
DISINFECTION PRODECURES FOR WELLS

New water systems and those water systems which have been subjected to repair must be thoroughly disinfected before use. Handling and storage of materials, supplies, and equipment during construction make contamination almost certain. Chlorine and chlorine compounds are effective disinfecting agents when properly used.

To obtain satisfactory disinfection with chlorine compounds, it is necessary that three conditions be satisfied:

1. The chlorine solution must be strong enough (i.e. 100 ppm residual chlorine)
2. There must be adequate mixing of the water being disinfected and the chlorine solution.
3. Ample time of contact must be allowed between the chlorine solution and the items being disinfected. (12 hours contact time)

A satisfactory disinfecting solution of chlorine concentrate can be prepared by mixing one gallon of household bleach, (such as “Clorox” which has 5.25% available chlorine) for every 525 gallons of standing water in your well. For example, a 6” drilled well has 1.5 gallons of water per foot of casing and a 24” bored well has 23.5 gallons of water per foot of casing. You must know the depth and static water level of your well to accurately perform this calculation.

The well should be disinfected as follows:

1. For a bored well you should mix the required amount of chlorine concentrate with 3 – 4 gallons of water and pour into the well while distributing over the inner surface of the well casing as evenly as possible. Start pump and connect a garden hose to an outside faucet. Wash down casing or tile with the chlorine water being pumped from the well. This method of recirculation aids in sterilization of the well.
2. For a 6” drilled well you should pour the chlorine solution through the sanitary well seal by removing the well vent or plug located on the well seal. You may need a funnel to pour the solution into the hole which is usually only $\frac{3}{4}$ ” in diameter.
3. Pump water from the well until it has a strong chlorine odor at each house faucet in your home. Turn off all faucets.
4. Stop pump and allow the chlorine to remain in the well for at least 12 hours. (Do not use chlorinated water for drinking, cooking, washing clothes, or bathing.) Flushing commodes with the chlorinated water will be permissible for a short period of time (overnight).
5. After 12 hours of contact time has passed you may start purging the chlorinated water from the well at an outside faucet. You may only want to run your well for short periods of time depending on how much water is in your well so you will not run the well dry or overheat the pump. **DO NOT PURGE** the chlorinated water from an inside faucet as to keep it out of the septic tank system.
6. A bacteriological water sample cannot be performed until chlorine has been completely purged from your well and plumbing system for 48 hours.