acknowledges that toxicity-based reference doses like those used by EPA ***"are by definition protective of the population at large, including fetuses and nursing infants"*** [Emphasis added]. The "scientific validity" of departing from the EPA's toxicity-based reference dose (which already protects fetuses and nursing infants) to instead follow dosimetry contrived from a modeling paper that is not a toxicology study cannot withstand scrutiny. For all of these reasons, the Kieskamp modeling paper simply does not rise to the level of technical and scientific rigor necessary to meet the statutory off-ramp from utilizing a federal number under s. 160.13(2)(b)2. of the Wisconsin Statutes. The Obama EPA's "federal number" of 70 ppt must be used.

Moreover, the validity of the DHS findings have been called into serious question by the scientific community, and the DNR is well aware of these shortcomings. On September 23, 2020, the DNR held a stakeholder meeting as part of its public input process for this rule. At that time, the American Chemistry Council did a stakeholder presentation[8] that raised serious concerns with the DHS model utilized to propose the 20 ppt standard, particularly how it misapplied the Kieskamp paper.

ACC concluded that the DHS recommendations significantly overestimated risks. The DHS evaluation inappropriately included certain types of exposure in its model, which resulted in a 5-6 times lower acceptable concentration. The DHS model also predicted levels of exposure 2-3 times higher than observed by the empirical data. Given these discrepancies, ACC urged the DNR to conduct a "robust review" of the DHS recommendation before moving forward with recommendations related to PFOA and PFOS.

In addition, it should be noted that DHS calculated the proposed drinking water MCL for PFOA and PFOS using exposure factors for a young child (10 kg), despite the fact that the Kieskamp paper examined impacts of water consumption on a pregnant/lactating mother. Specifically, DHS calculated the proposed drinking water MCL for PFOA and PFOS using a bodyweight of 10 kg (22 lb) and a water consumption rate of 1 L/d (equivalent to a drinking water ingestion rate to bodyweight ratio of 0.1 L/kg-d), which clearly does not correspond to a pregnant/lactating mother potentially passing PFOA through the placenta or milk per the Kieskamp model. This is another incongruity that calls into question the appropriateness of the Kieskamp paper as the basis for establishing a Wisconsin regulatory standard.

It should also be noted that when DHS made its Cycle 10 recommendation on PFOA, it pointed to a *draft* report from the Agency for Toxic Substances and Disease Registry (ATSDR). This report sets "minimum

[7] Rodriguez et al. 2009

[8] Risotto, Steve; ACC Position on Adoption of DHS Recommendation for PFOA/PFOS; September 23, 2020; https://dnr.wisconsin.gov/sites/default/files/topic/DrinkingWater/NR809/ACCPresentation.pdf

risk levels" (MRLs), and the agency strongly cautions that "MRLs are not intended to define clean up or action levels." Moreover, while the ATSDR MRLs undergo a review process, the DHS model itself that references the MRLs is not subject to any such peer review.

Unfortunately, despite these serious problems with the DHS analysis, the DNR is moving forward with the DHS recommendations for the combined standard of 20 ppt of PFOA and PFOS. To the best of our knowledge, no review of the DHS recommendation was ever conducted by the DNR. It begs the question as to why the DNR even bothered to hold stakeholder meetings, as the agency seems uninterested in making changes based on stakeholder recommendations or legitimate questions surrounding the science and methodology used to arrive at the 20 ppt combined standard.

4. Proposed regulations for PFOA and PFOS are far more stringent than many other countries.

Our organizations also stress that the Wisconsin DNR is proposing unique, Wisconsin-only drinking water standards for PFOA and PFOS that are far more stringent than what was adopted by many other countries. Again, DHS is relying on its own, internal models instead of a peer-reviewed standard.

Table 3: International PFOA/PFOS Drinking Water Standards[9]

Country	PFOA (ppt)	PFOS (ppt)
Australia	560	70
Canada	200	600
Denmark	100	100
Germany	300	300
Sweden	90	90
U.S. EPA (Obama)*	70	70
Wisconsin (proposed)	20	20

**70 ppt is a Health Advisory Level from the EPA.*

It is hard to understand why the DNR is moving forward with Wisconsin-only standards for PFOA and PFOS that are far more stringent than Canada, the Obama EPA's health advisory level, and several countries in Western Europe.

5. The DNR lacks statutory authority to set a combined standard for PFOA and PFOS.

Not only are the proposed standards within DG-24-19 based on questionable science, not peer reviewed, and inconsistent with recommendations by the Obama EPA and international standards, but the DNR simply lacks the statutory authority to propose a combined standard. The DNR is relying on ch. 160 of the statutes to propose this combined standard of 20 ppt of PFOA and PFOS. However, the agency lacks the explicit statutory authority required to propose a combined enforcement standard for any two PFAS compounds or any two chemicals.

[9] Source: International Technology Regulatory Council "PFAS Fact Sheets;" https://pfas-1.itrcweb.org/fact-sheets/

The relevant statutory authority for the establishment of enforcement standards for drinking water is found in Section 160.07 of Wisconsin statutes. This section sets requirements for DHS to recommend enforcement standards, and for the DNR to subsequently propose them. However, the statutes only contemplate the adoption of *a single* drinking water standard for each "substance of public health concern." Nowhere is the authority granted to propose a combined standard.

Moreover, the executive branch is well aware that it lacks the statutory authority for the action proposed in this rule. In his 2021-'23 budget recommendation, Governor Evers specifically proposed new statutory language in s. 160.07 to authorize the Department of Health Service to recommend a combined standard for PFAS compounds. Specifically, that proposed language stated the following:

> *"SECTION 2294. 160.07 (4) (f) of the statutes is created to read:*
>
> *160.07 (4) (f) In recommending an enforcement standard for a perfluoroalkyl or polyfluoroalkyl substance, the department of health services may recommend individual standards for each substance, a standard for these substances as a class, or standards for groups of these substances.[10]"*

To clarify, this provision was *rejected* by the Legislature, and not included in the final version of the budget (2019 WI Act 58) that was signed into law. If the agency already had the authority to propose combined standards for PFAS compounds, such language would be unnecessary. Nonetheless, DHS and the DNR have continued to advance a combined standard of 20 ppt under this rulemaking.

To conclude, this proposed combined standard is a violation of ch. 227 rulemaking requirements. Specifically, s. 227.10(2m) prohibits an agency from enforcing "any standard, requirement or threshold…that is not explicitly required or explicitly permitted by statute or by a rule." The actions by DHS and DNR to set a combined standard for two substances of concern is not explicitly authorized by s. 160.07 or any other statute. Thus, the proposed combined standard in this rule is unlawful.

6. If the DNR is to set a standard, statutes require the agency to use the federal number of 70 ppt.

Chapter 160 of the statutes also directs the state to follow federal standards when setting state drinking water standards. Specifically, if a "federal number" exists, the statutes direct DHS and DNR to utilize this number. In this case, the relevant number is the 70 ppt "health advisory level" for drinking water, which was established by the Environmental Protection Agency (EPA) under former President Obama. Nonetheless, the DNR is ignoring the federal number and proposing the 20 ppt standard.

Again, the statutes are clear as it pertains to drinking water standards for substances of public health concern. Section 160.07(4)(a) provides that, if a federal number exists, "the federal number shall be the enforcement standard." Under s. 160.01(3), a "federal number" can include a "drinking water standard or maximum contaminant level," or "a suggested no-adverse-response level" by the EPA.

In May of 2016, the Obama EPA issued drinking water health advisories for PFOA and PFOS. The EPA established "health advisory levels" at 70 ppt. The health advisories were based on the "best available peer-reviewed studies" and provides "a margin of protection for all Americans throughout their life from

[10] See lines 9-13 of page 1259 of 2019 Assembly Bill 68, legislation introduced "by request of Governor Tony Evers."

adverse health affects" from PFOA and PFOS in drinking water.[11] The 70 ppt health advisory level plainly meets the definition of "federal number" under Wisconsin statutes.

Indeed, this assertion is not disputed by DHS. In its Cycle 10 standard recommendation to the DNR (a DHS guidance document),[12] DHS readily referred to the EPA's health advisory level of 70 ppt for PFOA and PFOS as "federal numbers." However, as noted previously, DHS failed to simply recommend adopting the federal number. Instead, the agency utilized a statutory exemption to allow it to set its own standard. The applicable statute, s. 160.07(4)(e), states, in full, the following:

"(e) Notwithstanding pars. (a) and (b), the department of health services may recommend an enforcement standard different than the federal number if there is ***significant technical information which is scientifically valid [emphasis added]*** *and which was not considered when the federal number was established, upon which the department of health services concludes, utilizing the methodology under s. 160.13 and with a reasonable scientific certainty, that such a standard is justified. The department of health services may recommend a change in an enforcement standard previously adopted by utilization of a federal number. In evaluating the evidence for establishing an enforcement standard different than a federal number, the department of health services shall consider the extent to which the evidence was developed in accordance with scientifically valid analytical protocols and* ***may consider whether the evidence was subjected to peer review [emphasis added]****, resulted from more than one study and is consistent with other credible medical or toxicological evidence."*

In other words, DHS overruled the Obama EPA recommendation based on its own review of scientific information. Ironically, while DHS is allowed to consider whether EPA's recommendation is based on "evidence that was subjected to peer review," DHS ultimately moved forward with an alternative recommendation based on its own modeling that was not subject to peer review. As noted previously, our organizations have significant concerns with the how these Wisconsin-only standards were developed, and how the relevant studies were interpreted and applied by DHS.

Since substantial questions have been raised about whether DHS is recommending a standard that is "scientifically valid," it raises the question as to whether it is lawful for DHS to utilize (and DNR to implement) a recommendation that is inconsistent with the EPA's "federal number." Thus, if DNR intends to move forward a drinking water standard for PFOA and PFOS at this time, the most appropriate standard is the Obama EPA standard of 70 ppt.

7. EPA drinking water standards on PFOA/PFOS are imminent, and DNR will need to conform to the new federal standard.

Finally, our organizations are deeply troubled by the DNR's insistence of moving forward with expensive, Wisconsin-only drinking water standards for PFOA and PFOS when federal drinking water standards for these substances are imminent. In October, the EPA announced its "PFAS Strategic Roadmap."[13] According to this action plan, the EPA intends to issue proposed drinking water standards on PFOA and PFOS in "Fall 2022." In short, regulated entities may have to begin complying with a Wisconsin-only

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[11] EPA Fact Sheet: PFOA & PFOS Drinking Water Health Advisories; November 2016. https://www.epa.gov/sites/default/files/2016-06/documents/drinkingwaterhealthadvisories_pfoa_pfos_updated_5.31.16.pdf.

[12] Recommended Public Health Groundwater Quality Standards – Scientific Support Documents for Cycle 10 Substances; June 2019; https://www.dhs.wisconsin.gov/publications/p02434v.pdf

[13] PFAS Strategic Roadmap: EPA's Commitments to Action 2021-2024; https://www.epa.gov/system/files/documents/2021-10/pfas-roadmap_final-508.pdf

standard mere months before a mandatory federal standard is proposed.

In particular, our key concerns are as follows:

Federal standards are more uniformly applied and follow a predictable process:

Under its proposed rule, the DNR is seeking to impose a chemical MCL under a drinking water standard prior to the EPA proposing an MCL for that chemical. To our knowledge, such an action is unprecedented.

There is good reason for this past practice. As a policy matter, drinking water standards should be established at the federal level, rather than creating a state patchwork of varying standards and thresholds. A national approach helps to ensure all citizens receive the same level of drinking water protections that have been vetted through the rigorous Safe Drinking Water Act process. Such a practice also provides some measure of certainty to businesses, water ratepayers and consumers.

Federal standards will be released in fall 2022:

As noted previously, federal drinking water standards for PFOA and PFOS are expected to be proposed in fall 2022 by the Biden EPA. The agency is currently developing enforceable National Primary Drinking Water Regulations (NPDWRs) for both substances. Wisconsin must comply with these federal drinking water standards. If the DNR's proposed regulations fail to meet federal requirements, the federal requirements will prevail.

The DNR's goal is to have this rule become effective in "Summer 2022." In short, Wisconsin entities will need to start complying with this rule *mere months* before a federal MCL is proposed. This creates incredible regulatory uncertainty for the state's business community and public water systems, and could also create incredible compliance costs. As noted in the final EIA, many entities may need to install expensive PFAS treatment systems in order to comply with this rule. If these systems are unable to comply with the proposed federal MCL, well owners may have to *once again* install a new treatment system or install a new well in order to achieve compliance.

EPA is utilizing latest science with its standards:

Last month, the Biden EPA announced that it had asked the agency's Science Advisory Board to review draft scientific documents pertaining to the health effects of PFOA and PFOS. The agency noted that "following peer review," this information will be used to inform the development of MCLs for these substances.[14] The announcement also notes that "the EPA will not wait to take action to protect the public from PFAS exposure."

In short, the EPA is using the latest scientific documents and a process that includes peer review to advance its standards. Conversely, the DHS recommended standards for PFOA and PFOS by applying a model that never underwent a peer review process and the agency appears to be misapplying the documentation it analyzed. Moreover, all of the documentation it referenced is now more than two years old.

[14] Press Release: EPA Advances Science to Protect the Public from PFOA and PFOS in Drinking Water; 2021.11.16; https://www.epa.gov/newsreleases/epa-advances-science-protect-public-pfoa-and-pfos-drinking-water

Conclusion:

Our organizations – Wisconsin Manufacturers & Commerce, Wisconsin Paper Council, Wisconsin Civil Justice Council, Wisconsin Water Alliance, Midwest Food Products Association, and American Chemistry Council – support the EPA doing reasonable, science-based maximum contaminant levels (MCL) of PFOA and PFOS. However, that is not what is included in the proposed NR 809.

Again, our key concerns are as follows:

- The DNR lacks statutory authority to move this rule forward: The agency cannot lawfully promulgate a combined standard. Moreover, if the DNR wishes to promulgate a standard, the statute directs the agency to promulgate a standard that mirrors the EPA's current health advisory level (the "federal number") of 70 ppt.
- Compliance costs exceed statutory limitations: The compliance costs of this rule exceed $10 million over two years. This triggers the requirements of 2017 WI Act 57.
- The proposed standard lacks proper scientific justification: The Department did not subject its proposed standard to a peer review process, and serious questions were raised as to the model and science used to determine the standard.

Finally, new proposed drinking water standards on PFOA and PFOS, using the latest peer-reviewed science, are expected soon to be released by the Biden EPA. If the agency moves forward with the rule as proposed, businesses will be forced to comply first with a state standard, and then subsequently with a national standard. Such an approach will impose substantial additional compliance costs on the regulated community. **Our organizations respectfully ask the DNR to stop its work on the drinking water standards under NR 809 and instead allow the EPA to propose national standards under the Safe Drinking Water Act.**

Thank you for your consideration of our comments. Please do not hesitate to contact us with any questions.

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December 7, 2021

Filed Via Email
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Department of Natural Resources
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101 S. Webster Street
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RE: Comments on DG-24-19
Revisions to ch. NR 809 related to the promulgation of new drinking water MCLs for PFOA and PFOS

Dear Mr. DeWeese:

These comments are filed on behalf of the Municipal Environmental Group - Water Division (MEG - Water). MEG - Water is an association of 69 municipal water systems that provides input on legislative and regulatory issues involving water supply.

MEG - Water supports the establishment of federal drinking water standards for PFAS but does not support the Department's establishment of state standards at this time. EPA has made it clear that it is moving ahead to regulate PFAS in drinking water. On March 3, 2021, EPA published its final regulatory determination to regulate PFOA and PFOS under the Safe Drinking Water Act (SDWA). On October 18, 2021, EPA announced its PFAS Strategic Roadmap which included issuing a proposed rule establishing federal maximum contaminant levels (MCLs) for PFOA and PFOS by fall 2022 with a final rule issued by fall 2023. MEG - Water asks the Department to wait for EPA to promulgate federal drinking water MCLs before proceeding to adopt state standards.

When EPA promulgates federal drinking water standards, EPA follows the SDWA standard-setting process. Under the SDWA standard-setting process, a health goal is set that considers risks to the most sensitive populations including infants, pregnant women, and the immuno-compromised. The next step sets the enforcement standard (the MCL) to be as close to the health goal as feasible, considering available treatment technologies and costs. This cost-benefit analysis is a critical component of the SDWA standard-setting process.

Under the SDWA standard-setting process, drinking water standards are not set at the lowest possible level regardless of cost, treatment feasibility, and relative health benefit returns. The SDWA cost-benefit analysis provides assurance that the health benefits achieved by a new

standard justifies the cost of meeting that standard, and that comparable health benefits could not be achieved with a higher standard that would be less costly to meet.

The Department did not follow the SDWA standard-setting process in proposing the state standards for PFOA and PFOS in Rule No. DG-24-19. Instead, the Department set the proposed standards for PFOA and PFOS based on the Wisconsin Department of Health Services' proposed groundwater standards without conducting a cost-benefit analysis of the proposed state standards. The Department did not consider whether comparable health benefits could be achieved with a higher standard and a lower cost.

MEG - Water is concerned with the Department's proposal to establish drinking water standards without weighing the relative costs and benefits of those standards and the precedent that this may set for establishing future state drinking water standards for other emerging contaminants. MEG - Water questions the Department's authority to establish state drinking water standards in this way. While Wis. Stat. § 281.17(8)(a) provides that "the department may establish, administer and maintain a safe drinking water program no less stringent than the requirements of the safe drinking water act, 42 USC 300f to 300j-26," this subsection does not provide permission for the Department to set state drinking water standards where there is no comparable federal drinking water standard.

Under Wis. Stat. § 227.10(2m) an agency is prohibited from implementing any standard unless that standard "is explicitly required or explicitly permitted by statute or by a rule." To MEG - Water's knowledge, no statutory or regulatory authority explicitly permits the Department to establish a state drinking water standard in the absence of a federal drinking water standard. This likely explains why the Department has never before adopted a drinking water standard without there first being a federal drinking water standard in place.

MEG - Water supports the development and implementation of ***federal*** PFAS MCLs using the SDWA rulemaking process. MEG - Water also supports the Department's efforts to obtain additional information about the presence of PFAS in Wisconsin, to provide public information about PFAS, and to encourage action where PFAS levels are elevated. But MEG - Water does not support establishing state PFAS standards in the absence of federal drinking water standards nor in a manner that is inconsistent with the SDWA standard-setting process and that does not consider the relative costs and benefits of the proposed standards.

Public water systems are charged with protecting public health and they take this responsibility extremely seriously. Public water systems currently face a host of expensive challenges to ensure the continued protection of public health – like eliminating lead service lines, replacing old infrastructure, implementing corrosion control treatment to prevent leaching from lead pipes, and treating for contaminants like radium, arsenic, and nitrate. At the same time, there are concerns about public water supply remaining affordable.

