

STATEMENT OF SCOPE

Department of Natural Resources

Rule No.: DG-07-22(E) and DG-08-22

Relating to: Updating chapter NR 812 to allow for the use of new cement formulations for the construction of water wells

Rule Type: Both Permanent and Emergency

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

Pursuant to s. 227.24(1)(a), Wis. Stats., the Department of Natural Resources (department) finds that promulgating rules under this subsection as emergency rules are necessary for the preservation of public peace, health, safety, or welfare. Currently, ch. NR 812, Wis. Adm. Code, requires the use of Type I Portland cement that meets ASTM C150 standards or Class A Portland cement that meets API-10A standards in the construction of water wells. Cement is an important material for grouting and sealing wells in Wisconsin, especially in areas with fractured bedrock formations. Chapter NR 812, Wis. Adm. Code, requires the use of cement and cement mixed with other materials for the sealing of annular spaces and for filling unused wells in certain conditions, including annular spaces that extend through bedrock formations.

It has recently come to the attention of the department that the companies that manufacture cement for sale and distribution in Wisconsin and surrounding states have switched from producing Type I Portland cement and are now only producing Type IL cement, which does not meet ASTM C150 or API-10A standards. Type IL cement meets ASTM C595 standards and performs similarly to Type I cement. Individual manufacturers made the change to reduce the carbon footprint of their product. This was not prompted by a change in regulations. Some manufacturers completely switched over to producing and selling Type IL cement in 2021, but many end users of cement, including well drillers and pump installers, were not notified until April of 2022. It is anticipated that in the coming months, it will be difficult or impossible to find Type I cement in Wisconsin, which is needed for grouting or sealing of water wells or drillholes with neat cement as required by ch. NR 812, Wis. Adm. Code. This shortage will likely impact the 2022 peak drilling season during the summer and fall. It is paramount that well drillers have access to code-compliant materials they need to seal an annular space on a new well, or fill and seal an unused well or drillhole. Properly grouting, sealing, and filling water wells and drillholes is necessary to ensure safe drinking water and to prevent contamination of the State's groundwater. Accordingly, the department finds that promulgating emergency (and permanent) updates to ch. NR 812, Wis. Adm. Code, to allow the use of Type IL cement in the grouting and sealing of wells complies with the preservation of health, safety and welfare criteria found in s. 227.24(1)(a), Wis. Stats.

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

The proposed rule revisions will update the material requirements found in ch. NR 812, Wis. Adm. Code, to allow the use of Type IL Portland cement in the grouting and sealing of water wells and drillholes. This change will allow well drillers and pump installers to use the only readily available type of Portland cement when required by other portions of ch. NR 812.

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:

Existing or new policies relevant to the rule:

The existing and new policies relevant to the rule have been documented in the sections above. In summary, the department would modify the rule to allow for the use of the only readily available Portland cement (Type IL) to grout and seal wells.

Policy alternatives:

There are two policy alternatives. The first alternative is to issue variances every time a well needs to be grouted or filled and sealed with cement or a cement mix. This alternative is not feasible for staff, as there would be thousands of variances each year to review and approve. Last year, there were over 10,000 wells drilled in the state and over 4,000 of them were grouted using cement. The second alternative is to use the department's enforcement discretion to allow the use of a non-complying Portland cement as it is the only available material for use. This alternative is not sustainable long-term as enforcement discretion is meant to be used on a case-by-case basis when there is no risk to health or the environment from not meeting the code requirements. While there is no immediate risk to health or the environment from using Type IL cement, the integrity of the code is diminished when it is not possible to meet the requirements and is not enforced.

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

The department has authority under s. 280.11(1), Wis. Stats., to promulgate rules and regulations for methods of obtaining drinking water for human consumption and establish safeguards necessary to protect public health against the hazards of polluted sources of impure water supplies intended or used for human consumption, including minimum reasonable standards for the construction of well pits. This also includes methods for the construction or reconstruction of wells.

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 the emergency and permanent rules is approximately 150-200 hours. This includes staff time needed to address the full public input process, develop the economic impact analysis, conduct outreach to stakeholders, and coordinate agency reviews for the permanent rules.

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

The proposed rules would apply to all entities involved with the construction and sealing of water wells, heat exchange drillholes and other drillholes that require sealing under ch. NR 812, Wis. Adm. Code.

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 is no existing or proposed federal regulation that governs the construction of wells or drillholes.

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

Since the rule is intended to maintain the current supply of materials, there is no anticipated economic impact of the emergency and permanent rules. The rules will prevent a disruption to small businesses by allowing them to use materials that are readily available for a similar cost to the previously available materials.

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

The department anticipates holding a public hearing for the emergency and permanent rules in February 2023, or earlier if possible. The hearing will be conducted in Madison with opportunities for stakeholders around the state to connect to the Madison hearing via teleconference or video conference, and will allow for hearing comments to be submitted in writing.

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