

RECOMMENDED CHLORINATION PROCEDURE FOR WATER SUPPLY SYSTEMS

WARNING: Do not attempt to chlorinate your private well if the well pump or piping is connected to the well cap or if you have a flowing well or pressurized wellhead. A licensed pump installer or well driller should be contacted for pump installations of this type or in situations where you are unsure of the pump type. On occasion, during the process of chlorinating your well, damage to the well pump may occur. There is also a risk of electrical shock. If you have questions concerning the chlorination process or want to have it professionally done, it is recommended that you contact a licensed well driller or pump installer.

PROCEDURE

Chlorination is, in most instances, an effective means of removing contamination from a properly situated well of approved construction. Following correction of any well construction deficiencies, the water system may be chlorinated by the individual or, if he wishes, by a well driller or pump installer equipped to do the job. Directions for this process, using commercial laundry bleach, are given below as a step procedure. Each step in the procedure must be completed before moving to the next and each must be done to insure the process need not be repeated unnecessarily.

STEP 1: One gallon of 5% commercial laundry bleach (Hilex, Clorox, B.K. Solution, etc.) or 10 ounces of dry calcium hypochlorite (65-70% available chlorine) should be used for each 100 gallons of water contained in the well. Mix the bleach thoroughly with an amount of water equal to the amount of water contained in the well. The table below will help you in determining the volume of water contained in your well.

Casing Diameter in Inches	4	5	6	7	8
Gallons of Water Per Foot of Water Depth	0.7	1.0	1.5	2.0	2.6

STEP 2: Remove the well cap or seal from the top of the well casing. Submersible well pumps may be suspended from some types of well caps and well seals. It is recommended that a well driller or pump installer be contacted to chlorinate the well for these types of installations. If the well cap or well seal can be easily removed, pour the chlorine solution into the well. Care must be taken to prevent the chlorine solution from splashing and coming in contact with skin or eyes. There is also a hazard in mixing dry chlorine-base products because a violent reaction could occur in the confined space of a well.

STEP 3: Attach a hose to the faucet on the discharge side of the pump and wash down the walls of the casing with the chlorinated water from the well for about 30 minutes. This flushing not only disinfects the walls of the casing but also circulates the chlorinated water to all the pump and well parts.

STEP 4: Manufacturers of some water softeners recommend that the softener be bypassed during the chlorination procedure. Please consult your water softener manual for instructions. Open all faucets in the water system long enough to permit the filling of all the distribution piping with the chlorinated water and then close them. When the odor of chlorine can be detected at the faucet, it can be assumed that the piping to that point has been filled with chlorinated water.

STEP 5: Allow the bleach to act in the well and distribution for a period of 24 hours, then attach a hose to an outside tap and run the chlorinated water from the well to a point removed from the house, usually the roadside ditch. Allow the pump to purge the well for several hours or until the odor of chlorine can no longer be detected. Following this, the distribution piping should be flushed free of chlorine by opening all faucets.

Following chlorination, a week to 10 days should elapse before the system is again sampled. If bacteriological analysis of this sample reveals it to be free of contamination, a second sample should be obtained at a later date (preferably one to two months after the first sample date) to insure that the source of pollution has been eliminated and the system remains free of contamination.