

When to Disinfect your Well:

Well disinfection can eliminate or reduce many kinds of harmful bacteria and viruses as well as non-harmful bacteria which can cause unpleasant taste and odors. However, disinfection will **not** correct water problems caused by chemical contamination from nitrate, fuels, pesticides, or other substances. Well disinfection should be performed under the following circumstances:

- ▶ When coliform bacteria are present in the water
- ▶ After flooding of the well
- ▶ After a plumbing installation
- ▶ After pump or other plumbing repairs
- ▶ When a change in taste or an odor problem occurs
- ▶ As part of routine maintenance
- ▶ During startup of seasonal systems

Procedures for Well Disinfection:

Step 1 – Pre-Disinfection Safeguards

Turn off the pump switch which is usually located near the pressure tank, open a faucet, and allow the water to run until the water pressure is at a minimum.

Bypass softeners, bait tanks, livestock, and anything else that might be vulnerable to high chlorine

concentration to prevent damage to the device or animals. If the water system includes a filter device, this would be a good time to install a new one.

Since softeners themselves may be a source of contamination, it is good to disinfect the softener at the same time that the well is being disinfected.

- ▶ To disinfect the softener, add ½ cup of bleach to the brine tank and regenerate the unit.

Step 2 – Removing the Well-cap

Remove the well cap. Then lift the wires/wire nuts and pull them to the side of the well casing.



Step 3 – Mixing a Chlorine Solution

In a clean pail, add one-half to two gallons of 5.25 percent household chlorine bleach to 5 gallons of water.

Step 4 – Adding Chlorine to the Well

Pour the mixture into the well. Flush with 5 gallons of clean water to remove high concentrations of chlorine from the pitless adaptor.

Step 5 – Replace the Well-cap

Before proceeding to Step 6, place the well-cap securely onto the well casing.



Step 6 – Recirculation of Chlorinated Water

To speed up the recirculation process, follow these procedures:

- ▶ Turn on the pump switch
- ▶ Connect the garden hose to an outside water faucet
- ▶ Open the faucet and allow the water to run until a strong chlorine odor is detected.
- ▶ You may notice that for a brief period the water may be reddish in color.

Step 7 – Distribution of Chlorinated Water

To begin to disperse the chlorinated water throughout the distribution system, start with opening the cold water faucet closest to the pressure tank. Allow the water to run until a strong chlorine odor can be detected. Then shut off this water faucet and continue this process at each water cold faucet. After this process is completed, repeat this procedure with all of the hot water faucets.

Close the system down and allow for at least 4 hours of contact time (overnight, if possible).

Step 8 – Pumping Chlorinated Water to Waste.

Do not discharge chlorinated water into the septic system.

Using a garden hose, direct the water to an area where it will not harm plants or vegetation. Allow the water to flow until the water in the distribution system is free of chlorine.

Step 9 – Sampling the Water

Obtain a bacteriological sample and submit it to a laboratory for analysis. Sample bottles can be obtained from the Health Department. Closely follow the sample collection instructions provided with the bottles.

If the disinfection procedures fail to produce a safe sample, contact the Environmental Health (EH) Division for further information.

818 Pyle Drive
Kingsford, MI 49802
906-779-7239 (EH)
906-774-1868

601 Washington Ave.
Iron River, MI 49935
906-265-9913

Pictures obtained from the State of Minnesota

**Dickinson-Iron
District Health
Department**

**Well
Disinfection
Procedures**