As we respond to emerging contaminants, like PFAS, it is important that these emerging contaminants receive the same scrutiny and analysis as was given to the contaminants that already have MCLs. This is best done by having EPA develop federal drinking water standards for PFAS using the SDWA standard-setting process. If drinking water standards for PFAS are

established based upon the same uniform and consistent methodology used to establish standards for other drinking water contaminants, public water systems and the public at large can be assured that PFAS and all drinking water contaminants with federal standards are receiving the attention and resources that they deserve.

Thank you for this opportunity to provide the Department with our additional input. If you have any questions, please do not hesitate to contact us.

Sincerely,

MUNICIPAL ENVIRONMENTAL GROUP – WATER DIVISION

Lawrie J. Kobza
Legal Counsel

cc: MEG - Water Members (*via email*)

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Testimony on Adopting PFAS Drinking Water Rule DG-24-19
Peter Burress, Government Affairs Manager
December 1, 2021

Good afternoon. My name is Peter Burress, and I am the Government Affairs Manager with Wisconsin Conservation Voters. We have offices in Madison, Milwaukee, and Green Bay, where we work with our network of over 40,000 members and supporters to engage voters to protect our environment. I appreciate the opportunity to testify in support of the DNR's rule to establish drinking water standards for certain Per- and Polyfluoroalkyl substances, or PFAS.

It is hard to believe that in 2021, many Wisconsinites cannot go into their home kitchens and drink the water coming out of their tap. Wisconsinites living without safe drinking water are not responsible for the pollution that contaminated it. And yet, our leaders have not done the work to stop the pollution. Families and homeowners living without potable water are overwhelmed with the time and money that it takes to access clean water, and currently do not see their problems' end in sight.

That is why we appreciate this rulemaking to establish drinking water standards for PFAS. It is an important opportunity to *finally* drive substantive change on this issue, and deliver results for poisoned communities across the State. Today, I'd like to make three main points:

1. PFAS are one of the most serious threats to our drinking water, and are having a profound impact on our public health.
2. Every public water system in Wisconsin must begin testing for PFAS. Wisconsinites have a right to know the risk involved with turning on the tap in their own homes.
3. We cannot wait for the federal government. Public health-based standards for PFOA and PFOS are needed *today*, as an important first step toward tackling the larger issue.

First: PFAS are one of the most serious threats to our drinking water, and are having a profound impact on our public health.

PFAS are frequently referred to as "forever chemicals" because they do not break down in the environment. For decades, these chemicals have been used for industrial applications,

firefighting foam, and consumer products such as carpeting, waterproof clothing, upholstery, food packaging, and various paper products. As we are seeing with the DNR's more than 80 PFAS-related investigations in every corner of the state, we are just beginning to learn about the wide-scale exposure to these chemicals in Wisconsin communities. The U.S. Centers for Disease Control have advised doctors that PFAS have been linked to increased rates of testicular and kidney cancer. Exposure can also lead to increased cholesterol levels, liver damage, decreases in infant birth weights, and increased risk of high blood pressure in pregnant women.[1]

Another immediate health concern is that there are numerous studies showing that PFAS have a negative impact on the effectiveness of various vaccinations, a particularly scary finding in the age of COVID-19.[2] In 2016, the National Toxicology Program reviewed PFAS immunotoxicity and concluded that PFOA and PFOS can pose an immune hazard to humans. This negative impact was observed in people of all ages.[3] Some of the various findings related to PFAS' impact on vaccine response:

- In 2013, a study published in *Toxicological Sciences* provided evidence that certain blood level concentrations of PFOA were associated with reduced immunity to flu vaccines.[4]
- In 2017, a study published in the *Journal of Immunotoxicity* reported that elevated PFAS levels during the first six months of infancy were associated with a weaker response to the tetanus vaccination.[5]
- In 2020, a study published in *Environmental Health Perspectives* found that children with exposure to PFOS demonstrated a lower response to the measles vaccination.[6]

Given that PFAS are threatening our drinking water and posing serious threats to our public health, we must adopt this administrative rule and begin to protect Wisconsin families.

Second: Every public water system in Wisconsin must begin testing for PFAS. Wisconsinites have a right to know the risk involved with turning on the tap in their own homes.

Despite their significant threat to our public health, we do not yet know all the sources of PFAS contamination, nor do we know who in our state is at risk. By not acknowledging that PFAS are already present in some of the public water systems, we ignore the current threats

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[1] https://www.atsdr.cdc.gov/pfas/health-effects/index.html
[2] https://www.ewg.org/news-and-analysis/2019/06/pfas-chemicals-harm-immune-system-decrease-response-vaccines-new-ewg
[3] https://ntp.niehs.nih.gov/ntp/ohat/pfoa_pfos/pfoa_pfosmonograph_508.pdf
[4] https://academic.oup.com/toxsci/article/138/1/76/1671296
[5] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6190594/
[6] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7416537/

they pose and allow them to continue spreading throughout our drinking water. This makes future treatment more expensive and difficult.

For these reasons, we are happy to see the proposed initial and routine monitoring cycles included within this rule. If adopted, this rule would mean that certain public water systems would be required to comply with initial monitoring requirements three months after the rule becomes effective. This is a critical step toward ensuring that Wisconsinites know what is in the water that is coming out of their taps.

Finally: We cannot wait for the federal government. Public health-based standards for PFOA and PFOS are needed *today*, as an important first step toward tackling the larger issue.

As mentioned, the failure to quickly adopt policies that keep PFAS pollution out of our environment and set standards that protect our children is a public health crisis. Despite the large and growing number of known PFAS-related challenges across Wisconsin, there are no state or federal requirements for testing and cleaning up existing pollution. Big business special interest groups like Wisconsin Manufacturers and Commerce have suggested we wait for federal standards.[7] But the truth is, we cannot afford to wait.

The Environmental Protection Agency's final enforceable rule for PFOA and PFOS in drinking water is not expected until Fall 2023.[8] After that, it could take three years longer for the new rule to take effect in Wisconsin. Meanwhile, across the State, Wisconsinites are dealing with the impact of PFAS contamination *today.* Waiting half of a decade for protection is not an option for those facing heart surgeries, for those comforting friends with testicular cancer, for those paying for bottled water, for those trying to find the resources to care for a sick child, or for those who have miscarried a long-wanted baby. Wisconsinites pay when our policies fail to address the urgency of the crisis.

Beyond the fact that the federal process will continue to drag out for years, the current federal advisory level is much too high. We know the Wisconsin Department of Health Services recommended a public health based combined standard of 20 ppt for PFOA and PFOS, and we are grateful to see that recommendation reflected in this proposed rule. But while our organization is not equipped to make a specific numerical drinking water standard, we believe the state should consider setting an even lower Maximum Contaminant Level to be more protective of Wisconsinites' health, particularly children. In fact, just last month, the Environmental Protection Agency released a statement in response to new PFAS-related analyses that indicate, "negative health effects may occur at much lower levels of exposure to PFOA and PFOS than previously understood."[9]

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[7] https://www.wpr.org/groups-say-state-lawmakers-are-undermining-efforts-protect-public-pfas-firefighting-foam

[8] https://www.epa.gov/system/files/documents/2021-10/pfas-roadmap_final-508.pdf

[9] https://www.epa.gov/newsreleases/epa-advances-science-protect-public-pfoa-and-pfos-drinking-water

In closing, we strongly support this administrative rule for drinking water. The proposed rule will be a major step toward protecting our public health. Initial and routine monitoring cycles will be critical for ensuring that we can identify where in Wisconsin PFAS are poisoning our drinking water, without waiting for long-overdue action from the federal government. We appreciate the Maximum Contaminant Levels for PFOA and PFOS developed based on public health-based Department of Health Services standards, and hope to see even stronger standards as PFAS' dangerous impact becomes increasingly clear.

Particularly in a year where the Wisconsin legislature has passed zero legislation that would protect Wisconsinites from PFAS, we appreciate the DNR's efforts to pass this rule, alongside rules for protecting surface and groundwater from PFAS. These rules are an important step toward quickly beginning to tackle PFAS contamination. Attached to the copy of my written testimony, you will find a letter of support for these rules, signed by 267 of our members. We thank you for your efforts, and appreciate you doing everything you can to protect our drinking water from these dangerous forever chemicals.

Thank you for your time,

Peter Burress
Government Affairs Manager
Wisconsin Conservation Voters

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For more information, contact Peter Burress at peter@conservationvoters.org or 920-421-3601. Visit Wisconsin Conservation Voters at www.conservationvoters.org.

Petition to Protect Our Water from Toxic PFAS Chemicals

Every person has a right to safe drinking water. As Wisconsinites, from every corner of the state, we appreciate your efforts to protect our communities from PFAS by implementing administrative rules related to drinking water (Natural Resources Board Order Number DG-24-19), surface water (Natural Resources Board Order Number WY-23-19), and groundwater (Natural Resources Board Order Number DG-15-19) from PFAS.

PFAS are a class of highly toxic, human-made chemicals that for decades have been used for industrial applications and consumer products such as carpeting, waterproof clothing, upholstery, food packaging, firefighting foam, and various paper products. Commonly referred to as "forever chemicals," PFAS do not break down over time. There is mounting evidence linking these chemicals to a wide variety of serious long-term health risks including:

- Increased cholesterol levels
- Decreased responsiveness to vaccines
- Increased risk of thyroid disease
- Decreased fertility
- Increased risk of high blood pressure in pregnant women
- Lower infant birth weights

PFAS are already presenting well-known public health risks in communities like Campbell, La Crosse, Eau Claire, Madison, Peshtigo, Marinette, and Rhinelander. The list of impacted communities continues to grow. Across the state, the DNR has already opened more than 80 PFAS-related investigations in over 35 communities.

Still, the truth is, we don't know how widespread the exposure to these dangerous chemicals might be. There are no state or federal requirements for testing and cleaning up existing pollution. Without immediate comprehensive public health-based action, PFAS will continue to poison our communities and threaten future generations. The Department of Natural Resources' proposed rules are central to tackling PFAS' threat to Wisconsin communities.

We appreciate the Department's efforts, and urge you to do everything you can to ensure these rules are adopted.

Bruce Lisiecki, Cascade
Karen Ackroff, Eagle
Glory Adams, Eau Claire
Mary Beth Adams, Whitefish Bay
Daniel Agne, Rice Lake
Joanne Allen, Black River Falls
Eric Andersen, Kaukauna
Edna Anderson, Beloit
Kimberly Anderson, Salem
Lisa Anderson, Nelsonville
Melissa Anglin, Verona
Evan Arnold, Madison
Barbara Arnold, Madison
Mary Arthur, Milwaukee

Gary Austin, Green Bay
Duane Barmore, Middleton
Deborah Bascom, Wauwatosa
Rhonda Bast, Racine
Gerry Baudendistel, Fredonia
Brent Bauer, Durand
John Beck, Sturgeon Bay
Andrew Becker, Eau Claire
Lisa Bee, Osseo
Leigh Begalske, Green Bay
Mara Beldavs, Shorewood
Vitauts Beldavs, Shorewood
Jeremy Beloungy, Madison
Kate Bernardo, Ashland
Jess Bernstein, Mount Horeb
Anna Biermeier, Middleton
Erin Bloodgood, Milwaukee
Fred Braby, Hartland
Judith Brey, Reedsburg
Dianne Brooks, New Glarus
Christine Carollo-Zeuner, Oregon
Chris Casper, Stevens Point
Dawn Casper, Madison
Rebecca Cecchini, Madison
Ed Cohen, Oconomowoc
Connie Connour, Green Bay
Kate Cooper, Barneveld
Andrew Corbisier, Stevens Point
Sue Costoff, Elkhorn
Joseph Crumrine, Milwaukee
Dorothy Curtis, Fall River
Carol Czarnecki, Oshkosh
Stanley Czarny, Wisconsin Rapids
John Davy, Chippewa Falls
Paul Dearlove, Madison
Lyle Dickson, Clintonville
Dick Dierks, Appleton
Jeff Dix, Wausau
Colleen Dodge, Neopit
Thomas Duffey, Appleton
Harry Engle, Tomahawk
David Erickson, Oconomowoc
Gregg Ewert, Neenah
Don Ferber, Madison
Joanne Fetting, Milwaukee
Helen Findley, Madison
Marcia Finger, Madison
Susan Foote-Martin, Arlington
Corita Forster, Durand
Nanette Franze, Waukesha
Pat French, Green Bay
Joyce Frohn, Oshkosh
Everett Fuchs, Hudson
Kathleen Fullin, Madison
Mary Garnett-Hayes, Kenosha
Ned Gatzke, Sparta
Steve Gausman, Eau Claire
Kevin Giehl, Milwaukee
Jennifer Giesler, Madison
Patti Gmeiner, Niagara
Patricia Golner, Pewaukee
Cheryl Goodman, Madison
Gordon Gottbeheut, Nekoosa
Paul Gravunder, Greenville
Lance Green, Madison
James Greer, Sun Prairie
Gordon Grieshaber, Mineral Point
Norda Gromoll, Eagle River
Mary Hahn, Spring Green
Karen Etter Hale, Lake Mills
Scott Halvorson, Lake Geneva
Debbie Haman, Richland Center
Einar Hanson, Hudson
Vicky Harris, De Pere
Tom Hauge, Prairie Du Sac
Cathy Haupert, Catawba
Gini Heersma-Covert, Blue River
Marnie Hersrud, Eau Claire
Sidney Herszenson, Milwaukee
E. Hesseling, Milwaukee
Randi Hoffmann, Fond Du Lac
Kimberly Hollis, Winter
Leah Holloway, Milwaukee
Amy Holt, Fitchburg
Michael Horejs, Plover
Penny Howell, Green Lake
Edward Hubbard, Madison
Cal Huizenga, Waukesha

Beth Huizenga, Waukesha
Patricia Hung, Madison
Michael Iltis, Madison
Phil Immerfall, Appleton
Jo Jacobi, East Troy
Jolie Jacobus, Columbus
Sharon James, Madison
Debbie Johnson, Rice Lake
Harold Johnson, Rice Lake
Keith Johnson, Muscoda
Elaine Dorough Johnson, Fort Atkinson
Keith Johnson, Muscoda
Diana Jonen, Kewaskum
Harold Jones, Onalaska
Daniel Kaemmerer, Milwaukee
Lance Kammerud, Blanchardville
B Kehl, Neshkoro
Barbara Kelly, Hayward
Hunter Klapperich, Jim Falls
Susan Knapp, Wauwatosa
James Kneisler, Waupaca
David Koeller, Shawano
Lynn Koob, Rice Lake
Greg Koshak, Larsen
Aleks Kosowicz, Abrams
Susan Kozinski, Saint Francis
Laura Kracum, New Auburn
Honora Kraemer, Madison
Bruce Krawisz, Marshfield
Dana Lafontsee, Waterford
Jeffrey Lamont, Marinette
Barbara Landis, West Bend
Donald Langenfeld, Hartford
Mark Laustrup, Hayward
Kathleen Lea, Cadott
Linda Lehman, Wausau
Marc Lemaire, Viroqua
Mike Lessard, Wauwatosa
Eva Lewis, Eau Claire
Rick Lewis, Eau Claire
James Limbach, Stevens Point
David Lindberg, Milwaukee
Raymond Litzsinger, Green Bay
Dale Long, New Richmond
Constance Lorig, De Pere
Carol Losey, Eau Claire
C Maccrindle, Kansasville
Elizabeth Mackelvie, Appleton
Vic Mandarich, East Troy
Thomas Mandli, Peshtigo
David Manthey, Arpin
Lynn Markham, Stevens Point
Frances Martin, Racine
Nichelle Martin, Baraboo
Paul Martin, Baraboo
Diane Martin, Milwaukee
Sr Annice Mcclure, Green Bay
Joan Mccormick, Milwaukee
Brian Mckeon, Monroe
Autumn Meade, Three Lakes
Dan Melton, Madison
Karen Mesmer, Baraboo
Stephen Meyer, Middleton
Susan Michetti, Mount Horeb
Mary Miller, Milwaukee
Lisa Mink, Rice Lake
Yolan Mistele, Arbor Vitae
Dave Mittlesteadt, Deerfield
Samuel Morningstar, Milwaukee
Christine Morrissey, Appleton
Elise Moser, Sauk City
Sue Murphy, Shorewood
Tom Nacey, Superior
Paul Nasvik, Hudson
Ronald Natzke, De Pere
Jane Natzke, De Pere
Howard Nelsen, Eau Claire
Peter Nelson, Eau Claire
Patricia Nelson, Eau Claire
Cheryl Nenn, Milwaukee
Forrest Netzel, New Berlin
Daniel Never, Madison
Anne Nischke, Stevens Point
Russell Novkov, Madison
Mariette Nowak, East Troy
Michael O'brien, Sturtevant
Ellen Ochs, Menomonie
Laura Olah, Merrimac

Barb Olson, Madison
Cindie Olson, Superior
Diane Olson Schmidt, Milwaukee
James Omohundro, Madison
Sam Orlich, Milwaukee
Patricia Orthwein, Scandinavia
Roger Packard, Lake Mills
Jill Page, Brookfield
Barbara Parsons, Platteville
William Pennoyer, Madison
Joan Peterson, La Farge
Pat Pire, Milwaukee
A. Pire, Milwaukee
Cheri Price, Racine
Danny Proud, Madison
Dan Pubanz, Shawano
Eleanor Quint, Milwaukee
Joyce Radtke, Milwaukee
Christine Reichelderfer, Madison
Mc Reisdorf, Madison
Barb Reithel, Holmen
Beth Rendall, Lake Geneva
Dante Renzoni, Medford
Steve Reusser, Eau Claire
David Rieckmann, Pardeeville
Cameron Roberts, La Crosse
Jeannie Roberts, Madison
Eric Robson, Madison
Madolyn Rogers, Cross Plains
Tazzaleen Rogers, Milwaukee
Suzanne Row, Mequon
Kristine Ruffatto, Waukesha
Peggy Savides, Mondovi
Roger Schmidt, Monona
David Schramm, Belleville
Kerry Schumann, Madison
Dave Searles, Brodhead
Mary Shariff, Green Bay
John Shelley, Plymouth
Larry Shepler, Eau Claire
Jane Maya Shippy, Stevens Point
Lynn Shoemaker, Whitewater
Kathlin Sickel, Green Bay
Carol Siewert, Madison
Gladys Simerl, Brookfield
Karla Jo Skinner, Chippewa Falls
Mark Smith, Oconto Falls
Robert Smith, Shorewood
Ken Somerville, Lake Geneva
Kathleen Spaeth, Chippewa Falls
Michael Steele, Middleton
Rick Stel, Markesan
Marsha Stelzer, Rice Lake
James Tenorio, Menomonie
Eric Thompson, Fitchburg
Carol Tolejano Tolejano, Middleton
Julie Toman, Waukesha
John Twiggs, Marshfield
Lisa Vieth, Kendall
Theodore Voth, Madison
Daniel Waite, Cedarburg
Todd Walker, South Milwaukee
John Walsh, Eau Claire
Alexandra Walter, Madison
John Weston, Racine
Barbara White, Madison
Herman Whiterabbit, Madison
Sara Willadsen, Sheboygan
Margaret Wilson, Green Bay
Sylvia Witte, Eau Claire
Thomas Wolfe, Fish Creek
Brian Yanke, Madison
Linda Young, Blanchardville
Paul Zachow, Saukville
Jennifer Zienty, Waupaca
Terri Zupanc, Baraboo
Virginia Zwickey, Madison

Testimony DG-24-19

December 1, 2021

My name is Doug Oitzinger. I am the former Mayor of the City of Marinette and currently serve on our city council as an alderperson. I live in an area highly contaminated by PFAS.

