

STATEMENT OF SCOPE

Department of Natural Resources

Rule No.: DG-02-25

Relating to: Amendments to ch. NR 140 to set numeric standards to minimize the concentration of polluting substances for certain Per- and Polyfluoroalkyl Substances (PFAS) in groundwater based on the 2025 DHS recommendations.

Rule Type: Permanent

1. Finding/nature of emergency (Emergency Rule only):

The rule will be proposed as a permanent rule.

2. Detailed description of the objective of the proposed rule:

The proposed rule will amend ch. NR 140, Wis. Adm. Code, to add new public health related groundwater standards for certain Per- and Polyfluoroalkyl Substances (PFAS) based on the 2025 DHS recommendations. The proposed rule will add public health groundwater standards for six PFAS for which the United States Environmental Protection Agency (EPA) released federal drinking water standards on April 10, 2024, in light of newly available science and in accordance with EPA's responsibility to protect public health. The six PFAS include the contaminant compounds perfluorooctanoic acid (PFOA), perfluorooctane sulfonic acid (PFOS), perfluorohexane sulfonic acid (PFHxS), perfluorononanoic acid (PFNA), perfluorobutane sulfonic acid (PFBS), and hexafluoropropylene oxide dimer acid (HFPO-DA, commonly known as GenX Chemicals).

The objective of the proposed rule is to protect public health, given that groundwater is the primary source of drinking water throughout the state. PFAS break down very slowly and can accumulate in people. PFAS may cause reproductive effects such as decreased fertility and pregnancy-induced hypertension; developmental effects or delays in children, including birth defects and low birth weight; increased risk of some cancers including prostate, kidney, and testicular cancers; decreased antibody response to vaccines; and increased cholesterol. Specific health effects for certain PFAS are collected in the 2025 Wisconsin Department of Health Services (DHS) recommendations for groundwater standards, available here:

<https://www.dhs.wisconsin.gov/chemical/pfas.htm>.

Chapter 160, Wis. Stats., and ch. NR 140, Wis. Adm. Code, provide the process for setting numeric standards for consistent use in state regulatory programs to minimize the concentration of polluting substances detected in, or having a reasonable probability of entering, the groundwater resources of the state. Chapter 160, Wis. Stats., requires the department to develop

numeric groundwater quality standards, consisting of enforcement standards and preventive action limits, based on recommendations from DHS that rely on peer-reviewed science and statutorily prescribed guidelines in ch. 160, Wis. Stats. Chapter NR 140, Wis. Adm. Code, contains the promulgated Wisconsin state groundwater quality standards. The proposed rule will add the numeric standard in ch. NR 140, Wis. Adm. Code, but will not amend the regulatory programs in other parts of state statute and code that use groundwater standards in carrying out their regulatory authority.

3. Description of the existing policies relevant to the rule, new policies proposed to be included in the rule, and an analysis of policy alternatives:

The Natural Resources Board (NRB) has approved amendments to ch. NR 140, effective in 1988, 1990, 1992, 1994, 1995, 1999, 2000, 2004, 2006, 2008, 2011, and 2023 to revise existing standards, establish new standards, and clarify rule language. There are now groundwater quality standards in ch. NR 140 for 139 substances of public health concern, 8 substances of public welfare concern, and 14 indicator parameters.

Substances of public health concern are regulated using groundwater quality standards at two levels: preventive action limit (PAL) and enforcement standard (ES). In accordance with ch. 160, Wis. Stats., ES groundwater quality standards for substances of public health concern are established based on recommendations received from DHS. PAL groundwater quality standards for substances of public health concern are set at either 20% of the concentration of the established ES, or at 10% of the concentration of the established ES if the substance has carcinogenic, mutagenic or teratogenic properties or interactive effects.

The department began the rulemaking process for two PFAS --PFOA and PFOS-- during Cycle 10 under Board Order DG-15-19. The NRB did not approve the standards proposed under DG-15-19. During Cycle 11, the department initiated a new rulemaking process, under Board Order DG-25-20, to adopt groundwater standards for 16 additional PFAS, including PFHxS, PFNA, PFBS, and HFPO-DA. The scope statement for DG-25-20 expired on September 15, 2023. In August 2022, the department initiated a third PFAS-related rulemaking process, under Board Order DG-17-22, for four PFAS (PFOA, PFOS, PFBS, and HFPO-DA) based on the Cycle 10 and Cycle 11 DHS recommendations. Per s. 227.139(1), Wis. Stats., DNR has ceased work on this proposed rule after the final economic impact analysis estimated the implementation and compliance cost of the proposed rule would exceed \$10 million in a two-year period. Absent legislative action, the scope statement for this rule expires on March 12, 2025.

Under s. 160.07(4), Wis. Stats., groundwater recommendations must be based on federal numbers, including drinking water standards, if such a number exists. On April 10, 2024, the EPA finalized new federal drinking water standards for six PFAS. In May 2024, the department requested that DHS provide recommendations for these six PFAS, in light of these newly issued federal drinking water standards. On January 30, 2025, DHS provided DNR with updated recommendations for six PFAS (PFOA, PFOS, PFHxS, PFNA, PFBS, and HFPO-DA).

This proposed rule will add individual ESs and PALs to s. NR 140.10, Table 1, Wis. Adm. Code, for six PFAS. These standards will be based on the 2025 DHS recommendations.

Policy alternatives

Section 160.07(5), Wis. Stats., directs the department to propose rules establishing DHS recommendations for substances of public health concern. During the rulemaking process, the department may adopt or modify the proposed standards, based on public input on the proposed standards. One alternative would be to not complete the rulemaking process for these substances of public health concern. Without numeric health-based standards, groundwater regulatory programs will not protect the public health of Wisconsin residents.

