Water Well Disinfection (standard chlorination procedure for private water wells)

Well disinfection is necessary in the following circumstances:

- When coliform "found" (total or E. coli) results are obtained from a water well sample.
- When any work is done to the plumbing or well system.
- When a well or the surrounding area has been flooded.

Note: Check to make sure the well is pumping clear water before chlorinating. If the water is turbid, run it until it is clear before chlorinating.

1. Locate the wellhead and remove the access plug or bolt so that the area within the well casing is exposed.

2. Using a funnel, pour in an appropriate amount of liquid chlorine bleach (Clorox, Purex, etc.)
   
   1/2 to 1 gallon of bleach per 100 ft. of well depth is the recommended approximate dosage. Greater amounts are recommended for excessively cloudy water or for hand-dug wells.

3. Using the nearest faucet to the well and a garden hose, allow water to run through the funnel into the well for two or three hours. This will circulate the chlorinated well water and improve the germ-killing action by allowing all fittings and equipment in the well to be exposed to the chlorine solution.

4. After the well water has circulated for a while, the garden hose and funnel may be removed and the access plug replaced. The disinfection process should be extended throughout the entire plumbing system.

5. To disinfect the remainder of the plumbing system, turn on the next available faucet and allow it to run until the bleach odor can be detected, then turn it off. Repeat this step throughout the plumbing system at each faucet, including 1 hot water faucet. Flush each toilet. Then, allow the chlorinated water to remain in the plumbing system over night, or for 24 hours if possible. During this time, the water should not be used at all.

6. After disinfecting the well and plumbing system, turn on the outside cold water faucet furthest from the well and let it run until the water is clear of any debris or color and bleach odor can no longer be detected. Then run each water faucet, one at a time, until the bleach odor can no longer be detected. Flush outside faucets first - you do not want to flood the septic system.

7. Submit another bacteriological sample to determine if the disinfection process was successful.

Keep in mind that a single disinfection may not be sufficient because certain well systems, particularly shallow wells, hand-dug wells, wells in fissured areas and old wells, are more vulnerable to contamination. Water from these types of systems should be checked by periodically submitting samples for bacteriological analysis. Continuous disinfection equipment should be considered for any water well with repeated samples positive for coliform organisms.

For further information, call:

City of Houston Health Department Lab 281.233.2563 or 713.558.3474
TCEQ (Texas Commission on Environmental Quality) 512.239.4691
Harris County Public Health and Environmental Services 713.439.6260
City of Houston Public Works and Engineering Water Quality 713.842.4000

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