There is nothing more insidious than the poisoning of child through a glass of water from a home faucet, or a school drinking fountain. There is nothing more frightening than learning that the water you have been drinking is causing you to be sick or maybe killing you, and there is nothing you can do to get the poison out of your blood stream.

The proposed rule to amend NR 809 setting a drinking water standard for two PFAS compounds out of the many thousands of PFAS substances in our environment, is a modest but an-absolutely-necessary step to prevent the slow poisoning of the people of Wisconsin from municipal water systems. The reason we have municipal water systems is to provide safe drinking water for our communities and protect public health. The sooner we create these standards, the sooner we will be able to ensure that the water coming out of our faucets is safe to drink.

Any testimony submitted for this hearing stating that this rule will cost too much, that the science is unsettled, that our Department of Health Services somehow used the wrong data to come up with its recommendation, or that we should wait until the EPA takes action, are arguments to let our children be poisoned for the sake of profit. We have in the corporate pollution lobby the equivalent of the tobacco companies telling the public that smoking was safe, when they knew it wasn't. We have the potential equivalent of lead poisoning in Flint Michigan coming out of our home tap water because regulations cost money, and saving money is how you grow the bottom line for industry.

It is really that simple: safe drinking water or poison for profit.

A simple comparison of two facts will demonstrate that we are just debating how much poison we will allow in Wisconsin's drinking water. The safe level of Arsenic in drinking water in Wisconsin is regulated to a standard of 10 parts per billion (with a B). Converted to parts per trillion (with a T), that is 10,000 parts per trillion. The proposed safe drinking water standard for PFOA and PFOS combined is 20 parts per trillion. In other words, after studying the current scientific literature , the professionals at the Department of Health Services have determined it is safer to drink 500 times more rat poison than it is to drink more than 20 parts per trillion of just two PFAS compounds.

PFAS is a potential danger to every man, woman, and child in the State of Wisconsin and we need to start protecting our population from this poison. I support this proposed drinking water standard for PFAS and urge you to move these standards forward just as fast as you can.

Thank you.

12/2/21

Department of Natural Resources

Attn: Adam DeWeese – DG/5

P.O. Box 7921

101 S. Webster Street,

Madison, WI 53707-7921

I'm writing in support of permanent rule DG-24-19 to set state standards for PFOA and PFOS in drinking water. For the past four years myself and other concerned residents in the Town of Peshtigo, impacted by severe PFAS contamination in our wells, have been advocating for safe drinking water. We have testified at the State capital on behalf of legislation supporting safe drinking water, written letters, held public informational meetings, run for and obtained elected positions and knocked on hundreds of doors in an effort to inform and educate our neighbors of the consequences they face after consuming PFAS contaminated water for decades. Our efforts are working, growing awareness, allowing the public to better protect their families; but all of that will have been done in vein without the most critical step of widespread testing and the setting of maximum PFAS levels in drinking water.

The concern over PFAS will NOT disappear, the harm it causes will NOT somehow vanish. This problem is real, it is overwhelming and it is unfortunately persistent. Without state drinking water standards people's health will continue to be ravaged, their lives dismantled and their confidence in agencies created to protect them will be destroyed. I have had a front row seat to the painful reality of this process, the influence that industry lobbyists have and their prioritization of profit over public health has been nothing less than nauseating. Knowing that the WDNR is an advocate for public safety, has been one of the small reassurances that sustains myself and others facing this nightmare. We've already waited too long. The Natural Resources Board has the chance right now to protect Wisconsin residents, families, and children from toxic "forever chemicals". I'm asking the board to follow-through the process it started in 2019 by passing permanent rule DG-24-19.

I don't envy anyone facing this issue, those elected who must discern how to legislate for pubic safety; those agencies assigned the enormous task of identifying, remediating and preventing further contamination of this magnitude or those, like me, who have met the crisis face to face in their very own homes. What I do know, is that ignorance is NOT bliss in this case. Ignorance is deadly. Lack of action is NOT an option. Every step going forward will be difficult, but this decision should be easy. Imagine it being your child, grandchild, wife, husband, loved one…you're not immune, you may simply not yet have been tested.

Make the honorable decision, help protect public health…help protect me.

With respect, awareness and an imploring heart,

Cindy Boyle (Town of Peshtigo resident, Town of Peshtigo Chairperson)

Good morning. My name is Abby Siakpere and I am a resident of the Town of Campbell in La Crosse County. I am a Biology student at the University of Wisconsin – La Crosse, an Army Veteran, and local climate activist. Today I am speaking in support of permanent rule DG-24-19 to establish state standards for PFOA and PFOS in drinking water.

The Town of Campbell (located on French Island) coexists with The La Crosse Regional Airport. Water quality issues have plagued this small town of 4,300 residents since 1998, when the residents of Campbell voted in favor of a municipal water system collaboration with the City of La Crosse. Cronyism, back-door deals and personal agendas drove a wedge between the negotiations with the city, and ultimately the citizens of Campbell are now paying for decades worth of poor political decisions. According to the Town of Campbell Comprehensive Plan released in April 2021, the Town acknowledges that the residents water supply is dependent on private well use, and that only businesses have access to La Crosse city water. Officials acknowledge that "uncontrolled stormwater runoff is currently a pollutant of our water resources" and that "…the strains of meeting growing water demand from a sprawling population are starting to show."

The Comprehensive Plan further states:

"Statewide water use has increased 33% in the last 15 years and water tables are plummeting in many urban areas as the thirst for more water outstrips the land's ability to provide it."

"While this legislation is currently more relevant in areas of the state experiencing severe water quality issues (such as Southeast Wisconsin), the principle of controlling groundwater withdrawal in all parts of the state is quite important and is a growing concern for the future."

Sampling results from a 2019 DNR PFAS Survey released in June 2021 conducted on many various locations throughout Wisconsin revealed significantly high PFOA and PFOS levels in **every location** that was sampled. The most significant findings were samples taken from sites that were selected specifically because of the use of fire suppression materials (AFFF), which are now a known source of PFAS contamination, that registered dangerously high levels of PFOA/PFOS in both the drinking water and fish tissue. These samples, taken in July 2019, definitively showed the effects PFAS has on community water supplies, yet little action has been taken by the DNR to protect the Town of Campbell community from those same hazards until the fall of 2020.

The citizens of Campbell have had enough. The median age of a Town of Campbell resident is 45, with the largest age group being from ages 45-54. The number of senior citizens is expected to grow from 13% to a staggering 21% between the years of 2000 to 2030. Personally, as a 40-year-old, able-bodied person, the 10 5-gallon jugs required to sustain my household drinking water supply is extremely difficult to manage, both physically and in the terms of "everyday life." Having the extra responsibility of tracking water consumption, remembering to exchange my refills on a specific day (on a 4-week rotation) and ensuring there is a place to store them all is a challenge. As the winter season approaches, I would be lying if I said I wasn't concerned

about the logistics of a mass water delivery in the snow. These are all valid, everyday concerns that the people of Campbell have to live with. Recently, Town of Campbell supervisor Lee Donohue has been diligently in contacts with Representative Ron Kind's office (a fellow French Island resident), Senator Brad Pfaff's office and Senator Tammy Baldwin's office regarding a missed deadline by the FAA to discontinue use of AFFF at the La Crosse Regional Airport, a move that would have offered some layer of protection for the struggling citizens of Campbell. Now, not only are the residents of Campbell still trying to identify the extent of the PFAS contamination in their drinking water supply, the possibility of their only other source of water not being available in the not-so-distant future could become a reality.

Safe drinking water should be a basic human right in WI and I am here on behalf of the people of the Town of Campbell, who are pleading for your help. Passage of drinking water standards for PFAS are way overdue and I, Abby Siakpere, Town of Campbell resident and community climate activist am writing in support of permanent rule DG-24-19 to establish state standards for PFOA and PFOS in drinking water. The Natural Resources Board has the chance RIGHT NOW to help protect not only the Town of Campbell, but ALL Wisconsin residents from this toxic "forever chemical."

From: ANN T BEHRMANN <atbehrma@wisc.edu>
Sent: Wednesday, December 8, 2021 8:14 PM
To: DNR 105 PFAS Rule <DNR105PFASRule@wisconsin.gov>
Subject: PFAS comments on drinking water standards

Dear Wisconsin DNR,

I am a retired pediatrician who worked clinically in Madison WI for 38 years. I have been interested in environmental pollutants' risk to health, primarily in pregnant women, infants, children and adolescents. I moved to Madison for my Pediatrics Residency to swim, canoe and sail in the Madison and Wisconsin lakes, having grown up swimming in the polluted waters of the Ohio River downstream from the Dow Chemical plants in Parkersburg, West Virginia. As a health care provider and swimmer, I support the DNR's proposed drinking water standards that would set an individual and combined limit of 20 parts per trillion for PFOS and PFOA. This limit is based on Wisconsin Department of Health's sage recommendations.

PFAS compounds as you realize are around forever, so the solution to preventing the health consequences of human (and animal) exposure is through first measurement in water systems, both public and private wells, ideally with state or federal funding for regular testing, funds to notify those using this water for drinking and cooking as well as bathing, and funds for cleanup of contaminated sites such as the Truax Airfield soil and groundwater contamination that is affecting Madison Municipal water wells.

-----Original Message-----
From: Software-Notification@legis.wisconsin.gov <Software-Notification@legis.wisconsin.gov>
Sent: Sunday, December 5, 2021 2:43 PM
To: DNR Administrative Rules Comments
<DNRAdministrativeRulesComments@wisconsin.gov> Cc: [redacted]
Subject: Public comment on CR 21-083

Name: Steve Books
Address: [redacted]., Madison WI 53715
Email: [redacted]

Organization: Self

Comments: Hello,

I'm commenting Wisconsin's DNR rule about public drinking water, DG-24-19. These comments are about chapter NR 809 relating to the promulgation of new drinking water maximum contaminant levels for Per-and- and Polyfluoroalkyl Substances (PFAS) including Perfluorooctaneesulfanoic asid (PFOS) and Perfluorooctanoic acid (PFOA).

I suggest the level goal to be zero PPT, part per trillion, or 0.00 ng/L. That's correct, zero. As a person who works in a Special Education Department in a Public High School as an Educational Aide, I see the effects of pollution on children who have disabilities. How this happens can be discussed in great detail of how disabilities happen. One of the ways is definitely environmental. We owe it to future generations to have clean drinking water, and to work to clean up and stop mistakes that we know now that pollute drinking water. Currently, the City of Madison's Well
15 is shut down due to high levels of PFAS in the water. Starkweather Creek has fish advisories posted about contaminated fish due to PFAS in the creek. Wisconsin's standards can be set to be better than any neighboring state.

The action plan must be implemented to maintain protection of public health, welfare and safety in drinking water. There are costs of not supporting standards. And, those costs would be related to an increase in the already largest departments at local public high schools. And, that is Special Education Departments. That is what to support, as public education does now, because we owe it to children who have no say on the safety of the water supply that they drink from.

Sincerely,

Steve Books

-----Original Message-----
From: Software-Notification@legis.wisconsin.gov <Software-Notification@legis.wisconsin.gov>
Sent: Wednesday, December 8, 2021 11:49 AM
To: DNR Administrative Rules Comments <DNRAdministrativeRulesComments@wisconsin.gov>
Cc: Boerner, Audrey <Audrey.Boerner@co.eau-claire.wi.us>
Subject: Public comment on CR 21-088

Name: Audrey Boerner
Address: 720 2nd Ave, Eau Claire WI 54701
Email: audrey.boerner@co.eau-claire.wi.us

Organization: Eau Claire City-County Health Department

Comments: Public Comment for rule DG-24-19 to revise NR 809

The Eau Claire City-County Health Department is a regional leader in environmental health issues, including those related to drinking water. Our Department collects and analyzes drinking water samples in our public health laboratory and has participated in published research on the local occurrence of emerging contaminants. We see safe drinking water as a public health issue and support the development of drinking water standards, including those for PFOS and PFOA, as important steps in protecting human health. We support the research and conclusion from WI DHS that the risk to human health from exposure to these compounds that warrants the development of these standards and consideration of standards for additional PFAS. These standards will help to detect and lead to the mitigation of PFOS and PFOA that municipal water users may be unknowingly exposed to.

-----Original Message-----
From: Software-Notification@legis.wisconsin.gov <Software-Notification@legis.wisconsin.gov>
Sent: Tuesday, November 23, 2021 5:09 PM
To: DNR Administrative Rules Comments <DNRAdministrativeRulesComments@wisconsin.gov>
Cc: [redacted]
Subject: Public comment on CR 21-088

Name: Brian Hackman
Address: [redacted], Madison WI 53704
Email: [redacted]t

Organization:

Comments: With the passage of the Federal Government's Infrastructure Bill, the now law introduced up to $4 billion of Drinking Water State Revolving Loan Funds (DWSRLF) to address polyfluoridated alkyl substances (PFAS) in drinking water over the next 5 years. The funding in that Federal law is meant for work in concert with H.R. Bill 2467 from the 117th Congress to allocate the Infrastructure Bill funds for the necessary studies and regulatory action over the next 5 years. That action, as proposed by legislation, is to establish what concentrations of PFAS and related subcomponents should be regulated based on 360-degree understanding (health, economic, feasibility) as a Maximum Contaminant Level (MCL) and/or Maximum Contaminant Level Goal (MCLG) through the Safe Drinking Water Act and its amendments.

Wisconsin Department of Public Health (WDPH) has not had the benefit of resting on the significant and broader context of what USEPA has admittedly, by the proposal of the bill currently in Congress, not yet established through science and successful rationale established using the stringent actions of the promulgated Safe Drinking Water Act (1974) and its amendments (1996+). This may be a significant indicator, given over 50 years of the Safe Drinking Water Act implementation and Unregulated Contaminant Monitoring, that no prevalent risk is present and/or that any actions would result in a significant benefit to the populace for various reasons. At least the Federal regulatory process is primed to undertake that question wholeheartedly.

The agency in seeking to establish their version of a drinking water quality standard has not truly evaluated the cost impact to the State of implementing remedial measures for discharge of similarly laden constituent wastes, e.g. gas, liquid, or solid, that could result from performing the treatment methods being sought to implement this standard. PFAS just does not disappear on its own and moving a chemical constituent from one place to another is like sweeping dust under a rug.

The proposed State action (CR 21-088) towards Rule DG-24-19, only rests on advisory levels set by the limited outlook of the Wisconsin Department of Public Health (WDPH) and their actions taken at a Board level under the direction of Ms. Andrea Palm, which has occurred through information supplied by others with particular bias and/or unique/limited knowledge, political, monetary, and social influence related to that particular agency. WDNR is likely to find that it has been misguided and influenced by only a handful of people on a State agency Board attempting to establish a de minimus risk based standard that is cost prohibitive, unenforceable, and worse yet, unachievable.

WDNR must weigh the cost of previous minor studies vs. the efforts that can be achieved to fully understand the PFAS issue through an additional $4 billion in research and development. The State and its educational system will have an opportunity to be compensated for research and activities to make its own informed decisions as an agency based on science that maintains primacy through the USEPA.

The WDNR's proposed regulation brings up many questions:

What studies has the agency taken itself to prove and confirm the data and positions it has? Can it use that information to identify blind spots and opportunities for the third party verification of the advisory concentrations presented by WDPH?

What data has the agency collected of / from the citizens of Wisconsin demonstrating a direct health impact to the citizens of Wisconsin since becoming aware of the PFAS related chemicals is currently has set advisory limits for? Where wells in Wisconsin have been turned off, e.g., City of Madison, were any statistically significant findings discovered that show a measurable improvement in area public health as a result?

Keep in mind these are the same Health Boards in our State have also required mask mandates that have not been scientifically or socially proven to reduce the rate and severity of COVID-19 within our State and County when compared to the National daily caseload COVID-19 data on a nomalized basis (cases per 100,000 per day). Did the State legislature approve the WDPH advisory limits or was that a sole action of the agency's few Board members?

If these chemicals were of great concern, why has not more significant legislation already been passed given over 60 years of manufacturing history and use of the chemicals being considered here?

Conversely, why has WDPH, DCMPH, and related State agencies been so ready to dispense and inject COVID-19 related mRNA technology into our citizens, at similar parts per billion and trillion concentrations, without similar carcinogenic and safety studies through the National Institutes of Health and Centers for Disease Control, which currently do not exist? After years of efforts to control chronic wasting disease, WDNR now even supports deer entrail waste containers in this State to keep humans from being exposed to mRNA and prions that cause chronic wasting disease (CWD), yet now a high percentage of our citizens have artificially generated COVID-19 mRNA therapeutics (authorized by Emergency Use only through FDA) injected in them that scientific peer reviewed studies have shown could generate similar prions. Either, there must not be any concerns with microcontaminants, or a blind eye exists within our regulatory system that may be causing undue harm.

Why the lack of consistency in the our State and regional health agencies' public health actions with chemicals and biological agents that cause similar health outcomes, e.g., lower fertility rates, adverse health reactions, higher vaccine intolerance, as published by peer reviewed scientific papers? One type of constituent matters, the other does not from a public health concern? Why shouldn't the WDPH work on getting the log out of its own eye to see the real problems it has in front of it before another agency (WDNR) takes its recommendations and promulgate them?

Where has WDPH itself established the health benefit and rates of cancer associated with PFAS concentrations below or above the current advisory levels?

What funds have been allocated by the State to understand if the distribution system, private/public plumbing, is a source of PFAS for water system customers?

Would regulation or elimination of building materials, eg., PTFE plumbing tape, provide a more significant impact to water quality?

Is WDNR and the State ready to replace all water main and plumbing in the State subjected to the WDPH's advisory concentrations by law, similar to the Lead Service Replacement program established in the new Federal Infrastructure Bill?