4. Detailed explanation of statutory authority for the rule (including the statutory citation and language):

Chapter 160, Wis. Stats., establishes an administrative process for developing numeric state groundwater quality standards to be used as criteria for the protection of public health and welfare by all state groundwater regulatory programs. Chapter 160, Wis. Stats., directs the department to use this administrative process to establish numeric groundwater quality standards for substances of public health or welfare concern, found in, or having a reasonable probability of being detected in, the groundwater resources of the state. Section 160.07(5) and 160.15(1), Wis. Stats., require the department to engage in rulemaking to establish enforcement standards and preventive action limits for all substances of public health concern for which DHS develops recommendations.

After the department promulgates groundwater standards, s. 160.19, Wis. Stats., requires regulatory agencies to review existing rules that regulate activities, practices, and facilities to ensure compliance with new groundwater standards.

Section 281.15, Wis. Stats., states that the department shall promulgate rules setting standards of water quality, applicable to the waters of the state, that protect the public interest, including the protection of public health and welfare, and the present and prospective future use of such waters for public and private water systems. Section 281.19(1), Wis. Stats., grants the department the authority to issue general orders and adopt rules applicable throughout the state for the construction, installation, use and operation of practicable and available systems, methods and means for preventing and abating pollution of the waters of the state.

In accordance with ch. 160, Wis. Stats., the reliability of sampling data is to be considered when determining the range of responses that a regulatory agency may take, or require, to address attainment or exceedance of a state groundwater quality standard at an applicable “point of standards application.” Section 299.11, Wis. Stats., authorizes the department, in conjunction with the Department of Agriculture Trade and Consumer Protection (DATCP), to establish uniform minimum criteria for laboratories certified to conduct water analysis testing, and to establish accepted methodologies to be followed in conducting tests and sampling protocols and documentation procedures to be followed when collecting water samples for testing.

5. Estimate of amount of time that state employees will spend developing the rule and of other resources necessary to develop the rule:

The estimated staff time needed to develop these amendments to ch. NR 140, Wis. Adm. Code, is approximately 1,600 hours.

6. List with description of all entities that may be affected by the proposed rule:

The proposed groundwater standards would apply through other regulatory programs outside of ch. NR 140, Wis. Adm. Code, that regulate facilities, practices and activities which may impact groundwater quality.

Once adopted, numeric groundwater standards become the criteria for protecting public health, and are used in the regulation of:

- Solid and hazardous wastes
- Spills and remediation sites
- Wastewater and water quality
- Septic tanks
- Salt storage
- Fertilizer and pesticides, etc.

7. Summary and preliminary comparison with any existing or proposed federal regulation that is intended to address the activities to be regulated by the proposed rule:

Federal law does not govern groundwater quality; it is left primarily to the states to protect groundwater quality under state statutory authority. Wisconsin’s state groundwater quality protection is governed by ch. 160, Wis. Stats. Section 160.07(4), Wis. Stats., provides DHS a hierarchy of other regulatory numbers to which it must look when creating recommendations for state groundwater quality. With limited exception, DHS must first look to a final federal number, including federal drinking water maximum contaminant levels (MCLs), as its recommendation.

In April 2024, EPA finalized federal drinking water standards for PFOA, PFOS, PFHxS, PFNA, PFBS, and HFPO-DA. The EPA finalized the following MCLs for PFOS, PFOA, PFHxS, PFNA, and HFPO-DA. The MCLs are final federal numbers that takes into consideration feasibility, including currently available analytical methods to measure and treat these chemicals in drinking water.

	Federal Drinking Water MCL (ppt or ng/L)
PFOA	4
PFOA	4
PFHxS	10
PFNA	10
HFPO-DA	10

EPA also incorporated a Hazard Index (HI) approach to protect public health from mixtures of PFHxS, HFPO-DA, PFNA, and PFBS because of their known additive toxic effects and likely cooccurrence in drinking water. For purposes of the HI, EPA established a health-based water concentration (HBWC) for PFBS of 2,000 ppt or ng/L.

Hence, DNR requested DHS to provide updated recommendations for the six PFAS substances mentioned above. DHS reviewed scientific literature on each substance, using federal drinking water standards as a baseline, and provided written justification for each recommended enforcement standard. The recommended NR 140 enforcement standards align with the EPA's MCLs for PFOA, PFOS, PFHxS, PFNA, and HFPO-DA, and with the HBWC for PFBS.

8. Anticipated economic impact of implementing the rule (note if the rule is likely to have an economic impact on small businesses):

The department will examine the economic impact of the proposed rule when the rule is developed. Additional review and modification of regulatory program rules that rely on groundwater standards in ch. NR 140, Wis. Adm. Code, may impact the estimated cost of implementation and compliance. The economic impact to small businesses is indeterminant until the rule is drafted.

State groundwater quality standards protect both public health and welfare. There may be cost savings in reducing the exposure to these known substances of public health concern. Human health impacts and drinking water treatment system costs to remove contamination may be avoided when groundwater pollution is reduced or eliminated. Adoption of groundwater quality rules and regulations by state regulatory programs minimizes the concentrations of polluting substances in groundwater and minimizes water treatment system costs and health care costs, while safeguarding public health and welfare.

9. Anticipated number, month and locations of public hearings:

The department anticipates holding one public hearing on the final proposed rule language in late 2025. The department will hold the meeting in Madison with an option for virtual participation to allow for as many people to attend as possible.

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Signed by:

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Steven Little, Deputy Secretary

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Date Submitted