Chapter NR 811 Rule Revisions **Subchapter II and VIII Code Sections in Need of Revison** **July 29, 2021**

Please see a list of code sections in subchapter II and VIII of ch. NR 811, Wis. Adm. Code which have been identified as needing revisions to update, correct and clarify existing requirements and add requirements to address new technologies.

- 811.12 (1)(c) Doesn't specifically state liner casings also need 1.5 inch grout seal
- 811.12 (1)(d) Temporary casings being left in place, without grouting on exterior
- 811.12 (1)(g) Test well requirements unclear
- 811.12 (1)(g)(2) Language often causes confusion: Test wells to be converted to permanent wells or test wells to be pumped at a rate of 70 gallons per minute or more for a period of more than 72 hours shall be approved by the department prior to their construction.
- 811.12 (5)(d) Quarries are referenced in construction of limestone wells in NR 811.19, but no reference on a separation distance based on quarry location or depth is provided.
- 811.12 (5)(d) Confusion on the separation distance requirements for the separate types of above ground/below ground fuel storage tanks
- 811.12 (5)(d) Separation distances does not reference the separation distances in 812
- 811.12 (5)(d) Separation distance for a drinking water backwash tank to a well is not included. Code requires separation from contamination sources.
- 811.12 (7)(b) Reference to casing marking requirements has changed in NR 812.
- 811.12 (7)(b) While 6-inch diameter is the smallest diameter stated in Table 1, it's not explicitly stated that a minimum 6-inch diameter casing is required.
- 811.12 (7)(c) While 6-inch diameter is the smallest diameter stated in Table 1, it's not explicitly stated that a minimum 6-inch diameter casing is required.
- 811.12 (9) Doesn't address permanent use of packers
- 811.12 (12) Chemical conditioning indicates a final disinfection is required in accordance with NR 810.09 (4) and subsequently the AWWA requirements. AWWA requirements do not state whether additional chemicals may be used in final disinfection.
- 811.12 (12) No requirement for arsenic sampling post well rehab. It has indicated even in areas where arsenic has not previously been an issue, strong concentration well rehabs which we often see can lead to arsenic issues.
- 811.12 (13)(b) Impulse generation does not prohibit use of air in areas where arsenic may be a problem.
- 811.12 (13)(b)4. Impulse strength only required to be low enough to prevent damage to casing and grout. Also no requirement listed for depth from bottom of casing.
- 811.12 (14)(b)8 "Grout conductor, or tremie, pipes shall be metal pipe or a rubber-covered, fiber or steel braided, reinforced hose with a minimum pressure rating of 300 psi. Plastic pipe, including PVC pipe, shall not be used as a grout conductor pipe." Propose the use of PVC pipe for inside the casing grout methods to include Braden Head and grout shoe methods of grouting. Plastic tremie not proposed for outside the casing grouting methods.
- 811.12 (15)(a) Include an exception for small diameter OTM wells to have submersible pumps installed
- 811.12 or 810.26(1) Last minute notification of grouting by well drillers makes it difficult for DNR engineers to witness new well grouting.
- 811.13 Code does not specify the required timeframe for seal/abandonment of contaminated wells at community systems.

- 811.14 (5) "The seal shall be no more than 2 feet thick." References a seal of sand OR bentonite, but there can be both (this is from discussion with Norm)
- 811.13 Discrepancy in rule terminology--NR 812 refers to "filling and sealing," NR 811 calls it "abandonment."
- 811.18 Doesn't explicitly state all protective casings must be seated in firm bedrock
- 811.19 Doesn't explicitly state all protective casings must be seated in firm bedrock