While the State of Wisconsin's authority can rest on establishing more stringent regulations compared to USEPA, similar to homeowners taking responsibility for home plumbing systems, the advisory limits have already helped citizens be aware of a potential concerns and prompt choices in reaction to that concern for at least 2 years. There are currently no guarantees that the actions utilities have taken through the State in reaction to the WDPH's advisory limits have actually achieved or will achieve a particular outcome or lessening of the particular risk for their customers without the efforts of the USEPA to identify the cause and effect relationship of these particular PFAS water quality related constituents. As a well supply issue, the WDPH advisory limits do not also take into account the miles of water main and materials installed off the discharge of a water supply in each municipal subunit. Our State's agency, in proposing this rulemaking, has not considered other exposure routes, e.g., PTFE plumbing tape, home building construction materials for waterproofing and vapor barriers, certain non-stick lined cookware, fast food restaurant containers and wrappings, and others, through legislation and remains woefully unprepared to fully address all resulting outcomes and impacts.

The State will not have the benefit of Interstate controls and funding that the Federal Government can help support through its legislation and avoid potential outcomes, impacts, and loopholes. For example, what if by setting a standard for removal, that the resulting PFAS waste is collected and discharged downstream and enters a State with even lower PFAS concentrations, and higher expectations for removal. Then that State chooses to promulgate at lower concentrations because of Wisconsin's actions? Illinois is one such state with currently published lower advisory concentrations. What if Minnesota, Iowa, Michigan water systems impact Wisconsin citizens negatively through combined water systems that are not currently regulated for the presence of PFAS in drinking water?

If concerns exist with drinking water, our State's citizens have always maintained the right and are encouraged to install Point of Use (POU) and Point of Entry (POE) systems using granular activated carbon or reverse osmosis

technologies so they may take personal responsibility for their properties and drinking water on their own as the desire or spirit of conscious exists. There is always the option to purchase bottle water if so desired. Regulatory action is not the only means to an ends.

For these reasons, I openly object to the State passing this regulation on its own without the broader ability for it to rely on the necessary information, funding, and action being proposed and conducted by its parent agency, the US Environmental Protection Agency.

Respectfully Submitted,

Brian L. Hackman

LEAGUE OF WISCONSIN MUNICIPALITIES
131 W. Wilson St., Suite 505
Madison, Wisconsin 53703
phone (608) 267-2380; (800) 991-5502
fax: (608) 267-0645
league@lwm-info.org; www.lwm-info.org

December 8, 2021

Department of Natural Resources
Attn: Adam DeWeese– DG/5
P.O. Box 7921
101 S. Webster Street
Madison, WI 53703

Via Email – Adam.DeWeese@wisconsin.gov and DNRAdministrativeRulesComments@wisconsin.gov

RE: Comments on DG-24-19 Revisions to ch. NR 809 Related to the Promulgation of Drinking Water MCLs for PFOA and PFOS

Mr. DeWeese:

The League of Wisconsin Municipalities, a nonprofit and nonpartisan association of 594 cities and villages, welcomes the opportunity to submit the following comments on the proposed revision of ch. NR 809 related to the promulgation of new drinking water maximum contaminant levels for PFOA and PFOS.

It needs to be emphasized at the outset of our comments that the fundamental and most important goal of municipal water systems throughout the state is the provision of safe reliable drinking water to their customers. There are approximately 514 municipal water utilities in Wisconsin. Each of these systems tests its water to ensure the protection of public health. In the 2020 Annual Drinking Water Report, DNR noted that more than 98% of Wisconsin's public water systems provided water that met all health-based maximum contaminant level standards.

Timing:

The League supports the establishment of federal drinking water standards for PFAS but does not support the Department's creation of state standards at this time. EPA is moving forward to regulate PFAS in drinking water. On March 3, 2021, EPA published its final regulatory determination to regulate PFOA and PFOS under the Safe Drinking Water Act (SDWA). On October 18, 2021, EPA announced its PFAS Strategic Roadmap, which included issuing a proposed rule establishing federal maximum contaminant levels (MCLs) for PFOA and PFOS by fall 2022 with a final rule issued by fall 2023. The League recommends the Department wait for EPA to promulgate federal drinking water MCLs before proceeding to adopt state standards.

To date, all drinking water MCLs have been first established by EPA pursuant to the Safe Drinking Water Act (SDWA) process and then adopted by the State of Wisconsin. It is our understanding that Wisconsin has never adopted a drinking water MCL without a federal counterpart adopted prior to state action.

Unknown Costs Associated with the Recommended Standards:

Based on the final EIA, the League would contest that the department has insufficiently examined the overall economic impact of the PFOA and PFOS maximum contaminant levels. This does a disservice to

the state and our member utilities that Wisconsin residents rely upon to provide them with safe drinking water. An accurate economic impact of PFAS regulation is necessary to understand the level of economic assistance and/or ratepayer support that will be required for communities and water utilities to respond and continue to provide the public the safe drinking water we all expect.

The environmental impact assessment developed for the rule revision utilizes the third Unregulated Contaminant Monitoring Rule (UCMR 3), tested between January 2013 and December 2015, when making predictions on percentage of systems that will have a result greater than the proposed standard of 20 ppt. However, on March 11, 2021, EPA published the fifth Unregulated Contaminant Monitoring Rule (UCMR 5), which requires sample collections for 30 chemical contaminants between 2023 and 2025. Since the time of the testing associated with UCMR 3, the Safe Drinking Water Act was amended to require data not only from large systems serving over 10,000 people and a random sample of small systems to now include all small systems serving 3,300 to 10,000 and a random sample of systems serving less than 3,300. Therefore, with an increased number of systems that will soon test with more advanced testing methodologies, the number of exceedances for PFOA and PFOS (and other PFAS compounds) and the costs that are necessary to remediate those systems will certainly increase. The information from UCMR 5 has yet to be collected, but nevertheless, the department is moving forward with statewide regulatory standards despite an incomplete picture of the overall statewide problem and the costs associated.

The League believes the department needs to follow EPA's lead and wait for the federal process to unfold. The department is currently working with water utilities to monitor and test for PFAS. Our municipal water utilities have provided and will continue to provide safe drinking water for our communities and to our residents. We can wait for the federal safe drinking water process to be completed and for federal maximum contaminant levels (MCLs) to be promulgated.

The department should continue working with communities. It should be prepared to analyze the results of the UCMR 5 testing when it is available. It should support and evaluate additional research and development of effective treatment and disposal options. It should better evaluate the capital costs (regardless of Safe Drinking Water loans) to construct or install treatment methods, including secondary capital costs associated with treatment related to additional piping, connection systems, pumping facilities, and disposal costs. But the department should not promulgate state PFAS drinking water standards at this time.

In addition, to the comments outlined above, the League fully endorses the comments submitted by Lawrie Kobza on behalf of the Municipal Environmental Group Water Division on December 7, 2021.

Thank you for the opportunity to provide comments on NR 809 related to the promulgation of drinking water MCLs for PFOA and PFOS. The League continues to be supportive of federal safe drinking water standards and regulating these emerging compounds in a scientifically sound and technically and economically feasible manner.

Kind Regards,
Toni R Herkert
Toni Herkert, Government Affairs Director, Wisconsin League of Municipalities

Office of the Mayor
Satya Rhodes-Conway, Mayor

City-County Building, Room 403
210 Martin Luther King, Jr. Boulevard
Madison, Wisconsin 53703
Phone: (608) 266-4611
Fax: (608) 267-8671
mayor@cityofmadison.com
www.cityofmadison.com

December 7, 2021

Department of Natural Resources
Attn: Adam DeWeese – DG/5
P.O. Box 7921
101 S. Webster Street,
Madison, WI 53707-7921
DNRNR809Comments@wisconsin.gov or DNRAdministrativeRulesComments@wisconsin.gov

RE: Proposed Drinking Water Standards for PFAS (DG-24-19)

Dear Mx. DeWeese,

I am writing to express my support for the proposed administrative rule to establish a science-based standard for PFAS in drinking water. As you know, PFAS are a group of concerning chemicals with links to serious health impacts. As a Mayor, I am fully aware that one of the most fundamental responsibilities of local government is to provide safe, reliable drinking water. Given the pervasive use of PFAS in our products, its persistence in the environment, and the serious associated health risks associated with it, monitoring and limiting PFAS in our drinking water systems is imperative.

This rule proposes Maximum Contaminant Levels (MCLs) for PFOA and PFOS combined at 20 parts per trillion, consistent with recommendations from the Wisconsin Department of Health Services. I support the creation of health-based standards.

I also acknowledge the technical and cost challenges localities may face in addressing PFAS contamination found in drinking water. Moreover, while water utilities are faced with addressing the contamination, they did not cause the pollution. The best policy would be to require producers of PFAS containing products to take responsibility for remediation. Failing that, I strongly recommend the State continue its efforts to provide support to local governments in numerous ways. Specifically, water utilities need technical assistance and grants to implement treatment systems, and they need the DNR to continue its efforts to hold polluters accountable.

Sincerely,

Satya Rhodes-Conway
Mayor

Attention: Department of Natural Resources
Re: PFAS and CAFOs
Friday, December 3, 2021

I have put my concerns in front of the Department of Natural Resources, more times than I can count. Therefore, part of this letter you might recognize. And, yes, I will continue to remind you of who I/we are and what our growing CAFO situation is until my voice is heard and we can work together to create solutions…air quality…water quality…the quality of life.

My name is Janet Foust. I live at [redacted] in Ixonia. I taught 4 year old kindergarten through third grade. I have my masters degree in education with a focus on gifted kids and a reading license. Although I no longer teach in a classroom, right now I am working with college kids and counsel a few parents of gifted children. I married Jerry in 1985. He had been a farmer in Iowa, moved to WIsconsin when his wife was having health issues. She died a few years later. I moved from the east side of Milwaukee to Oconomowoc and then to Ixonia. When I married Jerry, it was a package deal. He had four kids. I taught his youngest in third grade. We now have a 27 year old and grandkids who are that same age. Challenging, absolutely, but many life lessons along the way, too, learning to look at things from a different perspective tops the list.

When we moved to Ixonia, I had visions of raising our daughter in a peaceful environment, a place that was away from the busyness of the city. I loved being surrounded by fields of wheat and soybeans. I loved watching the corn grow and measuring our daughter's height with cornstalks. We would walk to the family farm across the field from us and be educated by the family on all things cows. I did not worry about the quality of the water, the air, the land, or my health….just tried to be a good mom, a good neighbor, and learn as much as I could about country living.

Since 2008 when the small family farm petitioned to be an industrial sized farm, a CAFO (concentrated animal feeding operation) the picture has drastically changed. The landscape is not pristine and peaceful. The same small family farm has 2305 dairy cows on 33 acres of land. The excrement one dairy cow produced is equal to 18 humans as per Gordon Stevenson,

former DNR chief of run-off management. That means, in comparison, we are living right across the field from the equivalent of a small city, a city with the waste output of 41,490 people on 33 acres with no sanitary district. The CAFO's bovine population will be growing more if they choose to reach the limit in their permit. That means more liquid manure, more trucks hauling the manure, bringing the feed, trucking away the milk, more methane gas and hydrogen sulfide omissions, more constant noise…and more concerns about our water…excess nitrogens, phosphorus, E-Coli, etc., and health!

I am now concerned about PFAS and the connection these forever chemicals have to CAFOs. The attached article is what I believe is the start to many more articles as the level of concern grows and this link is more apparent:
https://www.nrdc.org/stories/americas-dairyland-may-have-pfas-problem

How do we know there are not PFAS in the run off from the CAFO in Ixonia to Rock River? How do we know that the chemicals Anvil and Permanone are not on the silage that the dairy cows ingest…making their way into the milk and eventually to the waterways? How do we know there are not other forever chemicals that are in the same cycle…..spray on fields, sink into soil, digest by cows, appear in milk, found in our waterways?

Please take action to protect our waterways! The earth needs you to put stricter guidelines on PFAS, the forever chemicals that will continue to effect future generations unless we figure out what to do with their existence.

Very Sincerely and With Concern for Our Future as Human Beings on this Earth…and for the Compassion We Show to Each Other,

Janet Foust
[redacted]
Watertown, Wisconsin 53094

[redacted]

- My name is Lee Donahue, I am a Town Board supervisor (for health, education and welfare) in Campbell, a community of 4,200 residents on French Island, in Western WI. Last year PFAS was found in 97% of 555 tested private wells, in a roughly 4 square mile area.
- **Initially three of our municipal buildings were tested for PFAS contamination, 6 months later the same locations were re-tested. In that short period of time, each location showed a 20% and 40% increase in PFAS concentrations.**
- **Due to PFAS contamination, our water is considered unsafe to drink, and use to water edible garden plants.**
- **Our lives have been devastated by the knowledge we may have been drinking toxic water for more than 50 years due to the use of AFFF at the La Crosse municipal airport adjacent to our town.**
- **I live about 2 blocks away from one of the plane crash sites where fluorine foam was used by City of La Crosse firefighters. Private well testing in that area reveals contamination levels upwards of 100 ppt. Less than a ½ mile away tests have shown contamination levels upwards of 1,000 ppt.**
- Safe ground water, drinking water and surface water standards are the key to protecting our human health. Two studies of the ***many*** adverse health effects of PFAS contaminated water show evidence of reduced immune response to vaccines – a critical issue in light of the Covid pandemic. Additional adverse effects have been linked to thyroid problems and cancer.

Our neighbor states of MI and MN have already set public health-based standards.

My daughter is a nurse practitioner in Germany where the European standard is roughly 2 ppt. There is a tremendous amount we can learn from the Europeans and Australians who have conducted massive amounts of science-based research on PFAS. They have implemented the use of safe new Fluorine free (F3) firefighting foams which have been used at the busiest international airports including London Heathrow for a decade. The Norwegian military is using these foams and changed the way they fight fires to become more effective. F3 foams are effective and available.

Europeans have also begun banning the use of PFAS in food wrappers and other industrial manufacturing. We cannot afford to "wait" on the EPA, which has allowed PFAS regulation to languish for decades. We are running out of time, to make a critical move to protect the great state of Wisconsin.

PFAS (known as a forever chemical) never goes away. A single use or spill of PFAS has lifelong impacts, not just for the current generation but also for every generation who follows us. Wisconsin is often referred to by the moniker "God's country". I assert it is our moral and ethical obligation to be environmental stewards. We must put water standards into place and invest in environmentally friendly foams and other commercial products to protect our residents, agriculture, tourism, recreational, and commerce.

Enforceable standards are the key to protect our residential ***and*** commercial/agriculture industry of our names sakes – the meat packers, cheese and dairy producers, deer and hunting industry, plus brewing and wine producers. Residential and commercial interests are not mutually exclusive of one another. In fact, we should be moving forward in tandem. Safe drinking water is the key to human health. If we fail to establish standards, for humans ***and*** industry - every meat, dairy, beer, wine, milk and sparkling water company will bear the burden of possible PFAS toxicity in their products. The customers who consume those products need to be protected as well. Thank You!

From:	Gloria Adams
To:	DNR NR 809 Comments
Cc:	GOV Info; Sen.Smith - LEGIS; Rep.Emerson - LEGIS; Rep.Vos - LEGIS; Sen.LeMahieu - LEGIS
Subject:	PFAS and surface water
Date:	Wednesday, December 1, 2021 6:10:55 PM

It is critical that the DNR set limits for certain Per- and Polyfluoroalkyl substances (PFAS). Truth be told the limits should extend to all chemicals in that group as they are pervasive. Limits are necessary since all humans already have the chemical in their bodies. As more and more PFAS enters the body the health effects increase resulting in an increasing need for costly health care. These chemicals are especially dangerous as they do not break down. From treatment plants they go to biosolids that contaminate soils and then the animals that graze on that field. How much PFAS ends up in plants from soils contaminated due to biosolids is unknown. I have no doubt that as more and more waters are investigated more and more contamination will be found as this is a group of thousands of chemicals that have been used extensively since the '40s.

I live in Eau Claire. Three of the city wells are shut down due to PFAS contamination. Contaminated water is being piped to a lagoon. Where the water goes from there, I do not know. Obviously it goes to the Chippewa River or it sinks into the water table. I do not know how to remedy that situation but I know that my water bill is going to increase as remediation measures begin. Across the state consumers will pay to clean up after industry. The longer the contamination is allowed the more expensive clean-up will become. It is critical that limits be set on this group of chemicals NOW.

REINS is becoming a huge limitation on DNR rulings. What is so damaging for the state and citizens is that costs computed for a rule come basically from business. Nobody takes into account the cost to citizens and consumers when contamination is allowed to go on and on. We pay dearly for health care and loss of income, water purchases, loss of farm land, loss to tourism, water treatment costs, new wells, and more.

Glory Adams
[redacted]
Eau Claire, Wi 54701
[redacted]

December 8, 2021

Adam DeWeese
Section Chief, Public Drinking Water
Wisconsin Department of Natural Resources
101 S. Webster Street
Madison, WI 53707
Email: DNRNR809Comments@wisconsin.gov

Re: Comments on Draft Rule DG-24-19 as published on October 12, 2021.

Dear Mr. DeWeese,

A. O. Smith Corporation, with global headquarters in Milwaukee, Wisconsin since 1874, applies technology and energy-efficient solutions to products manufactured and marketed worldwide. Listed on the New York Stock Exchange (NYSE:AOS), the company is one of the world's largest manufacturers of residential and commercial water heating equipment and boilers, as well as a leading global manufacturer of water treatment and filtration, as well as air purification products. A. O. Smith appreciates the opportunity to submit these comments to the Department of Natural Resources ("DNR") regarding its Proposed Rule DG-24-19 ("DG-24-19"), which would amend Chapter NR 809, Wis. Adm. Code, to establish drinking water standards in the form of Maximum Contaminant Levels ("MCLs"), for certain Per- and Polyfluoroalkyl substances ("PFAS") including the contaminant compounds perfluorooctanoic acid ("PFOA") and perfluorooctane sulfonic acid ("PFOS") at 0.000002 mg/L (20 parts per trillion (ppt)) for PFOA and PFOS individually and a combined standard of 0.000002 mg/L (20 ppt).

Overview

A. O. Smith supports public policy and regulatory action that are intended to help remove or significantly reduce PFAS compounds from the environment and more specifically from drinking water. As a global manufacturer of water filtration systems and products that are third-party certified to American National Standards Institute/NSF International ("ANSI/NSF") standards to remove or significantly reduce PFOA and PFOS from drinking water at the point-of-use or point-of-entry ("POU" or "POE"), we are a resource to policy makers, regulators, water utilities, small businesses, and consumers. Consistent with that experience, and the recognition that in the United States regulation of health-based contaminants in drinking water is a shared responsibility between the federal government, individual states, and regulated water utilities and systems, A. O. Smith recommends the following general principles relating to the current and prospective regulation of PFAS substances in drinking water:

- Elevated levels of PFAS compounds in drinking water presents an acute public health risk.

- To the maximum extent practicable the regulation of PFAS compounds in drinking water should be set based on a consistent set of empirical and transparent public health data, including long-term toxicity and exposure data.

- States should, in the absence of a national primary drinking water standard, be able to exercise leadership in protecting their populations from PFAS substances in drinking water.

