

Report to
Legislative Council Rules Clearinghouse
NR 812, Wis. Adm. Code
Natural Resources Board Order No. DG-25-19

Wisconsin Statutory Authority

Section 227.11(2)(a)(intro.), chs. 280 and 281, Wis. Stats.

Federal Authority

Federal law does not directly regulate the construction of wells or heat exchange drillholes and does not regulate the installation of pumps. For public drinking water systems, Wisconsin is a primacy state, with the primary responsibility to enforce state drinking water regulations consistent with the federal Safe Drinking Water Act. One federal requirement of Wisconsin's primacy role is that the state assures that the design and construction of new or substantially modified public water system facilities will be capable of compliance with the State primary drinking water regulations. For noncommunity public drinking water systems, NR 812, Wis. Adm. Code, provides the design and construction standards to meet this federal requirement.

Comparison of Adjacent States

The department considered well regulations related to thermoplastic casing for all neighboring states, plus Indiana and Ohio. All six states allow the use of thermoplastic casing terminating in bedrock, and the use of cementous grout for thermoplastic casing. Wisconsin does not.

Illinois, Indiana, Iowa, Michigan and Ohio allow drilling through thermoplastic casing; Minnesota and Wisconsin prohibit drill-through. DG-25-19 would not lift that prohibition in Wisconsin.

Five of the six states (except Indiana) have specific prohibitions against driving or mechanically advancing thermoplastic casing. Indiana has no specific prohibition against it. DG-25-19 would not lift that prohibition in Wisconsin. All six states allow the construction of water wells terminating in bedrock using thermoplastic casing and cementous grout. Currently, ch. NR 812, Wis. Adm. Code, prohibits both of these practices

Court Decisions Directly Relevant

None.

Analysis of the Rule - Rule Effect - Reason for the Rule

Although thermoplastic casing is an approved material in Wisconsin, its current use is restricted to wells that terminate in unconsolidated formations only. Wisconsin is the only state in the upper Midwest, and one of only three states nationally, that prohibits the use of thermoplastic casing for wells that terminate in bedrock formations. This puts Wisconsin's well drillers and homeowners at a disadvantage when it comes to safe and affordable options for well construction. Specific edits include:

1. Allows construction of wells using thermoplastic casing to terminate in bedrock formations. All neighboring states (and most states in the U.S.) allow this.
2. Allows the use of cementous grout as an annular space seal for wells with thermoplastic casing. All neighboring states allow the use of cementous grout in bedrock wells, although Minnesota restricts the depth of thermoplastic cased wells into limestone and dolomite bedrock to 5 feet.
3. Allows clamp-on, bolt-on, or bolt-through pitless adapters for all wells (currently these are only allowed for wells serving single families). This was proposed during the last rule revision too late to include in the rule. After consulting with the DNR Public Water Program, the perceived risk to ground water and public health was deemed to be minimal.
4. Adds maximum annular space requirements for wells constructed with thermoplastic casing and

cementous grout to prevent damage from pressure and heat of hydration. This suggested rule revision is unique to Wisconsin as an added precaution and is not present in neighboring states' regulations.

5. Clarifies s. NR 812.13 (4) (b), Wis. Adm. Code, making the use of a packer or shale trap to provide a sand seal between the bottom of a casing and the top of a screen optional rather than required. This was a clarification of the rule suggested by an industry member of the PVC Casing Study Group.
6. Allows the department to investigate wells that it suspects have suffered damage to thermoplastic casing. This suggested rule revision is an added precaution to allow department staff to investigate wells constructed with thermoplastic casing that they suspect have been damaged during construction.

Agency Procedures for Promulgation

The department will hold a hearing online on September 15, 2021 at 4 p.m. The hearing will be followed by board adoption, expected in December 2021, followed by a request for the governor's approval and legislative review.

Description of any Forms (attach copies if available)

None

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