

Wisconsin Department of Natural Resources
Natural Resources Board Agenda Item

SUBJECT:

Request that the Board authorize a preliminary public hearing and comment period for the Statement of Scope for Board Order DG-04-22, for proposed rules affecting chapter NR 140 related to setting numerical standards to minimize the concentration of polluting substances in groundwater (Cycle 10 Bacteria)

FOR: April 2022 Board meeting

PRESENTER'S NAME AND TITLE: Bruce Rheineck, Groundwater Section Chief

SUMMARY:

The Joint Committee for Review of Administrative Rules (JCRAR) has requested a preliminary public hearing and comment period on the scope statement for Board Order DG-04-22. If the preliminary hearing notice for DG-04-22 is approved by the board, the department will hold a preliminary public hearing and comment period on the scope statement. After the hearing is held and the public comment period closes, the department will bring the scope statement before the Board for approval. As required by statute, the department may not begin work on the content of the proposed rule until the scope statement is approved. The 30-month time frame for submission of a final rule to the legislature for approval expires on September 21, 2024.

The proposed rule will amend ch. NR 140, Wis. Adm. Code, to replace the existing total coliform bacteria standards with new state groundwater quality standards for Escherichia coli (E. coli) bacteria. The proposed rule will also transition total coliform bacteria from a public health groundwater quality standard to an indicator parameter.

RECOMMENDATION: That the Board authorize a preliminary public hearing and comment period for the Statement of Scope for Board Order DG-04-22.

LIST OF ATTACHED MATERIALS (check all that are applicable):

- Statement of Scope
Governor's Approval of Statement of Scope
Public Comments Summary
JCRAR Letter
(insert document name)
(insert document name)

Table with 3 columns: Approved by, Signature, Date. Rows include Kyle A. Burton, James Zellmer, and Preston D. Cole, Secretary.

by Sarah Barry

cc: Board Liaison - AD/8
Department Tribal Liaison - AD/8

Handwritten initials WR

Program attorney - LS/8

Department rule officer - LS/8

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From: Sen.Nass - LEGIS <Sen.Nass@legis.wisconsin.gov>

Sent: Wednesday, March 30, 2022 9:28 AM

To: Cole, Preston D - DNR <preston.cole@wisconsin.gov>

Cc: Kennedy, Sean P - DNR <seanp.kennedy@wisconsin.gov>; Sen.Nass - LEGIS <Sen.Nass@legis.wisconsin.gov>; Rep.Neylon - LEGIS <Rep.Neylon@legis.wisconsin.gov>; Grosz, Scott A - LEGIS <scott.grosz@legis.wisconsin.gov>; Kauffman, Jill - LEGIS <jill.kauffman@legis.wisconsin.gov>; Duchek, Mike - LEGIS <michael.duchek@legis.wisconsin.gov>

Subject: JCRAR Directive to Hold Preliminary Hearing on Scope Statement SS 021-22

March 30, 2022

Preston Cole, Secretary
Department of Natural Resources
101 S. Webster St. (GEF 2)
P.O. Box 7921
Madison, WI 53707-7921

RE: SS 021-22 – NR 140 Numerical Standards to Minimize the Concentration of Polluting Substances in Groundwater

Dear Secretary Cole:

As co-chairperson of the Joint Committee for Review of Administrative Rules (JCRAR) and pursuant to s. 227.136 (1), Stats., I write to direct the Department of Natural Resources (DNR) to hold a preliminary public hearing and comment period on Scope Statement SS 021-22, which was published in the Wisconsin Administrative Register on March 21, 2022.

Additionally, pursuant to s. 227.135 (2), Stats., please note that a scope statement may not be approved by the Secretary of the Department of Natural Resources (DNR) or other boards and individuals within the department until after the preliminary public hearing and comment period are held by the agency, and accordingly, no activity may be conducted in connection with the drafting of a proposed rule until after such hearing and approval have occurred.

Please confirm receipt of this letter directing a preliminary hearing and comment period on the above scope statement.

Sincerely,

Steve Nass

Senator Steve Nass
Co-Chair, JCRAR

– Sent via e-mail –

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STATEMENT OF SCOPE

Department of Natural Resources

Rule No.: DG-04-22

Relating to: Amendments to ch. NR 140 to set numerical standards to minimize the concentration of polluting substances in groundwater (Cycle 10 Bacteria)

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 replace the existing total coliform bacteria standards with new state groundwater quality standards for *Escherichia coli* (*E. coli*) bacteria. The proposed rule will also transition total coliform bacteria from a public health groundwater quality standard to an indicator parameter.

The purpose of establishing groundwater standards is to protect public health. Some types of *E. coli* bacteria, when consumed, can cause acute (short-term) gastrointestinal illnesses causing diarrhea, abdominal discomfort, nausea, and vomiting. Less common effects are chronic (long-term) and include kidney failure, hepatitis, and bloody diarrhea. *E. coli* bacteria are a subgroup of coliform bacteria and are considered to be a much more specific indicator of fecal contamination, and the potential for pathogens to be present in drinking water, than total coliform bacteria. Infants and young children, the elderly, and people with compromised immune systems are at the highest risk for illness from pathogens in water.

