

Bacteria Treatment

A fact sheet for driller and pump installers

The presence of bacteria in well water may indicate the water system is at risk to more serious forms of contamination. Water from a well properly located and constructed should be free of bacteria. A well with continued bacterial contamination may require additional measures to effectively treat the well.

SOME IMPORTANT FACTS ABOUT BACTERIA TREATMENT:

- **CHEMICAL TREATMENT AND BATCH CHLORINATION**-Chemical treatment shall be conducted under the supervision of a licensed Well Driller or Professional Engineer. A well acidification shall be conducted with material approved under NR 812.091, Wis. Adm. Code, and in a manner to prevent damage to humans, pump, and property. Batch Chlorination shall meet the specifications outlined in NR 812.22(2) (a-e) and 812.41.
- **FIND THE PROBLEM/FIX THE PROBLEM**- After a coliform bacteria-positive test result, and before reverting to installing treatment devices, Well Drillers and Pump Installers are required to return to diagnose and attempt to correct the underlying cause of the bacteria-positive test.
- **TREATMENT DEVICES**- Before a water treatment device is installed on a private well for the purpose of controlling bacteria, an inspection of the existing well and pressure system for compliance with construction and location requirements of NR 812. No person may install a water treatment device for the purpose of controlling bacteria unless an inspection is completed that meets all the requirements of NR 812.37(3m) (a-d). The inspector shall use NR 812 Compliance Report form # 3300-305 for the inspection and give the completed form to the well owner when the inspection is complete.
 - a. In-well treatment devices – e.g. pellet chlorinator – requires a written DNR approval
 - b. Downstream treatment devices – requires a written DNR approval for a non-community system; an inspection by a licensed Well Driller or Pump Installer is required to verify compliance before a licensed plumber may install a bacteria treatment device on a private well
- **WHO CAN INSTALL TREATMENT** –
 - a. A licensed plumber if treatment is installed downstream of the pressure tank or building control valve
 - b. A licensed pump installer if treatment is installed upstream of the pressure tank
 - c. The owner of a one-family building that is occupied by that owner as his or her home, unless a license is required by local ordinance
- **PHYSICAL TREATMENT** - A well driller shall return to the well site to diagnose and attempt to correct a problem when an initial sample from a potable well tests positive for total coliform bacteria. This requirement is outlined in NR 812.10(12) and 812.27(8). Corrective actions include physical treatment such as mechanical scrubbing and brushing the well. The well shall be disinfected and flushed after corrective action in accordance with NR 812.41 and re-sampled in accordance with NR 812.46(1).



The installation of a water treatment device does not replace proper well location, construction, and water supply protection.

This fact sheet does not replace or supersede specific code language for water treatment found in ss. NR 812.09 (1), 812.10 (12), 812.37, 812.22, 812.41 and 812.46, Wis. Adm. Code.

This document is intended solely as guidance and does not contain any mandatory requirements except where requirements found in statute or administrative rule are referenced. Any regulatory decisions made by the Department of Natural Resources in any matter addressed by this guidance will be made by applying the governing statutes and administrative rules to the relevant facts.

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