- Having a national standard is a preferable approach to help prevent a race-to-the-bottom of differing State standards that will be difficult to enforce and may incentivize unscrupulous actors to take advantage of consumers.

- Considering that less than 2% of drinking water that is treated centrally is consumed at the tap, exclusively treating PFAS substances will not be a final barrier to mitigate or protect millions of households from PFAS substances in their drinking water.

- All technology solutions should be made available to consumers to help mitigate PFAS contamination in their drinking water.

DG-24-19

A. Scope

As published, the proposed rule would establish initial and routine monitoring cycles for community and non-transient non-community public water systems to test for PFOA and PFOS and establishes approved methodology for PFOA and PFOS sampling.[1] Systems that exceed the proposed 20 parts per trillion MCL standards for PFOA and PFOS will be required to take measures to return to compliance, which may include drilling a new well or installing a treatment system, while at the same time allowing systems to waive routine monitoring under certain conditions.[2] While DG-24-19 is primarily intended to regulate public/municipal drinking water systems[3] in the State, A. O. Smith does maintain a certified drinking water testing laboratory in the State and would welcome working with DNR moving forward regarding testing requirements and laboratory capabilities for PFOS and PFOA analysis. Finally, A. O. Smith would defer to the subject matter expertise at the covered entities most impacted by DG-24-19 for an analysis on the financial and capacity challenges associated with complying with proposed rule.

B. Proposed MCL Level

As referenced above, A. O. Smith is supportive of public policy and regulatory action that are intended to help remove or significantly reduce PFAS compounds from the environment and more specifically from drinking water based on a consistent set of empirical and transparent public health data,

[1] DNR DG-24-19
[2] Ibid.
[3] Municipal community water systems (cities, townships, sanitary districts); Other-than-municipal community (OTM) water systems (mobile home parks, apartment buildings, condominium associations); Non-transient non-community (NN) water systems (small businesses with 25 or more employees that are not on a municipal source); Laboratories certified to perform PFOS and PFOA analysis in drinking water.

including long-term toxicity and exposure data. In this regard, A. O. Smith is concerned from an empirical point of view that DNR is not using health effects data from Wisconsin as part of this rulemaking.[4]

Earlier this year A. O. Smith was encouraged by the United States Environmental Protection Agency's ("EPA") final determination in January that it will establish an MCL for PFOA and PFOS consistent with its announced PFAS Action Plan.[5] A. O. Smith – similar to many stakeholders – is currently evaluating EPA's draft risk values for PFOA and PFOS[6] which is a precursor to setting both a Maximum Contaminant Level Goal ("MCLG"), which is health based, and an MCL. Consistent with EPA's recent data set, as well as several other more recent toxicity and exposure data, A. O. Smith is optimistic that national enforceable standards for PFOA and PFOS – and eventually other PFAS substances – will be promulgated that would provide much needed certainty for all stakeholders. This would be in marked contrast with the varying and bespoke standards that are being set across the country that vary from single digit parts per trillion[7], which may have the unintended consequence of introducing inconsistent detection results based on testing capabilities and performance, to the current EPA health-based advisory level of 70 parts per trillion. A consistent set of health data as well as risk values should reflect a common conclusion on what is an appropriate MCL as the underlying toxicity and human health effects of exposure to PFAS substances. While health effects in humans may differ based on intrinsic and non-intrinsic attributes, it should not however, differ based arbitrary demarcations such as the border line of two adjoining States. The common conclusion – whatever the data may indicate – will also have the benefit of providing business certainty to manufacturers of third-party certified water filtration and treatment systems designed to remove or significantly reduce PFAS substances from drinking water as well as testing laboratories that preform PFAS analysis.

C. Treatment Options

The proposed rule contemplates the utilization of granular activated carbon ("GAC") central treatment systems to mitigate the presence of PFOS and PFOA with annualized costs to water systems ranging from $1,762,527.42 per year over a 20-year period ($35,250,548.50 including interest charged over the period) and a total annual maintenance cost of $1,980,893.33 per year.[8] While the estimated costs associated with centralized GAC treatment can vary depending on multiple variables, including, but not limited to, installation, monitoring, and supply chains, A. O. Smith would observe that third-party certified POU and POE water filtration systems are a cost-effective solution[9] to address PFOA and PFOS that covered water systems – especially smaller systems with limited financial resources – under the proposed rule should be able to use as a compliance option.

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[4] See DG-24-19 Fiscal Estimate & Economic Impact Analysis.

[5] https://www.epa.gov/pfas/epas-pfas-action-plan

[6] See generally, *"External Peer Review Draft Proposed Approaches to the Derivation of a Draft Maximum Contaminant Level Goal for Perfluorooctanoic Acid (PFOA) in Drinking Water, November 2021"*

[7] E.g., 8 ppt in the State of Michigan vs 35 ppt in the State of Minnesota.

[8] See DG-24-19 as well as Fiscal Estimate & Economic Impact Analysis.

[9] See, COST BENEFITS OF POINT-OF-USE DEVICES IN REDUCTION OF HEALTH RISKS FROM DRINKING WATER. Prepared by: Marc Verhougstraete, Ph.D. Kelly Reynolds, Ph.D. Akrum Tamimi, Ph.D. Charles Gerba, Ph.D. At the: The University of Arizona Tucson, Arizona, USA Prepared for: Water Quality Research Foundation 3 January 2019.

Conclusion

A. O. Smith appreciates the opportunity to provide this feedback to DNR on its proposed rule DG-24-19 and stands ready to work with DNR as a resource moving forward. We would encourage DNR to afford covered public/municipal water systems with flexibility on compliance pathways under any final rule while remaining cognizant that peer-reviewed data on human health effects continue to evolve and become more transparent for the purposes of regulatory action. Lastly, we look forward to working with DNR and stakeholders to assist homeowners, not on centralized water systems, address PFAS substances in their drinking water.

Best Regards,

Joshua C. Greene
Corporate Vice President, Government and Industry Affairs
A. O. Smith Corporation
World Headquarters
11270 West Park Place
Milwaukee, WI 53224
jcgreene@aosmith.com
(301)-325-1315

From: Rich and Jess Bernstein
To: DNR NR 809 Comments
Subject: Drinking Water Standards
Date: Wednesday, December 1, 2021 9:28:02 PM

I'm reaching out to ask the WI DNR to support Board Order DG-24-19 Drinking Water Standards. People living near La Crosse and Marinette cannot drink their water because of PFAS contamination. Widespread drinking water testing for PFAS will not happen until DNR has standards in place. We cannot wait another 2-3 years for the EPA to set national PFAS standards, plus PFAS limits established by the EPA for drinking water won't apply to private wells, leaving thousands of rural Wisconsin families unprotected. Wisconsin must act to protect our water and the health of our communities!

Thank you.
Jess Bernstein

From: Darlene Bigari
To: DNR NR 809 Comments
Subject: PFAS Standards
Date: Wednesday, December 1, 2021 8:01:33 AM

I support drinking water standards for PFAS chemicals. Born and raised in Marinette County I had always considered Wisconsin as a leader in efforts to protect their communities. This is no longer true! I now reside in the UP of Michigan but some of my grandchildren live and are being raised in Wisconsin. One of my granddaughters lives in Peshtigo Township across the street from Lake Michigan. She has reoccurring kidney stones at age 10. Her household cannot drink their well water because of PFAS levels and are supplied bottled water. Health issues already at age 10. Coincidental? I think not. Two of my daughters are environmental engineers with over 20 years of experience. PFAS are forever chemicals and do not break down in the environment. Michigan leads the nation in PFAS standards. Wisconsin residents deserve safe drinking water and your state is contaminating Lake Michigan and risking the health of your residents. Wisconsin residents deserve safe drinking water and you need to set PFAS standards and enforce them to protect your communities.
Sent from my iPhone

From: Joan Braune
To: DNR NR 809 Comments
Subject: Registering support for Board Order DG-24-19
Date: Monday, December 6, 2021 11:10:45 AM

CAUTION: This email originated from outside the organization.
Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello,

I would like to register my support for Board Order DG-24-19. The DNR has a responsibility to protect the health of Wisconsin residents by protecting our drinking water. More stringently regulating the levels of PFAS chemicals is a necessary step in meeting this responsibility.

Thank you for your attention to this matter,
Joan Braune
[redacted]
Madison, WI. 53704
[redacted]

From:	Buzz Davis
To:	DNR NR 809 Comments
Subject:	Support for Safe Drinking, Recreation and Farming Water RE: Board Order DG-24-19 Drinking Water Standards
Date:	Wednesday, December 1, 2021 7:09:29 PM

I support the strongest safe drinking water standards in the nation.

Let us not do another DDT stunt and listen to the chemical companies.

Act smart! Other states will follow the lies of the corporations and spoil the drinking water in their states.

Please don't do this to WI waters and ground waters.

Buzz Davis formerly of Stoughton, WI and now of Tucson which is a state being run into the ground by greedy corporations. They will be too late smart.

Please continue the WI tradition of wise protection of the water.

Thank you and I wish each of the Board and staffers a Happy Holiday Season!

Peace!
Buzz Davis, Vets for Peace in Tucson
[redacted]

From: C lee
To: DNR NR 809 Comments
Subject: PFA contamination
Date: Tuesday, December 7, 2021 3:24:30 PM

The people of Wisconsin have a right to be protected from PFA contamination. I agree with the recommendations from Midwest Environmental Advocates

My husband has a young family member from the Peshtigo area that was recently diagnosed with leukemia. Was this cancer caused by PFA contamination in that area of the state? I am sure we will never know. However, it is important that we do our best to protect the people of Wisconsin.

The following information is from the website of Midwest Environmental Advocates. I strongly agree with their recommendations to establish drinking water standards in order to protect the health of the people of Wisconsin.

"WIsconsin must act now to prevent exposure to PFAS. When it comes to preventing PFAS exposure, Wisconsin cannot afford to wait for the federal government to act. While the Environmental Protection Agency has announced its intention to establish a federal drinking water standard for PFOA and PFOS, the federal process will take several
years to complete. Moreover, it would take several additional years for a federal standard to take effect in Wisconsin. In the meantime, an untold number of Wisconsinites would continue to be exposed to PFAS.
The DNR's proposed drinking water standards will protect the health of Wisconsinites. The DNR has proposed drinking water standards that would set an individual and combined limit of 20 parts per trillion for PFOS and PFOA. This limit is based on Wisconsin Department of Health
recommendations, which were developed using the best scientific information currently available."

Thank you for your time,

Carey M. Lee

On Tue, Dec 7, 2021, 3:02 PM C lee <[redacted]> wrote:

> The DNR's proposed drinking water standards will protect the health of Wisconsinites.
> The DNR has proposed drinking water standards that would set an individual and combined limit of
> 20 parts per trillion for PFOS and PFOA. This limit is based on Wisconsin Department of Health

recommendations, which were developed using the best scientific information currently available.

Once statewide drinking water standards have been established, public water utilities across Wisconsin will be required to test for PFAS. If testing shows that PFAS levels exceed established limits, a water utility would be required to implement a plan to address the contamination. That plan could include installing a treatment system, drilling a new well or switching to an alternate drinking water source.

The DNR's proposed surface water standards will protect the health of Wisconsinites.

The DNR has proposed a maximum concentration of 8 parts per trillion for discharges of PFOS into surface waters. For PFOA, the proposed maximum concentration is 20 parts per trillion for surface water used for drinking water and 95 parts per trillion for all other surface waters.

These limits would give the DNR the tools the agency needs to limit discharges of PFAS into our lakes, rivers and streams. Limiting PFAS in our surface waters would also protect public trust uses such as fishing and swimming and reduce risks to human health that are associated with ingesting contaminated water or eating contaminated fish.

From: [redacted]
To: DNR NR 809 Comments
Subject: PFAS Comments
Date: Friday, December 3, 2021 8:09:04 PM

Hello!

I just wanted to send in my comments regarding setting standards for levels of PFAS. I'm incredibly concerned with the lack of care that we as a nation and as a community have regarding these toxic chemicals, particularly when it comes to our drinking water. Please, please, set strict standards that must be met quickly by our local communities to drastically reduce the amount of PFAS allowed in our drinking water.
Thank you,
Julia Carvale
Milwaukee Resident

From: laurie chagnon
To: DNR NR 809 Comments
Subject: Drinking Water
Date: Monday, December 6, 2021 7:26:12 PM

To Whom It May Concern,
As I typed that salutation, I thought ridiculous, because it concerns us ALL in Wisconsin.

I have two precious children , who are the future of our state and world. They are going to be in charge several years from now, would you want them to be of sound mind and body? Raising them on toxic water (and soil) will lead to further ill health in our society. Wisconsin has seen many mass murders/school shootings/mental illness wreaking havoc with our society, every bit of toxin allowed to accumulate in the human body will bring more of this mental /emotional havoc. It is our duty to stop the accumulation of toxins in our population.

We need to think further into our future! Is the wealth of manufacturers and businessmen today more important than the total health of our citizens? Is the ease of our historical past of dumping into waterways or closing our eyes to harmful practices by cities and towns going to continue into our new global community? Is the fear of regulating CAFOs going to continue? We have to stand up to those, seemingly powerful businessmen, and ignorant rules of the past to stop their influential rhetoric which is clearly harming the greater of us. Please fulfill your duties as the protectors of our Natural Resources!

Sincerely,
Laurie Chagnon

From: Sue Clapp
To: DNR NR 809 Comments
Subject: PFAF Levels in Water
Date: Monday, December 6, 2021 10:49:59 AM

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I'm writing to express my concern for the level of contaminants in our drinking water in the state of Wisconsin. It's of critical importance for **Board Order DG-24-19** to revise chapter NR 809 and adopt new drinking water maximum contaminant levels for PFAS substances.

Sincerely,
Susan Clapp
[redacted]

Sent from my iPad

From: Sami Clausen
To: DNR NR 809 Comments
Subject: Water is Life - Support for Board Order DG-24-19
Date: Monday, December 6, 2021 10:35:57 AM

Hello!

I'm reaching out to express my support for Board Order DG-24-19 to revise chapter NR 809 and adopt new drinking water maximum contaminant levels for PFAS substances.

We already know PFAs are FOREVER chemicals which are literal poison. We already know they are in our waterways and wells. We already know PFAs are in the bodies of babies who are breastfed. We already know that PFAs are in the fish that many people consume.

It's past due that the regulatory bodies put people, water, animals, and life above profits and pressure from the military.

Please enact your due diligence to protect Wisconsin's vulnerable waterways, animals, and people and revise the NR 809 regulations, the Safe Drinking Water Standard.

Thank you
--
Sami Clausen-Ruppert
[redacted]
Madison, Wisconsin

From: KarenC
To: DNR NR 809 Comments
Subject: Revise NR 809!
Date: Wednesday, December 8, 2021 11:48:35 AM

I am writing to register my support for **Board Order DG-24-19** to revise chapter NR 809 and adopt new drinking water maximum contaminant levels for PFAS substances.

Karen Cornelius
[redacted]
Madison, WI 53704

From: Colleen Cox
To: DNR NR 809 Comments
Subject: Support for Board Order DG-24-19
Date: Wednesday, December 8, 2021 9:20:47 PM

Dear Mr. Deweese,
I am writing to register my support for Board Order DG-24-19 to revise chapter NR 809 and adopt new drinking water maximum contaminant levels for PFAS substances. I live near Starkweather Creek, which is a beautiful natural area that has already been negatively affected by these dangerous chemicals.
Thank you for accepting my input on this important public health matter.
Sincerely,
Colleen Cox
[redacted] Madison, WI 53704

December 7th, 2021

Re: Comments on the proposed rule DG-24-19 relating to the promulgation of new drinking water maximum contaminant levels for Per- and Polyfluoroalkyl substances (PFAS), including Perfluorooctane sulfonate (PFOS) and Perfluorooctanoic acid (PFOA)

Clean Wisconsin is a non-profit environmental advocacy organization working on clean water, clean air, and clean energy issues. We were founded over fifty years ago and have over 20,000 members and supporters around the state. We employ scientists, policy experts, and attorneys to protect and improve Wisconsin's air and water resources.

We appreciate the opportunity to comment on the proposed rule to establish drinking water maximum contaminant levels (MCLs) for PFOS and PFOA.

Clean Wisconsin supports the proposed rule and thanks the Department of Natural Resources for taking this step towards protecting Wisconsin residents from harmful exposure to toxic PFAS. Scientific understanding of the health impacts of PFAS is continually evolving, but there is good evidence for PFAS exposure being related to a variety of problems including: thyroid disease, liver damage, kidney and testicular cancer, reduced response to vaccines, lower birth weights, delayed organ development, and increased cholesterol levels.

PFAS contamination of drinking water is a problem that needs to be addressed immediately. This is evidenced by PFAS detections in several municipal water systems that have been proactively voluntarily testing for PFAS as well as the dozens of known PFAS contamination sites around the state. These proposed rules are a first step towards protecting the public from the harmful effects of these chemicals. As the Economic Impact Analysis indicates, the economic value of the public health benefits of promulgating these standards will likely far exceed the compliance costs.

1. <u>Wisconsin should not wait for federal standards to be promulgated</u>

While the U.S. Environmental Protection Agency has indicated that it intends to promulgate federal MCLs for PFAS and PFOA in drinking water, those standards are years away from being effective in Wisconsin. Voluntary testing has already found PFAS contamination of municipal system supply wells here in Wisconsin, and the testing required by this rule will enable a more complete understanding of the extent of PFAS contamination of public drinking water supplies in Wisconsin. There is simply no reason to delay acting now to protect our drinking water.

2. <u>Wisconsin will join several other states who have already established drinking water standards for PFOA and PFOS to protect their residents.</u>

Wisconsin will not be alone in establishing drinking water protections for PFOA and PFOS. Massachusetts, Michigan, New Hampshire, New Jersey, New York, and Vermont have all promulgated MCLs for at least PFOA and PFAS. Additionally, Maine has promulgated interim drinking water standards, and Minnesota has heath-based guidance values for these chemicals.

The proposed MCL of 20 ppt for PFOA and PFOS individually or combined is comparable to standards established in other states. Maine, Massachusetts, and Vermont all have a combined limit of 20 ppt for PFOA and PFOS (in addition to several other PFAS; see below). For states without combined standards, individual MCLs for PFOA range from 8-14 ppt, while MN's guidance value is 35 ppt. Individual MCLs for PFOS range from 10-16 ppt, and MN's guidance value is 15 ppt.

3. <u>The proposed standards are based on the best available science.</u>

Wisconsin's proposed standards are consistent with federal agency evaluation of recent scientific literature indicating the EPA's health benchmark of 70 ppt for PFOS and PFOA established in 2016 was inadequate to protect the public. The Agency for Toxic Substances and Disease Registry's Toxicological Profile for Perfluoroalkyls reviewed the recent scientific literature and determined that a safe exposure level lower than the level used by the EPA is warranted.[1] These proposed standards are consistent with this updated understanding of health impacts at lower levels than previously thought.