Chapter 160, Wis. Stats., and ch. NR 140, Wis. Adm. Code, provide the process for setting numerical 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 numerical groundwater quality standards, consisting of enforcement standards, preventive action limits, and indicator parameters. Chapter NR 140, Wis. Adm. Code, establishes these Wisconsin state groundwater quality standards.

Additional rule changes may be considered to accomplish the objectives described in this scope statement. Additionally, errors and omissions in Appendix I to Table 1 (Public Health Groundwater Quality Standard) and clarification of definitions and terms will be addressed.

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:

Chapter NR 140, Wis. Adm. Code, establishes numeric groundwater quality standards for substances of public health and welfare concern and creates a framework for implementation of those standards. The numerical standards, upon adoption, become the criteria for the protection of public health and welfare, to be achieved in groundwater regulatory programs concerning the substances for which standards are adopted. New and revised groundwater quality standards for substances of public health concern are based on recommendations developed by the Wisconsin Department of Health Services (DHS).

Chapter NR 140, Wis. Adm. Code, was adopted by the Natural Resources Board in 1985 to comply with ch. 160, Wis. Stats. Chapter 160, Wis. Stats., created as part of the 1983 Wisconsin Act 410 (The Groundwater Bill), requires the department to develop groundwater quality standards for substances detected in, or having a reasonable probability of entering, the groundwater resources of the state. The Natural Resources Board has approved amendments to ch. NR 140, effective in 1988, 1990, 1992, 1994, 1995, 1999, 2000, 2004, 2006, 2008 and 2011, to revise existing standards, establish new standards and to clarify rule language. There are now groundwater quality standards in ch. NR 140 for 138 substances of public health concern, 8 substances of public welfare concern, and 15 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 proposed rule will add a new ES and PAL to s. NR 140.10, Table 1, Wis. Adm. Code, for *E. coli* bacteria, based on recommendations from DHS.

Chapter 160, Wis. Stats. and ch. NR 140, Wis. Adm. Code, also establish preventive action limits for indicator parameters. Indicator parameters are standards that take into account background contamination and are used to monitor regulated activities and the potential for health and welfare parameter groundwater standards to be exceeded. Enforcement standards are not established for indicator parameters.

In 2016, the U.S. Environmental Protection Agency (EPA) and the Wisconsin state drinking water program changed how bacteria are regulated in public water systems as part of the Revised Total Coliform Rule. Chapter 809, Wis. Adm. Code, governing state drinking water standards, was amended to remove the maximum contaminant level standard for total coliform bacteria and replace it with a maximum contaminant level standard for *E. coli* bacteria. This change was made because studies show that *E. coli* bacteria are a more specific indicator of contamination from feces and because many coliform bacteria detected by total coliform tests are not pathogenic and occur naturally in the environment. The groundwater standards in ch. NR 140, Wis. Adm. Code, currently contain a groundwater preventive action limit and enforcement standard for total coliform bacteria. The proposed rule will update the groundwater standards to mirror the federal and state drinking water standards for bacteria by replacing total coliform

bacteria standards in s. NR 140.10, Table 1, Wis. Adm. Code with standards for *E. coli* bacteria, and adding an indicator parameter standard for total coliform bacteria in s. NR 140.20, Table 3, Wis. Adm. Code.

Policy alternatives

Section 160.07(5), Wis. Stats., directs the department to propose rules establishing DHS recommendations for ES for substances of public health concern. The alternative would be to not promulgate groundwater standards for *E. coli* bacteria. Without numerical health based standards for *E. coli* bacteria, groundwater regulatory programs will continue to be out of step with state and federal drinking water standards and will not adequately 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 numerical 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. The department is required to engage in rulemaking for all substances of public health concern for which DHS develops enforcement standard recommendations, pursuant to s. 160.07(5), Wis. Stats. The department is also required to establish by rule preventative action limits for all substances with enforcement standards, pursuant to s. 160.15(1), Wis. Stats. For substances without enforcement standards, s. 160.15(3), Wis. Stats., authorizes the department to establish indicator parameters that may show that preventive action limits may be exceeded.

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 600 hours.

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

The proposed groundwater standards for *E. coli* bacteria and total coliform bacteria 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, numerical 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:

There are no federal groundwater standards, and there is no parallel process for regulating groundwater contaminants at the federal level.

The EPA establishes health based drinking water maximum contaminant levels (MCLs). Federal MCLs, applicable at public water supply systems, are established based on scientific risk assessments and, in some cases, economic and technological considerations. As noted above, EPA's Revised Total Coliform Rule includes a maximum contaminant level for *E. coli*, but not for total coliform. Rather, it uses total coliform bacteria as an indicator of possible microbial pathways into a public drinking water system that triggers additional testing for *E. coli* bacteria.

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

The department will examine the economic impact of the proposed rule when the rule is developed. At this time, anticipated economic impact of this rule is expected to be minimal, given that bacteria is already regulated and this rule will cause minimal or no changes to the regulatory regimes that rely on groundwater standards. Because *E. coli* bacteria are a subgroup of coliform bacteria there are no cases where the proposed *E. coli* bacteria standards would be exceeded where existing total coliform bacteria standards are not already being exceeded. Similarly, the specific economic impact to small businesses is indeterminant, but anticipated to be minimal.

