

CHLORINATION OF BORED AND DRILLED WELLS

The sample you have taken has been analyzed for pollutional bacteria called "coliforms" which normally are present in the intestines of humans, birds, and land animals. They are always found in sewage, and are generally present in surface water and shallow groundwater. Coliforms in a water sample usually indicate that pollution is entering the water supply and that organisms which cause intestinal infections may be present or may gain entrance to the supply. Proper location and construction of the supply will help prevent pollution from entering the supply.

Chlorine is a chemical which when applied in small quantities will effectively destroy disease carrying bacteria in water. Chlorine will make water safe for human consumption so far as bacterial contamination is concerned, however, it will not prevent other pollutants (i.e. chemicals, minerals, etc.) from contamination your water supply. Further, it should be understood that chlorination is not a substitute to be used in place of proper well location and construction.

After the pumps and piping are constructed, or repaired, the water supply should be disinfected before use.

DISINFECTION PROCEDURES

1. Remove the cover from the well and add chlorine in the amount calculated from the following chart. The amount of disinfectant required is determined primarily by the amount of water in the well. The chart below shows the amount of chlorine (laundry bleach 5.25%), **by cup**, to use according to the well's depth and diameter.

		Depth of Well in Feet									
		10'	20'	30'	40'	50'	60'	70'	80'	90'	100'
Diameter of Well	4"	1/4	1/3	1/2	3/4	1	1 1/4	1 1/3	1 1/2	1 3/4	2
	6"	1/2	1	1 1/3	1 3/4	2 1/4	2 3/4	3 1/4	3 1/2	4	4 1/2
	8"	3/4	1 1/2	2 1/2	3 1/4	4	4 3/4	5 1/2	6 1/2	7 1/4	8
	12"	1 3/4	3 1/2	5 1/2	7 1/4	9	10 3/4	12 1/2	14 1/2	16 1/4	18
	24"	7 1/2	15	22 1/2	30	37 1/2	45	52 1/4	67 1/2	67 1/2	75
	36"	15	30	45	60	75	90	105	135	135	150
	48"	30	60	90	120	150	180	210	270	270	300

To calculate gallons: Divide # of cups by 16

2. Attach a garden hose to an outside faucet and place the hose into the well.
3. Start the pump and circulate the water until the chlorine is well mixed.
4. Use the garden hose and wash the entire interior of the well with the chlorine water. Be certain that the walls, pipes, wires, cracks, and crevices are thoroughly washed.
5. Reseal the well.
6. Open all water faucets in and outside the house, start the well pump, and let the water run until the water coming from the faucet has a chlorine odor. This should take about 5-10 minutes.
7. Close all the water faucets.
8. Allow the water to sit in the well and the plumbing distribution lines of your house for at least 8 hours, preferably 24 hours. **Do not use the water for any purpose during this time.**
9. Pump the well through outside faucet until all chlorine odor is gone. After chlorine odor is gone, open all inside faucets and allow all chlorine and chlorine residual to be eliminated. Do not forget the clothes washer.
10. Large amounts of chlorine may inhibit the action of a septic system. Pump as little as possible through the system. Discharge chlorinated water through outside taps onto ground surface away from sewage system.
11. After all traces of chlorine are gone, the well should be sampled by a laboratory to ensure that proper disinfection has taken place.

The St. Clair County Health Department will be glad to make a well inspection upon your request. For an inspection of your water supply or for any questions concerning the above disinfection procedures, please call the St. Clair County Health Department at 233-7769.