

How to Chlorinate YOUR WELL WATER

IF YOU RELY ON A WELL for your household water, you should chlorinate it once per year, in the spring or fall, and after periods of non-use. Chlorination refers to the process of flushing your well and water system with a chlorine solution.

CHLORINATION IS PERFORMED TO ACCOMPLISH THE FOLLOWING:

- To neutralize harmful bacteria
- Disinfection after well repairs or periods of non-use
- Temporary elimination of hydrogen sulfide (or 'rotten egg') odours
- Temporary removal of iron and manganese build-up
- Removal of bacteria that creates slime

This pamphlet outlines steps to assist you in chlorinating your well and water system.



PLEASE BE SURE TO READ ALL INSTRUCTIONS BEFORE PROCEEDING!

BEFORE YOU BEGIN

- 1 Store enough water to meet your household needs for a minimum of 24 hours.
- 2 Next, remove filters, water conditioners, or any type of water treatment system, or find a way to by-pass them during chlorination.
- 3 **You will need unscented household bleach, containing 3-5% hypochlorite.**
For drilled wells, use the chart to the right to determine the amount of chlorine solution recommended. For dug wells, use approximately 1L of chlorine solution for every 100L of water. Well depth can be located on your Water Well Driller's Report issued by the Water Well Driller.
- 4

VOLUME OF CHLORINE SOLUTION (LITRES) PER DIAMETER OF WELL

| WELL DEPTH (FEET) | 4 INCH | 5 INCH | 6 INCH |
|-------------------|--------|--------|--------|
| Less than 50 | 1 | 2 | 3.5 |
| 50 - 100 | 2 | 4 | 7 |
| 101 - 150 | 3.5 | 7 | 10 |
| 151 - 200 | 4.5 | 9 | 13.5 |
| 201 - 250 | 5.5 | 11 | 17 |
| 251 - 300 | 7 | 13.5 | 20.5 |
| 301 - 350 | 8 | 16 | 24 |
| 351 - 400 | 9 | 18 | 27 |

CHLORINATION PROCESS

- 1 Add chlorine solution to your well.
For a drilled well, remove the cap, pour in the chlorine solution. If your well head is buried, you will need to excavate to the well cap, remove, pour in the chlorine solution. For a buried well head with an available air line hose, there are two methods: you can insert the air line into the container of chlorine solution and pump your well until all of the solution is consumed, or simply pour the solution into the air line. Always flush the air line out with clean water after chlorinating your well.
- 2 Attach a garden hose to an outside faucet and place the other end into the well. Turn on the outside faucet and allow the water to circulate for approximately 1 hour.
- 3 Open each faucet one at a time (inside and outside faucets, cold and hot water faucets, including baths and showers, run dishwashers, and flush toilets) until the smell of chlorine is apparent. Then, quickly shut them off. This will thoroughly distribute chlorine throughout the plumbing.

NOTE: During this procedure, chlorinated water permitted to enter your sewage system should be kept to a minimum, as excess amounts of chlorine may affect the biological activity of a septic tank system.

- 4 **Do not use the water**, and let it sit in the pipes for a minimum of 8hrs (overnight for example). A 24-hr period is recommended.
- 5 Place the end of your garden hose in an outside location where the chlorinated water will not run into a natural waterway (such as a stream, brook, lake etc.) or damage any desired vegetation, and should be directed away from your septic system. Allow the water to flow until the odour of chlorine is no longer apparent (generally, 2 to 3 hours). If you have a low yield well, be careful not to pump the well dry.

NOTE: During this procedure, the water may have the colour of tea, but should improve with time. Aeration screens in faucets, the cold-water inlet of washing machines, and pumps may become plugged with sediment. It's important to keep this in mind, especially if the pump is located in the well column. For a buried well, excavation to the well head may be required.

- 6 Turn on each faucet in the house (one at a time), and run the water until the odour of chlorine is no longer present. It is recommended that you do not drink the water during this flushing period. Once the flushing process is complete you may resume normal use of your water, keeping in mind that it may be two to three days before the chlorine odour and taste is completely gone.

NOTE: If you chlorinated your well to address a bacteria problem, you should have your well water tested at an accredited lab before consuming. To do this, you will need to collect a water sample about one week after you've chlorinated your system and

drop it off at the lab within 24 hrs of collecting the sample. Sample should be kept refrigerated until it is brought to the lab. In the meantime, find another safe source of water or boil the water for one minute before consuming it until test results show the water is free from harmful bacteria.

- 7 If the chlorination process results in a noticeable improvement in your water quality, but the problem redevelops after 2 to 3 weeks, repeat steps 1 to 6, using 2 to 3 times the amount of chlorine solution recommended for your water system. In addition, you should increase the time in which you do not operate your water system (step 4) to a minimum of 24 hours.

A FINAL NOTE

Depending on the characteristics of your well water quality, it may be necessary to chlorinate your well water system more than once a year. Chlorination may or may not improve your water quality, and in some cases, provide only a temporary, or short-term solution.

There are many household water treatment systems available that are approved by the National Sanitation Foundation. Look for a listing of retailers who carry these systems online.

WE'RE HERE TO HELP. FOR ADDITIONAL INFORMATION:

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