

DISINFECTION FOR BACTERIAL CONTAMINATION

Disinfection Options Include:

- A. Boiling your water (at a rolling boil) for at least one minute.
- B. Pouring chlorine bleach (household strength) into your well.
- C. Installing a point-of-entry disinfection unit, of which there are chlorine, ultra-violet light, or ozone –based formats.

Please note: Chlorine may not kill *E.coli*, *Giardia*, or parasites in your water because they are capable of encysting (e.g. encapsulating) themselves until their environmental conditions are more favorable to them. For this reason, it is usually necessary to filter out these organisms in addition to disinfecting the water.

Instructions for Well Disinfection:

- Remove the well cover. Exercising care not to spill or contact to the skin, pour the required amount of unscented household-strength bleach into the well, as noted below:

<u>Well Casing Diameter</u>	<u>Amount of 5.25% (Household) Chlorine Bleach Needed</u>
4 inches	Two and one-half (2½) cups
6 inches	Five (5) cups
8 inches	Seven and one-half (7½) cups
12 inches	Twenty (20) cups OR One and one-quarter (1¼) gallons

NOTE: These quantities are for 100 feet deep wells. Adjust the quantities in proportion to the depth of your well. Use only unscented bleach.

- Turn on all of the faucets inside the house, one at a time, until you smell chlorine at the faucet furthest from the well. Make sure that you run both the hot and cold water at each location. The purpose of this is to circulate the chlorine through every pipe in the building. This ensures that the whole system is disinfected. Also, connect a garden hose to a nearby faucet and wash down the inside walls of your well with the chlorine-treated water.
- Allow the treated water to remain in the system for a minimum of 24 hours. **DO NOT USE THE WATER FOR ANY PURPOSE.**
- After the disinfection period, you will need to purge the chlorinated water from your system. This can take three or four hours for a typical well. To avoid pump overheating and possible damage, turn off the water if the flow slows down. Then wait a few minutes and resume flushing. Run the water to waste if you are not on a septic system. This water should not be disposed of into a septic system. Chlorine will also kill grass and plants, so be careful where you drain the water.
- After a week of use, resample and retest for bacteria.
- In some cases, one chlorination treatment will not be sufficient and a second round of disinfection may be necessary.
- If you have tried to disinfect your well unsuccessfully, you may need to investigate permanent water treatment systems.

Please note: If your water contains high levels of iron, chlorination will aggravate your iron problem temporarily. The iron problem will decrease as the level of chlorine lowers.