NR 812 Revisions

Marty Nessman, April 30, 2024

DNR Approval Requirements

- Current code requires DNR approval of:
- All nonpressure storage vessels
- All pitless adapters and units
- All above ground discharge units
- All wellhead components including well caps and seals

Potential Alternative - NPSVs

• Require approval only for:

Reservoirs or tanks installed below ground surface
Reservoirs or tanks installed at a non-community public system

 Clarify requirements for the installation of new and existing NPSVs in code

Potential Alternative – Pitless Adapters

- No longer require prior DNR approval if adapter or unit meets requirements of NR 812.31 and enhance/clarify.
- All subsurface connections shall be made in a watertight manner.
- Properly sized and installed according to manufacturers instructions.
- Keep requirements for installation in NR 812.31 (3) and (4) but clarify as needed.

Potential Alternative – Pitless Adapters

- No part of a pitless adapter may extend into the inside of the well casing pipe prior to the installation of the pump, except that a bolt-through pitless adapter may be installed for a well with polyvinyl chloride well casing pipe having a permanently attached screen.
- This can't be changed in NR 812.

Potential Alternative – Wellhead Equipment

- No longer require prior DNR approval, revise NR 812.28 (2) to read:
- (2) WELLHEAD EQUIPMENT. Well caps and seals shall be weatherand vermin-proof compression type components and shall attach securely to the well. Nuts and bolts shall be made of materials that minimize corrosion. Any component attached to a wellhead shall enter the well in a manner that maintains sanitary integrity and prevents the entrance of contaminants or vermin into the well.

Pump work on non-complying wells

- New well in non-complying location
- Out of water situation
- Other situations?
- Should simple fixes be required when working on an existing well?
 - Well cap
 - Sample tap

Pitless Unit and Adapter Requirements

- Are current requirements in <u>NR 812.31</u> too prescriptive?
- Steel casing with PVC riser?
- PVC casing with steel riser?

Off-set Pump Installations

- Any changes needed?
- How can we improve this section?

Hand Pump Installations

- Will clarify requirements for pump heads and connection to well
- Clarify when a pump platform is needed • Exempt emergency use hand pumps
- Require lock or removal of pump handle for emergency use hand pumps?
- Any other changes or clarifications needed?

Sampling Requirements

- Bacteria sample required for:
- New pump installation
- Replacing a pump or pressure tank on an existing well that does not involve entry into the well
- Entry into a well to diagnose any feature or problem with a well or to measure casing depth
- After corrective action following a total coliform positive test result

Sampling Requirements

55. NR 812.46 (1) (a) 2: Total Coliform Bacteria Testing

Comment: "This reads that a Total Coliform Bacteria Sample be taken for "Pump installing for an existing well that does not include entry into the well." This is very vague as this could be anything from a simple Pressure Gauge or Pressure Switch Replacement to a Motor Control Panel Replacement or a Pressure Tank Replacement. A Motor Control Panel Replacement, for example, has absolutely no contact with the water system as the well is **not being entered** not does the pressure tank need to be drained. I don't see the need for the additional costs, or how it in any way helps the owner. This could be done as an option to a well owner rather than a requirement."

DNR Response: Changed. Language was changed to require a sample for bacteria testing only when replacing a well or pressure tank on an existing water system that does not involve entry into the well.

Bacteria and Nitrate

- Well driller requirement:
 - New well construction or reconstruction
 - Well redevelopment
 - Physical conditioning of a well

Bacteria, nitrate and arsenic

- Entering an existing well to perform pump installing activities
 - Does not include taking a water level measurement
 - Nitrate and arsenic not required if they were collected by same licensee within the past 6 months
- Property transfer well inspection

Bacteria Sample Collection/Analysis

- NR 812 requires:
 - Sample delivered and analyzed by the lab within 48 hours of collection
- Safe drinking water act requires:
 - Sample analyzed by the lab within 30 hours of collection

Existing Wells in Limestone

 Allow an existing well <6" in limestone bedrock to continue in use by changing NR 812.42 (1) (b) and deleting NR 812.44 (5) (b) 27

Use of Bentonite Chips as Annular Space Sealing Material

• Any suggestions for how it can/should be allowed?

Landfills and Property Transfer Inspections

• Currently need to mark as needing further due diligence to determine if a variance exists

Casing Advancement

- NR 812.13 (6) and (7)
- NR 812.20 (2)

Non-electric Installations

- More to come
- We will work with Bob Aune and others to develop some minimum standards

Next Steps

- DNR will start drafting language
- May reach out for additional feedback
- Final draft of revision will be completed in August
- Economic impact analysis in September

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