4. <u>The economic impact analysis is sufficient for promulgating an MCL under state law</u>

Like any proposed rulemaking, setting an MCL requires DNR to conduct an economic impact analysis (EIA). Wis. Stat. s. 227.137. DNR's EIA for these MCLs is rigorous, based on the best available information, and meets all statutory requirements. Under state law, the DNR is required to assess certain costs of implementing a proposed rule and also analyze the actual and quantifiable benefits of a proposed rule. DNR has done so for these MCLs. And that EIA makes clear the benefits that can be attained by implementing these standards.

While the process for setting an MCL under the federal Safe Drinking Water Act requires cost-benefit analysis, and that process that may differ in certain respects from the state EIA process, DNR is compelled to follow state requirements, not federal ones, and has done so here. Moreover, there is no reason to think that the DNR's approach here is inconsistent with the approach that EPA will take in assessing the costs and benefits of setting MCLs for PFOS and PFOA.

5. <u>The proposed standards should only be a first step in protecting the public from harmful PFAS in their drinking water.</u>

[1] https://www.atsdr.cdc.gov/toxprofiles/tp200.pdf

PFOA and PFOS are only two of thousands of PFAS compounds. They are the best-studied and understood PFAS compounds, so they make for a logical starting point. However, Wisconsin needs to continue to work to reduce PFAS contamination of drinking water. For example, other states have already developed MCLs for additional PFAS compounds beyond PFOA and PFOS. The 20 ppt standards in Maine, Massachusetts, and Vermont are combined standards for PFOA, PFOS and three to four other PFAS compounds. Michigan has MCLs in place for seven different PFAS compounds.

Moreover, we need to continue to work to prevent PFAS from getting into drinking water sources in the first place. Our residents should not have to either bear the health costs from drinking contaminated water or bear the economic costs as ratepayers paying for treatment systems when source water is contaminated.

Respectfully submitted this 7th day of December, 2021.

Scott Laeser
Water Program Director
Clean Wisconsin

Additional Contributors:

Paul Mathewson
Staff Scientist
Clean Wisconsin

Evan Feinauer
Staff Attorney
Clean Wisconsin

LEAGUE OF WOMEN VOTERS OF WISCONSIN

612 W. Main Street, #200 Phone: (608) 256-0827
Madison, WI 53703 www.lwvwi.org

November 30, 2021

TO: Department of Natural Resources
Attn: Adam DeWeese – DG/5
P.O. Box 7921
101 S. Webster Street
Madison, WI 53707-7921
email: DNRNR809Comments@wisconsin.gov

RE: Permanent rule DG-24-19 to revise chapter NR 809 relating to the promulgation of new drinking water maximum contamination levels for PFOS and PFOA

The League of Women Voters of Wisconsin (LWVWI) has long been a strong supporter of efforts to protect the environmental quality of our state, including the quality of our water. It is the League's position that access to clean drinking water is a fundamental human right. The LWVWI is therefore in support of any efforts to address PFAS contamination of our drinking water.

PFAS are a group of highly toxic and persistent compounds that bioaccumulate in animals and humans. Evidence has mounted linking PFAS to serious health problems, including cancer, liver damage, and developmental defects.

As described in the Statement of Scope SS 89-19 the objective of the proposed rule is to amend NR 809 to establish drinking water standards for certain PFAS substances, including PFOA and PFOS. Numerous residents and several concerned organizations, including LWVWI (letter dated 11/18/2019), expressed their support of SS 89-19 and the Wisconsin Natural Resources Board approved it at its January 2020 board meeting.

The proposed rule DG-24-19 establishes monitoring cycles for community and non-transient non-community public water systems to test for PFOA and PFOS. Systems that exceed the MCL standards for those two compounds are required to take measures to return to compliance. The MCL standards are the Wisconsin Department of Health Services recommended Cycle 10 standards: 20 ppt individually and 20 ppt combined (EPA is also combining PFOA and PFOS in its health advisory because they cause similar types of adverse health effects).

According to the fairly detailed EIA of the proposed rule, the implementation and compliance cost is about $4 to $5.6 million annually.

The economic benefits of implementing the rule are not easily estimated. Three studies of the cost of the adverse effects of PFAS are referred to in the EIA, each for a different geographic area and time

period: low birthweight, hypertension, and decreased housing value. Extrapolation of those estimates suggests that the economic benefit (avoided cost) is very likely in the hundreds if not thousands of millions of dollars for Wisconsin.

The League agrees with DNR that the economic benefits will greatly outweigh the cost of implementing the rule and is therefore in support of DG-24-19. Given those benefits – which are costs incurred without enforceable drinking water standards - it makes little sense to wait until EPA establishes federal drinking water standards for PFAS. In January 2021, EPA decided to establish MCL for PFOA and PFOS but that federal process will take several years, and another 3 years after that for the Wisconsin process.

The League is however disappointed that the rule addresses only two PFAS compounds. We will continue our strong support of rule DG-31-20 (SS 30-21) which addresses 12 individual and 4 combined PFAS compounds (Cycle 11) and which is currently being drafted.

Thank you for your consideration.

From: Tracy Doreen
To: DNR NR 809 Comments
Subject: SUPPORT THE ADOPTION OF NEW PFAS DRINKING WATER STANDARDS.
Date: Tuesday, December 7, 2021 7:43:42 AM

To: Adam Deweese, Water Supply Specialist
Bureau of Drinking and Ground Water
and DNR Staff

From: Tracy Doreen Dietzel, Madison, Wisconsin

Please register my support for DNR adoption of new PFAS drinking water standards. It is imperative that the DNR revise the NR 809 regulations, the Safe Drinking Water Standard.

I agree with the resident of Marinette who at the DNR's virtual meeting on Dec 1 called for amending NR 809 "to prevent the slow poisoning of the people of Wisconsin from municipal water systems."

Thank you for your attention and action.

Sincerely,

Tracy Doreen Dietzel
[redacted]
Madison, WI. 53703

From:	Robin Downs
To:	DNR NR 809 Comments; DNR 105 PFAS Rule
Cc:	Robin Downs
Subject:	Support for PFAS standards
Date:	Thursday, December 2, 2021 7:40:00 AM

I'm writing to urge you to support the adoption of BOTH Drinking Water standards and Surface Water Standards for PFAS in our water

Board Order DG-24-19 would set drinking water standards. These are needed because

- Widespread drinking water testing for PFAS will not happen until DNR has standards in place.
- We cannot wait another 2-3 years for the EPA to set national PFAS standards.
- PFAS limits established by the EPA for drinking water won't apply to private wells, leaving thousands of rural Wisconsin families unprotected, so Wisconsin must act.
- The state must act to protect our water and the health of our communities.

Board Order WY-23-19 would set Surface water standards. These are needed because

- DNR's efforts to set standards for PFAS in our surface water are a starting point for cleaning up the contamination already out there and preventing more from occurring.
- PFAS pollution poses serious public health risks for families across Wisconsin and threatens the treasured rivers, lakes, and streams that make our state special.
- No one should be forced to bear the financial and health burden of industrial pollutants contaminating our water resources in order to protect corporate profits.
- The proposed standards are informed by the best science available to protect public health and are in line with those put forward by other states.

Thank you for your work

Robin Downs
[redacted]
Cross Plains, WI 53528

From: Dave Fallow
To: DNR NR 809 Comments
Subject: PFAS
Date: Monday, December 6, 2021 10:22:04 AM

CAUTION: This email originated from outside the organization.
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I support **Board Order DG-24-19.**

Dave Fallow
[redacted]
Madison WI 53714

From: Helen Findley
To: DNR NR 809 Comments
Subject: PFAS Drinking water standards
Date: Tuesday, December 7, 2021 10:13:53 AM

I support Board Order DG-24-19 to revise chapter NR and adopt new drinking water maximum contaminant levels for PFAS substances. PFAS are very dangerous and we must eliminate them from human consumption!

Thank you,

Helen Findley
[redacted]
Madison, WI 53795

From: Janet Frieswyk
To: DNR NR 809 Comments
Subject: PFAS
Date: Monday, December 6, 2021 2:23:56 PM

Regarding Board order DG-24-19, please revise chapter #809 and adopt new drinking water maximum contaminant levels for PFAS. This is way overdue!
While you are at it please STOP all those unwanted nutrients from the manure getting into the water ways. Lakes here in Madison look beautiful but they are so polluted I will only put my feet in those lakes on rare occasions. Wisconsin is my 8th State of residence and it is by far the worst State I have ever lived in! There is no democracy here and corporate fools running the legislature and the State Supreme Court! My God,I can not tell you how much I hate it here, I forgot to include the lousy architecture.

Thank you for doing your job, love Mother Nature, stop the pollution.

J.C. Frieswijk

From: Ned Gatzke
To: DNR NR 809 Comments
Subject: NR 809 Revisisions
Date: Monday, December 6, 2021 12:26:52 PM

CAUTION: This email originated from outside the organization.
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I support the provisions proposed by this rule revision to establish Maximum Contaminant Levels (MCL) for Perfluoroctanoic acid (PFOA) and Perfluorooctane sulfonic acid (PFOS) in drinking water. The Environmental Protection Agency (EPA) issued a Health Advisory Level (HAL) for these chemicals in 2016 indicating that exposure to these substances has been shown to produce adverse health effects. Waiting for the EPA to develop federal standards is too long to wait when we know that our drinking water may/is impacted and can affect the public health and welfare. We cannot delay the implementation of these standards.

States surrounding Wisconsin (Illinois, Iowa, Michigan and Minnesota) have adopted or proposed similar MCL rules for these substances and other PFAS to protect public health and welfare. Wisconsin must act now.

Execution of this rule appears to apply to public and community drinking water supply systems and I am presuming that the MCL standards would also apply to private drinking water wells that can be vulnerable to contamination due to land uses that may contaminate groundwater as is the case with public and community water supplies drawn from groundwater.

In addition to establishing MCL and monitoring requirements this rule should also address the sources of potential contamination of drinking water supplies and responsibility to reduce or eliminate these discharges on the front end. The responsibility and cost of mitigation the presence of these substances in drinking water supplies should not fall solely on the water provider or private well owner.

Thank you for the opportunity to comment on this necessary rule proposal.

Ned Gatzke
[redacted]
Sparta, WI 54656
[redacted]

Sent from Mail for Windows

From: m.mk@juno.com
To: DNR NR 809 Comments
Subject: I support for Board Order DG-24-19
Date: Tuesday, December 7, 2021 9:59:14 PM

Adam Deweese, Water Supply Specialist
Bureau of Drinking and Ground Water
C/O DG/5
PO Box 7921
Madison, WI 53707-7921

Dear Mr Deweese:

I SUPPORT THE ADOPTION OF NEW PFAS DRINKING WATER STANDARDS.

I support for Board Order DG-24-19 to revise chapter NR 809 and adopt new drinking water maximum contaminant levels for PFAS substances.

Thank you.

Sincerely,

Mark M Giese

[redacted]

Racine, WI 53403

From:	Hannah Lee
To:	DNR NR 809 Comments
Subject:	Support for Board Order DG-24-19, revise chapter NR 809 and adopt new drinking water maximum contaminant levels for PFAS
Date:	Monday, December 6, 2021 1:06:02 PM

To Adam Deweese, Water Supply Specialist, Bureau of Drinking and Ground Water

Dear Mr. Deweese, I am writing to urge you to take into serious account the many and telling comments by citizens at the DNr's public meeting on December 1. There is no doubt anymore that current PFAS standards for drinking and ground water are insufficient to address the ever-unfolding harm they are doing. Protection of drinking water is one of the most urgent issues before ANY governmental body. Please do all in your power to insure that PFAS standards are updated to reflect our current knowledge of the poisonous effects of these toxic chemicals in even the tiniest amounts.

Thank you.

Hannah Lee
[redacted]
Madison WI 53704

From: Darcy Haber
To: DNR NR 809 Comments
Subject: PFAS in drinking water and recreational water!
Date: Monday, December 6, 2021 11:06:14 AM

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Do not click links or open attachments unless you recognize the sender and know the content is safe.

To DNR board and Staff,

It seems there is no more important role of the DNR than acting on a cancer causing agent being leaked into our wells and waterways. Please do not be influenced by what caused the PFAS, strictly require that it be cleaned up to the extent science can, and don't allow future use of this pollutant in Wisconsin unless it is interior use and properly disposed of.

Thank you,

Darcy

--

Darcy Haber EcoBroker®.
1148 Williamson St.
Madison, WI 53703

(office) 608.284.9311
(cell) 608.358.6180
(fax) 800.381.5814

www.solidarityrealty.com
darcy@solidarityrealty.com

From: Eric Hansen
To: DNR NR 809 Comments
Subject: Supporting drinking water standards for PFAS
Date: Wednesday, December 8, 2021 8:15:11 PM

I am writing today to express strong concerns about the lack of testing and standards for PFAS in our drinking water.

We already face major health challenges from lead pipes in older homes in Milwaukee - where I live.

Common sense tells us that we need to get ahead of new threats - dangerous chemicals such as PFAS - that are horrifyingly dangerous to our communities' children and other vulnerable people.

Don't wait for some other agency, federal or other, to develop drinking water standards for PFAS. Don't kick the can down the road. The dangers are already clearly obvious.

There is good reason to suspect that PFAS contamination is present in multiple locations around the state. We need a robust response to this.

Clearcut standards are needed. Now.

Thank you,

Eric Hansen
[redacted]
Milwaukee, WI 53211

From: justin h
To: DNR NR 809 Comments
Subject: I support Board Order DG-24-19
Date: Tuesday, December 7, 2021 8:04:44 PM

Hello,
I am sending this email to express my support for Board Order DG-24-19. We must establish standards for PFAS levels in our drinking water! Every citizen deserves to have safe drinking water. Thank you-

Justin Hellickson
[redacted]
Madison WI 53704

From: Sheralyn Holcomb
To: DNR NR 809 Comments
Subject: adopt Board Order DG-24-19
Date: Monday, December 6, 2021 8:20:12 PM

I am writing in support of Board Order DG-24-19. As PFAS chemicals become more prevalent in the environment, shocking and distressing effects have resulted from it, including decreased response of antibodies to vaccines during a pandemic. I live in close proximity to Truax Field, the primary source of PFAS in Madison. I exhort you to adopt DG-24-19 as a matter of public health urgency.

Sherry Holcomb
53704

From: Paul Huset
To: DNR NR 809 Comments
Subject: Please Revise NR 809
Date: Tuesday, December 7, 2021 10:14:41 PM

Hello,

As a citizen who lives close to the airport, I would like to register my support for revising NR 809. My wife and I have a baby on the way and it concerns me greatly what we do and don't know about PFAS impacting our drinking water.

Thank you,
Paul Huset

From: Bob Israel
To: DNR NR 809 Comments
Subject: PFAS drinking water standards
Date: Wednesday, December 8, 2021 4:10:52 PM

This is to register my support for **Board Order DG-24-19** to revise chapter NR 809 and adopt new drinking water maximum contaminant levels for PFAS substances.

Bob Israel

[redacted]

Madison, WI

From: Lewis Koch
To: DNR NR 809 Comments
Subject: no PFAs in drinking water-
Date: Tuesday, December 7, 2021 10:36:48 AM

Dear Commissioners,

I would like to register my support for **Board Order DG-24-19** to revise chapter NR 809 and adopt new drinking water maximum contaminant levels for PFAS substances.

The people of Wisconsin deserve contaminent-free drinking water. It is a precious resource.

Thank you,

Lewis Koch
[redacted]
Madison, WI 53704

From: Leigh Langford
To: DNR NR 809 Comments
Subject: PFAS and Drinking Water Standards
Date: Friday, December 3, 2021 11:26:42 AM

CAUTION: This email originated from outside the organization.
Do not click links or open attachments unless you recognize the sender and know the content is safe.

Greetings,

I am writing to express my wishes that the Wisconsin Department of Natural Resources adopts and supports the Board Order DG-24-19 Drinking Water Standards. The creation of standards will help protect our water and the health of our communities. Given the serious nature of forever chemicals, this action is critical and necessary.

Sincerely,
Leigh M. Langford
[redacted]

I believe in kindness. Also in mischief. Also in singing, especially when singing is not necessarily prescribed. -Mary Oliver

From: Margaret Larson
To: DNR NR 809 Comments
Subject: Thank you for opportunity to comment
Date: Tuesday, December 7, 2021 9:33:15 PM

My name is Margaret Larson, and I am the La Crosse County Supervisor for District 14, which includes most of French Island and the Town of Campbell. To the record of scientific facts being submitted by experts, I would like to add the perspectives of my friends and neighbors who now find themselves facing the reality of PFAS contamination every day.

French Island sits among waterways connected to the Mississippi and is home to 4,200 people. The residents of French Island have always depended on their private wells for water to drink, cook with, bathe their infants in, and water their vegetable gardens. That changed forever when 97% of the 555 wells tested were found to have PFAS contamination.

Detectable PFAS levels ranged from 1 ppt to 2,126 ppt which is more than 100 times the standard being considered.

For now, families on French Island are somewhat resigned to depending on bottled water, but their patience is not infinite. It takes time to determine the best long-term solution to ensure safe water for consumption. And it will take more time plus tens of millions of dollars to implement the solution.

How did this happen? The use of PFAS in our daily lives has grown for decades – whether in non-stick cookware or water/stain-proofed clothing, carpet and upholstery or the fire-fighting foam that douses fuel-based fires and continues to be required by the FAA. Like asbestos – the miracle product used until its negative effects were discovered to include serious and fatal illness – PFAS were welcomed for their positive properties. Now the time has come to regulate PFAS.

We need to regulate PFAS and the serious problems they cause due to their contamination of the most important life-giving force: water. We need to do this before more communities develop the problems we have on French Island.

No one really knows what amount of PFAS is safe, especially for the most vulnerable friends and neighbors among us. Although I prefer a number closer to 10 ppt, I do support the DNR on a permanent rule DG-24-19 to revise chapter NR 809 which sets the safety limit at 20 ppt, at least until we learn more.

When thinking about private wells and residences and municipal wells and communities throughout the State of Wisconsin living with these toxic forever chemicals, please realize that we are not talking just numbers. We actually are talking about human beings and families.

From: Cathy Loeb
To: DNR NR 809 Comments
Subject: Board Order DG-24-19
Date: Monday, December 6, 2021 11:02:49 AM

Greetings:

I'm writing to express my support for Board Order DG-24-19 to revise chapter NR 809 and adopt new drinking water maximum contaminant levels for PFAS substances. We must act to prevent the further poisoning of our waterways and drinking water. When I walk along the Starkweather Creek path here in Madison, I see signs alerting people not to fish because of the hazard of PFAS contamination. Nonetheless, I often see people fishing in Lake Monona, into which Starkweather Creek flows. Then I see all the waterfowl swimming in the creek, unable to read the signs that would alert them to the danger.

