Disinfection of Individual Water Wells

A water well should be disinfected (1) when the well is newly drilled; (2) when repairs to the well or pumping equipment are completed; (3) when an unsafe sample has been reported or (4) after a disaster situation (for example after a flood or natural disaster), which has impacted your home or business. Ordinary liquid laundry bleach may be used to disinfect a well. Liquid laundry bleach contains 5.25 percent chlorine. Do not use scented bleach as this will contaminate the well.

In order to disinfect a well:

1. Pump the well enough in advance to completely remove sediment and other debris caused by construction or repairs.
2. Add enough chlorine to make 50 to 100 parts per million solution (use table to the right).
3. Circulate the solution by pumping the discharge back into the well. This can be done by inserting a garden hose through the well seal at the top of the well and pumping until the chlorine is thoroughly mixed (at least fifteen minutes).
4. Open each water tap in the system until a strong chlorine odor is present, then close the tap. This will also disinfect the house service lines.
5. Let the chlorine stand for at least 24 hours, if possible, but no less than two hours.
6. Flush the system thoroughly.
7. Sample and resample after a one-week period to allow for the possibility of bacterial regrowth.

If the sample has tested positive after disinfection, the well should once again be disinfected, allowing a greater stand/contact time for the chlorine. Resample after one week. Please write ‘RETAKE’ in the Samplers’ Remarks on the Chain of Custody.

The volume of laundry bleach needed to make a 50 parts per million (ppm) solution may be found on the table above, to the right, if one knows the depth of the water in the well and the casing (pipe) size. This volume may be doubled to achieve a 100 ppm solution if desired. Further assistance regarding disinfection of your well may be obtained from your local environmental specialist. Questions about the testing can be answered at the State Environmental Lab at (405) 702-1000 or 1-866-412-3057 or via email at selsd@deq.ok.gov.