

STATEMENT OF SCOPE

Department of Natural Resources

Rule No.: DG-15-19

Relating to: Amendments to ch. NR 140 to set numerical standards to minimize the concentration of polluting substances in groundwater

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 objective of the proposed rule is to set numerical standards for consistent use in state regulatory programs to minimize the concentration of polluting substances in groundwater [ss. 160.001 and 160.07(5), Stats.].

Amendments are being proposed to ch. NR 140, Wis. Adm. Code, Groundwater Quality, to establish new state groundwater quality standards for substances detected in, or having a reasonable probability of entering, the groundwater resources of the state, provided sufficient scientifically valid technical information exists to allow the Department of Health Services (DHS) to develop recommendations for standards.

Amendments are also being proposed to ch. NR 140, Wis. Adm. Code, to revise existing state groundwater quality standards in cases where established federal numbers or health based reference doses for substances have changed, or where significant technical information, not considered when federal numbers or reference doses were established, justifies revision.

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, and the frequency of submissions of substances to DNR from regulatory agencies.

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 in NR 140 are based on recommendations developed by 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 DNR 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 and 8 substances of public welfare concern.

Chapter NR 140, Wis. Adm. Code, establishes 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.

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. Without numerical health based standards, groundwater regulatory programs would be unable to protect the public health of Wisconsin residents.

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

The DNR's statutory authority to establish state groundwater quality standards is contained in ch. 160, Wis. Stats., and sections 281.12(1), and, 281.19(1), Wis. Stats.

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 DNR 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 entering the groundwater resources of the state.

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 NR 140 is approximately 925 hours (over an anticipated 3 year period).

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

The proposed groundwater standards would apply to all regulated facilities, practices and activities which may impact groundwater quality.

Once adopted, the 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 :

The United States Environmental Protection Agency (US EPA) establishes health based drinking water maximum contaminant levels (MCLs) and health advisories (HA). Federal MCLs, applicable at public water supply systems, are established based on scientific risk assessments and, in some cases, economic and technological considerations. Federal HAs provide information on contaminants that can cause human health effects and are known or anticipated to occur in drinking water. EPA's HAs are non-enforceable and provide technical guidance to state agencies and other public health officials on health effects, analytical methodologies, and treatment technologies associated with drinking water contamination.

The administrative process established in ch. 160, Wis. Stats., for developing numerical state groundwater quality standards for substances of public health concern requires that DHS base their recommendations for standards on existing federal numbers. Federal numbers, as defined in ch. 160, Wis. Stats., include MCLs, HAs and established cancer risk levels. In cases where a federal number does not exist for a substance, DHS uses reference doses (RfDs) and acceptable daily intake (ADI) values to develop their recommendations for standards.

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

The anticipated economic impact of this rule will range from moderate to significant impact (\$50,000 to greater than \$5 million), depending on the number of regulated entities that may be found to exceed the proposed new or revised standards. Moreover, it also depends on whether the regulated entities are already required to take action for existing standards contained in ch. NR 140, Wis. Adm. Code. If existing standards in ch. NR 140, Wis. Adm. Code, have not been exceeded by a particular facility, practice or activity, then the new standards proposed in this rule may require additional actions that will cause economic impact beyond the current situation. If existing ch. NR 140, Wis. Adm. Code, standards have been exceeded by a particular facility, practice or activity, concurrent monitoring or remedial action for existing standards and the new standards proposed in this rule are not likely to increase compliance costs. It is anticipated that there will be few cases where the proposed standards will be exceeded where existing standards are not already being exceeded. As a result, the anticipated economic impact of this rule is at the lower end of the estimated range of impacts and the workload of state regulatory agencies should not change substantially. The addition of new or revised ch. NR 140, Wis. Adm. Code, groundwater quality standards does not trigger additional monitoring at public water supply systems.

Specific economic impacts on small businesses are indeterminant until the rule is drafted. Small businesses that are sources of the substances for the proposed groundwater standards are, for the most part, likely sources of substances for which groundwater standards already exist. Consequently, there should be few cases where the proposed standards would be exceeded where existing standards are not already being exceeded.

Chapter NR 140, Wis. Adm. Code, currently contains groundwater standards for 138 substances of public health concern, 8 substances of public welfare concern and 15 indicator parameters.

State groundwater quality standards protect both public health and welfare. There are significant cost savings to reducing exposure to contaminants which are known to cause disease and premature death and that may enter groundwater drinking water supplies. 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 5 public hearings in the month of November, 2020. Hearings will be held simultaneously by videoconference. Anticipated locations are Madison, Eau Claire, Rhinelander, Oshkosh and LaCrosse.

The Department will hold these hearings in these locations to gather stakeholder input on a rule package that is used widely statewide.

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