HOWARD COUNTY HEALTH DEPARTMENT

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WELL AND WATER SUPPLY SYSTEM DISINFECTION

The purpose of well chlorination is to kill bacteria which may be introduced into wells during well drilling, pump installation and plumbing activities. Chlorination should not be expected to provide any permanent solution to a contamination problem since the process only destroys existing bacteria. If a sample taken after a well is chlorinated shows the presence of bacteria, there may be a new contamination occurring, and possibly problems with the groundwater, well or plumbing exists.

Since chlorine kills all bacteria, if chlorine is found in a water sample, no bacterial analysis of that water can be conducted. To avoid delays in testing, it is important to carefully chlorinate a well without leaving excessive chlorine residuals.

Chlorine is available in liquid (household or commercial bleach) and solid forms that are available from swimming pool supply firms. Liquid bleach may float in a well, while granular solid chlorine may dissolve completely without going all the way to the bottom. Chlorine tablets may sit on the bottom dissolving slowly, often for extended periods of times. The most effective chlorination technique is to use a combination of liquid and solid chlorine. In wells over 225 feet deep, it is best to use both granular and tablet forms as well as liquid bleach.

INSTRUCTIONS:

1. Put the appropriate amount of solid chlorine into the well.
2. Mix the liquid bleach with 5 gallons of water. Pour into the well, rinsing the wires and casing.
3. Attach a garden hose to an outside hose bib, run water into the well for a minimum of ½ hour, or until bleach odor is detected from the hose.
4. Turn on each faucet, flush each toilet, run each shower, washing machine, and dishwasher until bleach is smelled at the fixture. Turn the water off.
5. Let water sit overnight.
6. Flush chlorinated well water onto the driveway. You should attempt to minimize contact between the chlorinated water and your lawn and/or garden as much as possible.
7. Make arrangements with a private certified water testing laboratory or the Health Department to resample the water supply.

WARNING:

DO NOT ALLOW PEOPLE TO USE THE CHLORINATED WATER FOR DRINKING, BATHING, OR LAUNDRY.

BE CAREFUL NOT TO RUN THE WELL DRY! FLUSH IN SMALL AMOUNTS IF YOU HAVE ANY CONCERN! (i.e. Flush for 20-30 minutes, then turn the water off for 30-60 minutes)

DO NOT FLUSH CHLORINATED WATER THROUGH THE SEPTIC SYSTEM, AS CHLORINE MAY DAMAGE IT!

TOO MUCH SOLID CHLORINE, ESPECIALLY TABLETS, CAN LEAVE CHLORINE RESIDUAL IN A WELL FOR MONTHS WHICH WILL PREVENT SAMPLING AND APPROVAL OF THE WELL!

Depth of Water In Well	**Quantities of Pool Chlorine Granular and/or Tablets (70%)**		**Quantities of Home Laundry Bleach (5%)**
10 Feet	**1 Tablespoon**	**or**	**1 Cup**
20 Feet	**3 Tablespoons**	**or**	**1 Cup**
40 Feet	**6 Tablespoons**	**or**	**2 Cups**
80 Feet	**9 Tablespoons**	**or**	**1 Quart**
100 Feet	**4 Ounces**	**or**	**1 ½ Quarts**
150 Feet	**6 Ounces**	**or**	**2 Quarts**
180 Feet	**8 Ounces**	**or**	**2 ½ Quarts**
225 Feet	**12 Ounces**	**or**	**3 Quarts**
250 Feet	**16 Ounces**	**or**	**4 Quarts**

****>250 INCREASE AMOUNTS PROPORTINATELY**

BEST PRACTICE:

To achieve optimum sanitation, refer to the above chart. It is best to use ½ of quantity of solid pool chlorine shown plus ½ of the liquid volume shown for a particular depth of water.

NOTE:

If you only have swimming pool chlorine, mix half of the listed amount in 10 gallons of water and use it for #2 of the instructions.

Example 1

Well is 125 feet deep. The water level is 25 feet down. The water depth is 100 feet. You may use 1½ quarts of liquid household bleach or 4 oz. of pool chlorine. The best practice is to use 0.75 quarts of bleach and 2 oz. of granular pool chlorine.

Example 2

Well is 250 feet deep. Water level is 25 feet down. The water is 225 feet deep. You may use 12 oz. of pool chlorine or 3 quarts of liquid bleach. As granular chlorine may dissolve before it reaches the bottom, the best practice may be to use ½ liquid bleach plus ¼ granular pool chlorine plus ¼ pool chlorine tablets.