

Blanco-Pedernales Groundwater Conservation District

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A Do-It-Yourself Guide to Chlorinating Your Water Well

The Blanco-Pedernales Groundwater Conservation District receives frequent requests for information on how to chlorinate water wells. In an attempt to answer this question in a clear and easily understood manner, the District is providing this guide as a courtesy and convenience to well owners. Whether or not you chlorinate your well and how you go about are decisions you must make. The following chlorination treatment guidelines are those generally used by many well owners and professional well service companies. In most cases, these procedures will successfully sterilize your well of bacteria. The procedures are relatively simple, but can be hazardous. If you have any doubts about your ability to safely and properly follow these procedures, you are urged to contact a well service company for professional help. The District is not responsible for any injuries, problems, damages, or bacterial reoccurrences resulting from the use or misuse of this information

1. Obtain one gallon or more of ordinary household bleach (which is a form of chlorine). One gallon will generally suffice for wells up to 300-400' deep. Deeper wells or systems with large storage tanks will require additional quantities.
2. Remove the small well inspection plug on top of the well. For some wells, particularly for wells completed with pitless adapters and buried pressure tanks, there may be a smooth, rounded cap that has no inspection hole. In this case, try to remove the well cap, which is attached to the top of the well casing with small bolts. **If you remove the cap, do not bother any of the well equipment just below the cap.**

NOTE: Some wells may be equipped with unusual caps that provide no easy access. These may require professional help. If your well has such a cap, if you prefer to have professional assistance in chlorinating your well, or if you are not comfortable in doing it yourself, you are encouraged to contact your well service company.

3. Insert a funnel into the inspection hole or into the top of the well and pour the bleach down the well. If the well cap is off, make sure to avoid pouring the bleach directly on the pressure switch, pressure gage, or other well equipment near the top. It is OK to carefully move some of the wires around for easier access, but take care to not position them where they may interfere with reinstallation of the cap.
4. Connect a garden hose to an outside hose bib or faucet connection. Put the other end of the hose into the well or inspection hole and turn on the faucet. Let the water run down the sides of the well casing for several minutes in order to wash the bleach down the sides of the well. Then turn off the faucet and remove the hose from the well. If a hose is not available, then pour several gallons of water down the well. The idea is to wash the bleach down the sides of the well casing or well bore and get the bleach down into the water table.

5. Replace the inspection plug or well cap if you have not already done so.
6. **Warning: At this stage of the disinfection process, chlorine levels in your well are likely to be high. This could be a health risk to humans, pets, or plants. It may also be high enough to damage certain types of laundry. This will be a temporary situation, but to be safe, you should avoid using your well water until you complete this process and there is no discernable smell of chlorine.**

If possible, let the well sit unused for several hours, preferably a day or more in order to let the bleach blend with the water in the well bore as much as possible. Then turn on all faucets in the house, both hot and cold, and all the outside hose bibs, one at a time, until you can smell the chlorine at each faucet. Set each faucet to a slow stream of water and leave all of them on until the smell of chlorine is no longer present. This will help ensure that the entire system will be disinfected.

Some people who have concerns about running too much chlorine through their septic tank, or anyone who has a well with low pumping capabilities, may want to use the following alternative treatment method. Once the smell the chlorine can be detected at each open faucet or hose bib, shut off each tap and let the chlorinated water remain in the system at least twelve (12) hours, during which the water should not be used for consumption, laundry, etc. Upon completion of the holding period, turn on an outside hose bib (one that does not flow into the septic system) for several hours, or until the chlorine taste is diluted enough to be unobjectionable or undetectable. For a typical well this may take several hours. Then turn on the other faucets to drain the chlorinated water remaining in the house plumbing.

In either case, the procedure should only be done with someone present who can frequently monitor the water flow in order to prevent flooding or well problems. If flow becomes intermittent or stops entirely, turn off all faucets and check the well status. Some low producing wells may have to be closely monitored, and the purging of the chlorine may have to be done in gradual stages to allow the well to recover from the pumping demand.

7. This treatment should disinfect the well and plumbing system. If any problems persist that appear to be bacteria related, you may want to re-test for bacteria, but the well should be used for a week or two with no odor of chlorine present before re-testing. Note that re-testing the well with chlorine present will serve no purpose.
8. In some cases, one chlorination treatment will not be sufficient. Repeat the disinfection procedure as necessary. If you have attempted this procedure two to three times and bacteria are still present, permanent treatment may be required. Permanent treatment may include either a chlorine injection system or an ultra-violet light unit.
9. For peace of mind, you may want to consider a regular chlorination of your well every 1-2 years. In addition, any well service work that involves removal of the well cap, pump, pipe, etc, should be followed by a chlorination treatment.