State groundwater quality standards protect both public health and welfare. There are significant cost savings to establishing groundwater quality standards for *E. coli* bacteria, a more specific

indicator of fecal contamination, and the potential for pathogens to be present in drinking water, than total coliform bacteria. Standards for a more specific indicator of the potential for pathogens to be present in drinking water will reduce exposure to bacteria which are known to cause acute (short-term) gastrointestinal illnesses causing diarrhea, abdominal discomfort, nausea, and vomiting and in some cases chronic (long-term) illness and kidney failure, hepatitis, and bloody diarrhea. Infants and young children, the elderly, and people with compromised immune systems are at the highest risk for illness from pathogens in water.

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, 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 in the month of September, 2022. The hearing will be held by videoconference. The department will hold the hearing to gather stakeholder input on a rule package that is used widely statewide.

Contact Person: Bruce Rheineck
(608) 266-2104

DocuSigned by:
Sarah Barry
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For Preston D. Cole, Secretary

3/10/2022 | 3:32 PM CST

Date Submitted



Tony Evers

Office of the Governor | State of Wisconsin

March 18, 2022

By Electronic Mail Only

Dear Secretaries and Agency Heads:

On this day, I approved the following statement of scope pursuant to Wis. Stat. § 227.135(2):

- A statement of scope by the Department of Natural Resources, submitted March 10, 2022, relating to amendments to set numerical standards to minimize the concentration of polluting substances in groundwater (Cycle 10 Bacteria) (Wis. Admin. Code ch. NR 140).

Please direct any questions about this letter to my deputy policy director, Katie Domina.

Sincerely,

A handwritten signature in black ink that reads 'Tony Evers'.

Tony Evers
Governor

cc: Ryan Nilsestuen, chief legal counsel (ryan.nilsestuen1@wisconsin.gov)
Katie Domina, deputy policy director (katherine.domina1@wisconsin.gov)
DOA State Budget Office (SBOAdminRules@spmail.wi.gov)
Emma Esch, DNR (emma.esch@wisconsin.gov)

Notice of Preliminary Hearing on Statement of Scope

The Department of Natural Resources announces that it will hold a preliminary public hearing on Statement of Scope SS 021-22 (Board Order DG-04-22), which affects ch. NR 140, and is related to setting numerical standards to minimize the concentration of polluting substances in groundwater (Cycle 10 Bacteria), at the virtual time and place shown below.

Hearing Information

Date: April 22, 2022

Time: 1:00 p.m.

Virtual Location:

- Online via Zoom: <https://us02web.zoom.us/j/86719604139>
- Meeting ID: 867 1960 4139
- Join by Telephone: +1 312 626 6799

Rule Information

The proposed rule will amend ch. NR 140, Wis. Adm. Code, to replace the existing total coliform bacteria standards with new state groundwater quality standards for Escherichia coli (E. coli) bacteria. The proposed rule will also transition total coliform bacteria from a public health groundwater quality standard to an indicator parameter.

The purpose of establishing groundwater standards is to protect public health. Some types of E. coli bacteria, when consumed, can cause acute (short-term) gastrointestinal illnesses causing diarrhea, abdominal discomfort, nausea, and vomiting. Less common effects are chronic (long-term) and include kidney failure, hepatitis, and bloody diarrhea. E. coli bacteria are a subgroup of coliform bacteria and are considered to be a much more specific indicator of fecal contamination, and the potential for pathogens to be present in drinking water, than total coliform bacteria.

Accessibility

For the hearing or visually impaired, non-English speakers, or those with other personal circumstances which might make communication at the meeting/hearing difficult, DNR will, to the maximum extent possible and with reasonable advance notice, provide aids including an interpreter, or a non-English, large-print, or recorded version of hearing documents. To access these resources, please contact the email address or phone number listed below as soon as possible.

Appearances at the Hearing and Submittal of Written Comments

The public has the opportunity to testify at the hearing. Pre-registration is strongly encouraged if you plan to provide spoken comments during the hearing. To pre-register, either use the Zoom

link above prior to the day of the hearing or download and complete the fillable [hearing appearance form](#) and send it to BruceD.Rheineck@wisconsin.gov .

Comments on the proposed scope statement must be received on or before April 22, 2022. Written comments may be submitted by U.S. mail, E-mail, or through the internet and will have the same weight and effect as oral statements presented at the public hearing.

Written comments and any questions on the proposed scope statement should be submitted to:

Department of Natural Resources
Attn: Bruce Rheineck – DG/5
P.O. Box 7921
101 S. Webster Street,
Madison, WI 53707-7921
BruceD.Rheineck@wisconsin.gov

The scope statement may be viewed at: <https://dnr.wi.gov/news/input/ProposedPermanent.html>

Comments can be made at: DNRAAdministrativeRulesComments@wisconsin.gov

The scope statement may be reviewed, and comments made at:
https://docs.legis.wisconsin.gov/code/scope_statements/comment.