I urge you to act to protect the water on which life depends.

Sincerely,

Cathy Loeb
[redacted]
Madison

From: Ellen Magee
To: DNR NR 809 Comments
Subject: Bd Order DG-24-19
Date: Tuesday, December 7, 2021 1:00:49 PM

I want to register strong support for immediate action to address water standards for drinking and ground water. PFAS levels in certain areas of WI are documented to be high enough to make people seriously ill.
We need these chemicals contained but the first step is to institute a measure for unsafe.
Thank you,
Ellen Magee, North Madison

From: Mark Smith
To: DNR NR 809 Comments
Subject: In support of Board Order DG-24-19
Date: Wednesday, December 1, 2021 6:35:32 PM

- People living near La Crosse and Marinette, Wis. cannot drink their water because of PFAS contamination.
- Widespread drinking water testing for PFAS will not happen until DNR has standards in place.
- We cannot wait another 2-3 years for the EPA to set national PFAS standards.
- PFAS limits established by the EPA for drinking water won't apply to private wells, leaving thousands of rural Wisconsin families unprotected, so Wisconsin must act.
- The state must act to protect our water and the health of our communities.

Thanks,
Mark Smith
[redacted]
Oconto Falls, WI 54154

From: Lissa McLaughlin
To: DNR NR 809 Comments
Subject: Please support Board Order DG-24-19
Date: Tuesday, December 7, 2021 11:19:36 AM

Dear Mr. Deweese,

I write with great alarm to ask you to support **Board Order DG-24-19** . I live immediately adjacent to Starkweather Creek, cited by scientists as the most polluted body of water in the state of Wisconsin. Great numbers of turtles, beaver, frogs or fish have disappeared from the creek recently. Signs warn fishermen not to eat what they catch. PFA's are exterminating our wildlife and emptying Madison's lakes. Our current drinking water standards cannot possibly mitigate the damage their ingestion is doing to humans, particularly babies and children. Our standards are woefully inadequate to this task.
Thank you.
Lissa McLaughlin

From:	heartlandphoto@tds.net
To:	DNR NR 809 Comments
Cc:	Nancy McMahon
Subject:	Board Order DG-24-19
Date:	Friday, December 10, 2021 2:57:53 PM

I am registering my support for **Board Order DG-24-19** to revise chapter NR 809 and adopt new drinking water maximum contaminant levels for PFAS substances.

If you require it, here is my identify:

Paul McMahon
[redacted]
Madison, WI 53711

Thank you to staff and leadership at DNR for moving the State of Wisconsin toward safer water standards.

Delivered via electronic mail

December 8, 2021

Wisconsin Department of Natural Resources
ATTN: Adam DeWeese – DG/5
P.O. Box 7921
101 S. Webster St.
Madison, WI 53707-7921
DNRNR809Comments@wisconsin.gov

RE: Comments on Proposed Rule DG-24-19

Dear Mr. DeWeese:

The undersigned organizations submit the attached comments in support of DG-24-19, which proposes to set standards for PFOS and PFOA in drinking water. Please let us know if you have any questions or concerns.

Sincerely,

Tony Wilkin Gibart, *Executive Director*
Midwest Environmental Advocates
tgibart@midwestadvocates.org

Allison Werner, *Executive Director*
River Alliance of Wisconsin
awerner@wisconsinrivers.org

Elizabeth Ward, *Chapter Director*
Sierra Club of Wisconsin
elizabeth.ward@sierraclub.org

COMMENTS ON PROPOSED RULE DG-24-19—NEW DRINKING WATER MAXIMUM CONTAMINANT LEVELS FOR PER- AND POLYFLUOROALKYL SUBSTANCES

Midwest Environmental Advocates, River Alliance of Wisconsin, and Sierra Club of Wisconsin submit these comments in on proposed rule DG-14-19, which will establish new drinking water maximum contaminant levels for perfluorooctanesulfonic acid ("PFOS") and perfluorooctanoic acid ("PFOA"). PFOS and PFOA are only two out of thousands of toxic, human-made chemicals in the per- and polyfluoroalkyl substances ("PFAS") family, and the Wisconsin Department of Natural Resources ("DNR") needs to regulate additional PFAS in drinking water and other natural resources.

PFAS present a particularly difficult problem for the DNR because they are ubiquitous in the environment and extremely difficult to destroy. Rather than regulating toxic chemicals like PFAS once they are in the environment and people become exposed, Wisconsin needs to establish a system that screens chemicals before allowing them to be used to prevent problematic substances from entering the environment in the first place. This would prevent harm on the front end instead of attempting to reduce risk on the back end. Nevertheless, the proposed standard of 20 parts per trillion ("ppt") for PFOA and PFOS combined is an important step in the right direction—a step that Wisconsin needs to take. We therefore support the proposed rule and urges the DNR to move it forward.

I. THE PROPOSED RULE IS BASED ON SOUND SCIENCE AND DESIGNED TO PROTECT OUR MOST VULNERABLE POPULATIONS.

We applaud the DNR for following the Wisconsin Department of Health Services' ("DHS") recommendations on restricting PFAS in drinking water at levels necessary to protect the health of <u>all</u> Wisconsinites. As indicated in the DNR's plain language analysis of the proposed rule, the 20 ppt standard is based on DHS recommendations developed for groundwater standards pursuant to Chapter 160 of the Wisconsin Statutes. That statute effectively requires the DHS to recommend drinking water standards designed to protect our most vulnerable populations. The DHS must recommend standards based on the "acceptable daily intake," or levels protective of a person weighing 10 kilograms, or approximately 22 pounds, drinking one liter of water per day, "where that water is the only source of the substance for the person."[1] In other words, when the DHS makes recommendations under Chapter 160, those recommendations must protect infants and toddlers.

Infants and toddlers are particularly vulnerable to exposure to PFAS through drinking water. Infants and small children drink more water in proportion to their size, their brains and organs are growing rapidly, their immune systems are still developing, and they have more time to bioaccumulate environmental toxins like PFAS in their bodies. As opposed to adults and children who eat a variety of food, infants only consume formula or breastmilk, which, if contaminated, leads to overall higher concentrations in their bodies at any given time. In addition, studies on

[1] Wis. Stat. § 160.13(c).

children have shown links to adverse impacts on the immune system with a decreased response to vaccines. These results may have long term effects on immune function resulting in increased risk for future infections, auto immune disease, and cancer.

The DHS made its groundwater standard recommendations after an exhaustive epidemiological review of the available science. While Chapter 160 requires the DHS to recommend enforcement standards based on existing "federal numbers", and the U.S. Environmental Protection Agency ("EPA") established a drinking water lifetime health advisory level of 70 ppt for PFOS and PFOA in 2016, the DHS may recommend more stringent standards if there is significant scientific information available that was not considered when the federal number was established.[2] Such information was available and the DHS determined that the EPA's health advisory level was not adequately protective of infants.

The science regarding exposure to PFAS and the associated adverse health impacts will continue to develop in the coming years and may suggest that even more stringent drinking water standards are necessary. Subsequent groundwater standard recommendations are indicative of that trend and include a combined drinking water recommendation of 20 ppt for six PFAS, not just PFOA and PFOA. We have more than enough information to know that these chemicals are dangerous in infinitesimal amounts and that we need to interrupt exposure pathways and otherwise limit exposure as quickly and as much as possible. Establishing the drinking water standards proposed in DG-24-19 will help accomplish that goal and safeguard the health of all Wisconsinites, including our most vulnerable.

II. LIMITING PFAS EXPOSURE THROUGH DRINKING WATER.

Drinking contaminated water is a significant PFAS exposure pathway and one of the most easily interrupted. That only works, however, if public water systems and the people those systems serve are aware that the water is contaminated. Increasingly more communities are discovering that their water supplies are contaminated with PFAS, and we do not yet understand the full scope of contamination in Wisconsin. Although the DNR already has the authority to require public water systems to test for unregulated contaminants such as PFAS that jeopardize the public health,[3] the proposed rule will establish a much needed testing regime for PFOS and PFOA.

Testing is important because, in the first instance, simply knowing empowers people to protect themselves and their families through direct action by limiting the amount of contaminated water they consume. This includes not only limiting the use of contaminated water to drink, but also to cook and even irrigate vegetable gardens. Access to bottled water can help but is not sustainable. If bottled water is not provided or at least subsidized by governmental entities, a disproportionate burden is placed on low-income members of the community who may not otherwise be able to afford avoiding exposure even if aware. And even when bottled water is

[2] Wis. Stat. § 160.07(4)(e).
[3] Wis. Admin. Code NR § 809.73.

provided, there are logistical burdens to those who may not have access to transportation or are physically unable to lift large quantities of water.

Public water utilities will therefore need to take action to ensure the communities they serve have clean drinking water in the long term. For those public water systems with contamination, that may mean drilling new wells or installing treatment systems using the Drinking Water State Revolving Fund. When infrastructure improvements for PFAS are required, the DNR should work under applicable EPA regulations to prioritize the availability of loans and subsequent loan forgiveness to public water systems serving communities with a diminished ability to absorb costs, including communities with median household incomes that are lower than the state average.

Larger public water systems with multiple, interconnected wells may have options other than costly infrastructure improvements. For example, systems may have the option of shutting down wells with excessive levels of PFAS, particularly if they have been adequately implementing water conservation and efficiency measures required under Wisconsin Public Service Commission ("PSC") regulations. That was the case in Madison when it shut down Well 15 in early 2019. Although there was concern that shutting down Well 15 would lead to an inability to meet the community's water demand, we understand that concern has not been realized nearly three years later. Before resorting to new infrastructure, public water systems should explore the availability of alternatives, and the DNR should assist in identifying less expensive opportunities that fully protect public health.

Testing will also clarify which public water systems do not have excessive levels of PFAS contamination and thereby restore confidence in communities facing uncertainty as to whether their water is safe to drink. Previous testing under the EPA's Third Unregulated Contaminant Monitoring Rule during the mid-2010s did not resolve that uncertainty. Only those public water systems serving populations of 10,000 or more along with a few smaller systems were required to test, and detection limits were not as low as those achievable through current methods.

III. WISCONSIN SHOULD NOT WAIT ON THE FEDERAL GOVERNMENT TO ACT.

Wisconsin cannot and should not wait on and defer to the federal government to regulate PFAS in drinking water. The federal government is lagging significantly behind the states in regulating PFAS. Although the EPA has signaled its intent to develop drinking water standards for PFOS and PFOA, this process will take years to complete and another three years to implement. The people of Wisconsin cannot afford further delays for meaningful action to abate PFAS contamination in drinking water. Since the DNR has been delegated authority over the Safe Drinking Water Act program, it will be the implementing entity anyway. And neither state nor federal law prohibit Wisconsin from developing drinking water standards first or that are more restrictive than federal standards.[4]

[4] State law only requires that the DNR's drinking water program be "no less stringent that the requirements of the safe drinking water act." Wis. Stat. § 281.17(8)(a). *See also* 40 C.F.R. § 142.10(a).

Wisconsin also cannot afford to wait on the federal government because it does not directly regulate contaminants in groundwater. Those Wisconsinites relying on private wells for drinking water will not benefit from federal regulation. While this proposed rule will not impact private wells, the DNR has proposed another rule that will because the need for timely, comprehensive health standards at the state level is clear.

IV. POTENTIAL ERRORS.

Although not part of the draft rule language itself, the plain language analysis indicates that the drinking water standards for PFOS and PFOA are set at 0.000002 mg/L (20 ppt) for PFOA and PFOS individually and a combined standard of 0.000002 mg/L (20 ppt). 0.000002 mg/L translates to 2 ppt, not 20 ppt, which instead is 0.00002 mg/L. This difference is properly reflected in the draft rule language, where the detection limit of 2 ppt for PFOS and PFOA is set at 0.000002 in the amended table under Subsection 809.23(1) of the Wisconsin Administrative Code and the maximum contaminant level of 20 ppt for PFOS and PFOA is set at 0.00002 in the amended table under Subsection 809.20(1). If this is indeed an error, the DNR should fix it to promote clarity and avoid confusion on the part of the public and regulated entities.

From: Sheila Mitchell
To: DNR NR 809 Comments
Cc: sheilamitchell84@gmail.com
Subject: PFAS Drinking Water Standards Comment
Date: Wednesday, December 8, 2021 10:47:04 PM

Greetings,

Thank you for allowing me the chance to address the PFAS Drinking Water Standards for the State of Wisconsin.

My name is Sheila Mitchell, and I am a retired emergency room physician. My husband and I live just outside of Ashland, on the shores of Lake Superior. I have been trying to educate myself on the issue of PFAS contamination, and the more I learn, the angrier I get that these chemicals are still not tightly regulated for the safety of us all. In fact, they should just be banned entirely.

PFAS appears to be the "asbestos of our times." In short, just as asbestos was touted as a "wonderful substance" in the past, with the industry hiding the ill effects from the public, such is the case for PFAS. And, instead of the EPA making sure that these substances are safe for us, we are once again having to deal with problems through the back door. It makes one so ashamed. However, I and happy you are having these hearings and allowing our comments regarding this subject.

It has been known for decades that PFAS exposure is a threat to human health. In fact, defects such as cancer were found by 3M and DuPont in their labs, with no hold put on these products at the time. And the fact that small children and pregnant women are particularly vulnerable to PFAS exposure is so alarming. Most people have no idea which materials contain these contaminants and have no idea that their drinking water is unsafe.

I support the Wisconsin Department of Health's recommendations of 20 parts per trillion for PFOS and PFOA. However, I would also like to add that I would support a drinking water health advisory for a PFAS level of 5 parts per trillion.

It is so tough to raise a child these days with so many social ills that our country is facing. The last thing people need to hear is that they are surrounded by so many toxins. I personally hope these items are banned, as it will take years to clean up this mess. Thank you for taking these steps to try to address it.

Sincerely,

Sheila Mitchell M.D.

Ashland, Wisconsin

From: Jill Mitchler
To: DNR NR 809 Comments
Subject: PFAS/PFOS Standards/written testimony
Date: Thursday, December 2, 2021 10:05:44 AM

Hello,

I listened to yesterday's public hearing, and I'd like to add my comments in support of the PFAS and PFOS "forever chemicals" standards in Wisconsin. Please consider this my written testimony.

It's our duty to protect safe drinking water and the environment for ourselves and also for future generations. As you know we are already seeing serious effects and warning signs. We need to begin to put people's long-term health over corporation's short-term profits. As many of the verbal testimonies suggested, you might consider even more restrictive limits on these and other dangerous chemicals.

Thank you for reading my comments.

Jill Mitchler
[redacted]
Appleton, WI 54915

From: Clair Morud
To: DNR NR 809 Comments
Subject: PFOA rules comment
Date: Wednesday, December 8, 2021 10:42:58 AM

While I was not able to watch the public hearing, I am aware that multiple concerned citizens commented on the vital importance of protecting the public from these dangerous chemicals. I suspect industry groups are busy trying to stall or prevent any action.

As a recently retired physician, I clearly side with those who see the need for public protection. Rather than restate the recognized dangers of these chemicals, I opted to consider this issue from a historical perspective.

The current public discussion is eerily similar to a similar interaction that came to a head at the start of my career. Specifically, the dangers of asbestos had been known for at least two generations. The asbestos industry continued to advertise asbestos as a "miracle product." They even sold asbestos containing fake "snow" to spread on the family Christmas tree. When we look back at that debacle, we can't help but see industry as villainous. The governmental agencies that were co opted by the asbestos industry to delay public action now appear to be accessories to these villains. History does not view these agencies in a favorable light!

Now the Wisconsin DNR has an opportunity to act on behalf of the citizens of the state to enact tight regulations on PFOA chemicals. If the DNR does not act on the behalf of the citizens, if it is again co opted by industry, history will not view the DNR favorably.

In a quote attributed to Mark Twain, it has been said that "History doesn't repeat itself, but it often rhymes." This is the opportunity for the state of Wisconsin to prove Mark Twain wrong.

Thank you.

From: Larry Nesper
To: DNR NR 809 Comments
Subject: PFAS regulations
Date: Monday, December 6, 2021 10:32:05 AM

I want to advocate in favor of the proposed rule DG 24-19 to regulate the discharge of PFAS into our waters.

Much of the time, the interests of the captains of industry and those of the general population are aligned. The citizens of the state need energy or transportation or clothing or food and other citizens rise to the occasion and supply it. But sometimes the methods used in the production of these goods and services turn out not in the general population's interest. We have such a case in front of us today.

Industry may not have known that PFAS chemicals were bad for our health when they were introduced. Now we know that they are.

It is my understanding that currently that these substances raise the risk of cancer and other serious health problems, such as reproductive and developmental problems, thyroid hormone disruption, ulcerative colitis and can have negative impacts on the immune system.

Our state's constitution's preamble speaks of promoting the general welfare. This is manifest in the responsibilities of state agencies, the DNR one of them.

I feel it is the state's responsibility to do what it can to alleviate the risks that these chemicals create and not wait for the federal government to step up though I think they should as well.

As the Wisconsin Department of Health has made a recommendation regarding a limit of 20 ppt of PFOS and PFOA, I think the DNR recommendation should be implemented.

Sincerely,

Larry Nesper

=

From: Joann Nishiura
To: DNR NR 809 Comments
Subject: PFAS
Date: Tuesday, December 7, 2021 4:27:15 PM

Dear Adam Deweese,

I am greatly concerned about PFAS in Wisconsin's drinking water. I live in Madison, near Truax airport where decades of use of fire-fighting foam has been used and polluted our water, land and air. I am deeply concerned that further contamination will occur with the arrival of F-35s to our community. I ask for levels of PFAS in our water systems be cleaned up to safe levels and this means the DNR needs to reform the NR-809 regulations. This is of utmost concern to me!

Please get back to me and inform me of your efforts,

Sincerely,

JoAnn Nishiura, Madison, WI

[redacted]

From:	Barbara Olson
To:	DNR NR 809 Comments
Subject:	To Mr. Adam Deweese: PFAS drinking water standards needed in WI
Date:	Monday, December 6, 2021 12:59:58 PM

Adam Deweese, Water Supply Specialist
Bureau of Drinking and Ground Water
C/O DG/5
PO Box 7921
Madison, WI 53707-7921

Dear Mr. Deweese,

I grew up playing in and around Starkweather Creek and swimming at Olbrich beach near where Starkweather flows into Lake Monona, both of which are now heavily contaminated with PFAS pollution.

Data, scientific evidence and community testimony around PFAS demands strong and immediate action on proposed rules for drinking water and surface water standards. Our groundwater and the entire Yahara chain of lakes & their fish, etc. are already contaminated, or at risk of being contaminated, with PFAS thousands of times the anticipated water standard.

Therefore I urge support for **Board Order DG-24-19** to revise chapter NR 809 and adopt new drinking water maximum contaminant levels for PFAS substances. This is the very LEAST that you can do.

Thank you,
Barbara Olson
Madison, WI

From: Fred-Lynda Paasch
To: DNR NR 809 Comments
Subject: Board Order DG-24-19
Date: Monday, December 6, 2021 1:58:15 PM

Hi Mr. Deweese,

I support for **Board Order DG-24-19** to revise chapter NR 809 and adopt new drinking water maximum contaminant levels for PFAS substances.

Please let me know if there is more that I can do to save our State's water from irreversible contamination.

Thanks,
Lynda Paasch

From: John Peck
To: DNR NR 809 Comments
Subject: Comment in Support of Board Order DG-24-19
Date: Wednesday, December 8, 2021 6:24:34 PM

To whom it may concern,

I'm writing on behalf of Family Farm Defenders, a national grassroots organization with over 500 members across WI, to express our support for Board Order DG-24-19 to modify chapter NR 809 to include tougher standards for PFAS related contaminants in drinking water.

This measure is long overdue given the widespread contamination of our public drinking water supplies across the state with these "forever chemicals." In fact, the very Madison well (#15) from which I get drinking water in my own home on the near East Side is dealing with unsafe PFAS levels due to runoff from the Truax Airfield. This same PFAS plume has also polluted Starkweather Creek and the Yahara River Lake Chain, making it unsafe to eat local fish. A similar situation faces dozens of communities across our state - from Marinette to La Crosse.

Our organization would hope that the DNR also considers stricter PFAS regulations on sewage sludge coming from our many state licensed municipal wastewater treatment plants, since these "biosolids" are often applied on cropland (5000+ acres in Dane County alone), basically "recycling" PFAS contaminants back into oour groundwater and surface water drinking supply.

Thank you for your consideration and we look forward to the DNR taking bolder steps to strictly regulate PFAS contamination in our drinking water. It is hard to imagine a better expression of the agency's public service mission: "To protect and enhance our natural resources: our air, land and water; our wildlife, fish and forests and the ecosystems that sustain all life...and to ensure the right of all people to enjoy these resources."

Sincerely,

John E. Peck, executive director

John E. Peck Executive Director Family Farm Defenders, P.O. Box 1772, Madison, WI 53701 tel./fax. 608-260-0900 www.familyfarmdefenders.org

From: Martha Pings
To: DNR NR 809 Comments
Subject: Drinking water standards and PFAS
Date: Wednesday, December 1, 2021 10:06:56 PM

Our standards must be strict, and guided by known impact to health.

I grew up in Stevens Point, which prided itself on (among other things) its good drinking water. Indeed, that has been the case through much of the state—until recently.

I am saddened by the allowed and forever destruction of our drinking water. Its impact is known for our future generations: My children have a greater risk of cancer, reproductive issues, and less effective immune systems simply because they drank water.

When we know it will negatively impact human health, why do we turn a blind eye and permit an amount we know is still unsafe? What is the plus side of a population that is less able to be productive, and a state that is unwilling to advocate for its citizens?

This should not be a matter of debate. It should be a call to action.

Sincerely,
Martha Pings
[redacted]
Madison, WI 53704

Sent from Mail for Windows

From: atpotter
To: DNR NR 809 Comments
Subject: Drinking water standards
Date: Wednesday, December 1, 2021 6:33:22 PM

There are very few elements as critical to the human existence as water and I'm wholeheartedly in support of drinking water standards.

Tom Potter

From: Pamela Richard
To: DNR NR 809 Comments
Subject: I SUPPORT THE ADOPTION OF NEW PFAS DRINKING WATER STANDARDS.
Date: Monday, December 6, 2021 2:17:10 PM

I am asking you to approve **Board Order DG-24-19** to revise chapter NR 809 and adopt new drinking water maximum contaminant levels for PFAS substances. Data, scientific evidence and community testimony around PFAS show the need for strong and immediate action on proposed rules for drinking water and surface water standards.
At your next DNR Board meeting on January 25-26, 2022, please consider adoption of **Board Order DG-24-19.**

Thank you,
Pamela Richard
[redacted]
Milwaukee, WI 53208

From: K SAMELSON
To: DNR NR 809 Comments
Subject: Require testing for PFOA and PFOS in drinking water
Date: Tuesday, December 7, 2021 9:21:03 PM

To the DNR:

I am writing in support of Board Order DG-24-19 Drinking Water Standards.

Wisconsin needs to require testing of drinking water for PFOA and PFOS to protect the health of our residents. The more we learn, the more concerned I get about these "forever chemicals."

For several years, people living near La Crosse and Marinette cannot drink their water because of PFAS contamination. This is unacceptable and Wisconsin needs to join other states in regulating them in both drinking water and groundwater. Clean water is a basic human right.

We cannot wait for the EPA — the state's rule-making process already will take valuable time. Neighboring states have already adopted standards, some higher.

Please protect our residents, especially the youngest, most vulnerable ones, from these hazardous contaminants.

Sincerely,

Karen Samelson
Milwaukee

From: Robert Sander
To: DNR NR 809 Comments
Subject: Board Order DG-24-19 Drinking Water Standards
Date: Thursday, December 2, 2021 11:35:54 AM

As a Wisconsin Family Physician, I strongly encourage the DNR to implement standards for PFA's to ensure that our citizens have access to safe drinking water. This is a critical issue, and we cannot wait for the EPA to act. We must start to implement widespread drinking water testing to ensure none of our citizens are being exposed to toxic levels and to implement corrective actions when needed. In addition, potential EPA rules will not apply to private wells, a common source of drinking water in our state.
Please act now to protect the health of Wisconsin.

Thank you,
Robert Sander, MD
Custer, Wisconsin

From: Alice Schneiderman
To: DNR NR 809 Comments
Subject: Support Board Order DG-24-19
Date: Monday, December 6, 2021 2:14:53 PM

CAUTION: This email originated from outside the organization.
Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Adam,

We support **Board Order DG-24-19** to revise chapter NR 809 and adopt new drinking water maximum contaminant levels for PFAS substances.

Thank you,
Alice, David, Elizabeth, & Nikolai Schneiderman
[redacted]
Madison, WI 53704
[redacted]

Ronald, Harriet, & Stephen Dinerstein
[redacted]
Madison, WI 53704
[redacted]

From: Joe Shaffer
To: DNR NR 809 Comments
Subject: I support PFAS regulations for drinking water
Date: Sunday, December 5, 2021 4:46:03 PM

Dear DNR, please develop and support new rules to regulate PFAS in drinking water.

Thank you,

Joe Shaffer
[redacted]
Shorewood WI
[redacted]

From: Julie Schwarz
To: DNR NR 809 Comments
Subject: New standards
Date: Wednesday, December 8, 2021 2:30:06 PM

Dear Adam Deweese,

I would like to show my support for **Board Order DG-24-19** to revise chapter NR 809 and adopt new drinking water maximum contaminant levels for PFAS substances. I live in the Carpenter/Ridgeway neighborhood at 1017 Melvin Ct, Madison, WI . I am very concerned about our water. I am upset and want immediate action to be taken. I find it alarming that the government hasn't been more concerned about the people affected. It's crazy and it makes it seem like they don't care about our welfare. The fact that there are signs up and little is being done otherwise is horrible. It is very concerning that it is already contaminated and I worry that I've been drinking it for 20 years. A couple weeks ago my neighbor friends and I counted the huge percentage of residents just in our condo complex of people who have had cancer. Way above the normal population. We really believe that this is related to our water.

Sincerely,

Julie Schwarz

From: Anne Steinberg
To: DNR NR 809 Comments
Subject: Supporting drinking water standards for PFAS
Date: Wednesday, December 8, 2021 7:42:15 PM

I am very concerned about the lack of standards and testing for PFAS in our drinking water.

In the city of Milwaukee, where I live, we already face health challenges from lead pipes in older homes. We need to know what other dangerous substances are in our drinking water so there can be actions taken. It is essential to protect our children who are the most vulnerable.

We are lucky to live in a state where fresh water is abundant and we should be able to safely drink our tap water. Instead we are concerned because the water is not currently tested for many dangerous chemicals that have been developed since the water system was built.

I urge action now by the state rather than waiting years for the Environmental Protection Agency to establish federal drinking water standards.

So I strongly support the development of drinking water standards for PFAs by the Wisconsin Department of Natural Resources. Using the best scientific information available, the DNR has proposed reasonable standards. Once these standards are established, public utilities all over our state will be required to test for PFAs and to plan to address any contamination that is found. These standards and the subsequent testing will protect our health.

Thank you

Anne Steinberg
[redacted]
Milwaukee, WI 53211

From: Roberta Thurstin
To: DNR NR 809 Comments
Subject: wateer
Date: Tuesday, December 7, 2021 12:45:33 PM

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In order to establish standards for PFAS, the DNR will need to revise the NR 809 regulations, the Safe Drinking Water Standard. The DNR already held a public meeting on December 1st.

Many state citizens commented during this virtual meeting. They said:

Six of twelve wells in Eau Claire were closed due to high levels of PFAS, chemicals used in many products including food wrappers, stain-resistant sprays and aqueous film forming foam (AFFF). PFAS contamination in Madison is largely due to decades of fire-fighting training at Truax Field using foam containing PFAS.

An OB/GYN physician presented evidence that PFAS and PFOA, lipophilic substances, are not only found but concentrated in breast milk. She called it "alarming." Other documented adverse health effects of PFAS in drinking water include decreased response of antibodies to vaccines, low birth weight, testicular cancer and thyroid cancer.

A resident of Marinette called for amending NR 809, "to prevent the slow poisoning of the people of Wisconsin from municipal water systems."

The next step in the rulemaking timeline is the DNR Board meeting on January 25-26, 2022, where they will consider adoption of the rule.

Public hearing on a permanent rule, Board Order DG-24-19, to revise chap...

This is a public hearing on a permanent rule, Board Order DG-24-19, to revise chapter NR 809 relating to the pro...

Thank you, thank you!

Don and Roberta Thurstin Timmerman

[redacted]

From: Anne Tigan
To: DNR NR 809 Comments
Subject: In support of DG-24-19
Date: Friday, December 3, 2021 3:35:36 PM

To the Department of Natural Resources and the Natural Resources Board:

On 12/1/21 the DNR held a public meeting for citizen input in accordance with Rulemaking procedures, Cycle 10 Rulemaking Timeline (dnr.wisconsin.gov).

The testimony and lived experience of Wisconsin citizens is not only alarming but very sad. How disheartening it is that our public officials, elected, paid for by taxpayers, have utterly failed us on this front - safe drinking water. A physician testified to documented research that PFAS in drinking water contributes to low birth weight; thyroid and testicular cancer; concentrated levels of PFAS in breast milk; reduced response of antibodies to vaccines.

There is not time for delay on moving forward with permanent rule DG-24-19, amending NR 809, establishing state standards for PFOA and PFAS.

A Marinette resident put it this way in the 12/1/21 meeting: "Amend NR 809 to prevent the slow poisoning of the people of Wisconsin from municipal water systems."

I am in support of DG-24-19.

Respectfully,
Anne Tigan, RN
Madison, WI
[redacted]

From: Susan Trier
To: DNR NR 809 Comments
Subject: Board Order DG-24-19
Date: Wednesday, December 8, 2021 8:38:54 PM

CAUTION: This email originated from outside the organization.
Do not click links or open attachments unless you recognize the sender and know the content is safe.

I'm writing to ask the DNR to take action and set drinking water standards for PFAS as soon as possible—Wisconsin can not wait for the EPA to define the issue. If Wisconsin waits for the EPA, valuable time will be lost as well as funding sources from the Build Back Better plan. Other states are ahead of Wisconsin on this issue. In addition, Wisconsin communities will not move forward independently without DNR direction.

Thank you.
Susan Trier
[redacted]
Lake Mills. Wi
Jefferson County

Sent from my iPhone

From: Bill and Cindy Verschay
To: DNR NR 809 Comments
Subject: Rule DG-24-19. Comments
Date: Wednesday, December 1, 2021 12:19:48 PM

To: WI DNR

Date: 12-1-21

Re: Rule DG-24-19

My wife and I are writing in support of permanent rule DG-24-19. We unknowingly moved our then young family into the PFAS contaminated area south of the city of Marinette in 1985 and lived there 32 years. Our daughter currently lives at that residence. We unknowingly sold this contaminated property to her, her husband and their young family. We currently live in the Porterfield area where we have unknowingly built a retirement home in a township that is also polluted by PFAS from the city of Marinette's waste water biosolids. Industries like Tyco/Johnson Controls have known for decades that PFAS are highly toxic chemicals that have been linked to many dire health risks. They also did not report groundwater pollution for years after identifying it. We now know the damage that can be done by ingesting even small amounts of PFAS over time, since they do not easily breakdown and they bioaccumulate in our bodies. Our family has dealt with and deal with some of the health issues that these pollutants cause including thyroid, high cholesterol and others.

We may be years from federal standards being approved and implemented by EPA. Wisconsin residents in the Town of Peshtigo have been waiting for solutions since they were first told about the PFAS plume in their community in 2017. We've already waited too long. We need enforceable standards and we are running out of time. We, the residents of Wisconsin need protection from this pollution and from these industries who are only governed by profit. The Natural Resources Board has the chance right now to protect Wisconsin residents, families, and children from toxic "forever chemicals". We are asking the board to follow-through the process it started in 2019 by passing permanent rule DG-24-19.

Bill and Cindy Verschay

[redacted]

Porterfield, WI 54159

From: Tim White
To: DNR NR 809 Comments
Subject: Support for DG-24-19
Date: Monday, December 6, 2021 4:33:51 PM

PFAS is a real and present danger to our health. For years we have ignored scientific evidence of adverse health effects of this "forever" additive. It is time, way past time, we took serious action to eliminate PFAS from use, and work to clean up the mess we have made of our precious water sources. I urge you to take action NOW. We ask that you support the rule change, and hold those responsible accountable for the damage.

Sincerely,

Tim and Karen White
[redacted]
Mount Horeb, WI 53572
[redacted]

Department of Natural Resources

Attn: Adam DeWeese – DG/5

P.O. Box 7921

101 S. Webster Street,

Madison, WI 53707-7921

Re: Support for DG-24-19 to revise chapter NR 809

Dear Mr. DeWesse:

On behalf of Wisconsin's Green Fire, I would like to convey to you our strong support for DG-24-19 which would result in the establishment of new drinking water maximum contaminant levels for Per- and Polyfluoroalkyl Substances (PFAS) including Perfluorooctanesulfonic acid (PFOS) and Perfluorooctanoic acid (PFOA).

Earlier this year Wisconsin's Green Fire released a report on PFAS – Forever Chemicals in Wisconsin as an emerging issue as part of its ongoing effort to develop a series of issue papers that summarizes the science and background of key conservation and environmental issues and make policy recommendations that support pro-conservation outcomes. The report which is part of OPPORTUNITIES NOW An Analysis of Priority Issues and Actions for Wisconsin's Natural Resources can be found at: PFAS: Forever Chemicals in Wisconsin — Wisconsin's Green Fire Opportunities Now 2021-2023 Report on PFAS • Wisconsin's Green Fire (wigreenfire.org).

The report includes the history of the development and use of PFAS with over 9,000 in existence today some of which have been associated with adverse impacts to human health and the environment. PFAS, including PFOA and PFOS, have been known to bioaccumulate and have been linked to:

- Hypertension
- Decreased the efficacy of vaccines
- Compromise the immune system
- **Growth and development issues**
- **Liver damage**

- Decreased Fertility

Based on our findings contained in our report Wisconsin's Green Fire recommended that the state:

- Develop science-based statewide standards that are protective of human health and the environment and stablish for drinking water, groundwater, and surface waters for PFAS compounds.
- Require that all public water supplies begin testing for multiple PFAS compounds no later than the 2021-22 fiscal year with the results of those tests should be publicly available.

Wisconsin's Green Fire is in support of the proposed rule modifying NR 809 to include MCLs for PFOA and PFAS which is an important step in achieving the findings outlined in our report. The rule is based on science used by the Department of Health Services to propose standards in their transmission of Cycle 10 recommendations to the DNR. If the MCLs are exceeded, a corrective action plan must be implemented ensuring protection of public health and safety in drinking water.

Please feel free to contact me at robinson.john@hotmail.com or at 715 212-2227 if you have any questions.

Sincerely,

John Robinson

Wisconsin's Green Fire

Water Quality Association of Wisconsin

M E M O R A N D U M

TO: Adam DeWeese – DG/5
DNRNR809Comments@wisconsin.gov

FROM: Water Quality Association of Wisconsin

DATE: December 2, 2021

RE: Comments on DG-24-19

On behalf of the Water Quality Association of Wisconsin, representing water conditioning dealers, suppliers and equipment manufacturers in Wisconsin, we would like to provide comments for consideration related to DG-24-19.

The proposed rule amends ch. NR 809, Wis. Adm. Code, and establishes drinking water standards of 20 parts per trillion for certain Per- and Polyfluoroalkyl substances (PFAS) based on recommendations from the Wisconsin Department of Health Services (DHS).

The Water Quality Association of Wisconsin is concerned with Wisconsin establishing PFAS standards that differ from drinking water standards set by the Environmental Protection Agency (EPA) and surrounding states. WQAW supports establishing science-based, enforceable maximum contaminant level through the National Primary Drinking Water Regulations at the federal level to ensure consistent standards across the country.

The WQAW supports incorporating recommendations that consumers use certified in-home filtration systems to remove or reduce any chemicals found. According to testimony recently submitted by the national Water Quality Association, it would be extremely expensive to remove PFAS from our drinking water using centralized treatment. This would require upgrading drinking water treatment plants not currently designed to remove these chemicals. Many economically challenged communities already struggle to fund necessary

maintenance and upgrades to their existing infrastructure for roads, bridges and drinking water pipes. Asking these communities to pay for additional upgrades to their drinking water treatment plant would only increase that burden.

There are currently water treatment systems that can effectively reduce PFAS from drinking water and these systems, at either point-of-entry or point-of-use (POU), are the final barrier to ensure clean drinking water. The EPA acknowledges these technologies and recommends activated carbon adsorption, ion exchange resins, and high-pressure membranes to remove PFAS from drinking water. According to the EPA, these technologies can be used in drinking water treatment facilities, in water systems in hospitals or individual buildings, or even in homes at the point-of-entry, where water enters the home, or the point-of-use, such as in a kitchen sink or a shower.

We appreciate the opportunity to comment on this rule.

From: Jim Young
To: DNR NR 809 Comments
Date: Monday, December 6, 2021 11:46:36 AM

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Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good morning,

I'm writing you to express my support for Board Order DG 24-19 along with creating new and more stringent standards for the maximum amount of PFAS and related pollutants in drinking water, ground water and surface waters/streams. Please also register my support for measures that require the emitters of these contaminants to clean them up and stop emitting them immediately.

Thank you,

Jim Young
[redacted]
Madison WI 53704