

## SHOCK DISINFECTION OF A DRILLED WELL

## **MATERIALS NEEDED:**

• Clean 5 gallon bucket

Enough hose to run from an outdoor/frost-free spigot to the well head

Household bleach (5.25% to 6 % strength)- UNSCENTED

(The amount of bleach needed is based on 1.5 quarts of bleach for every 100 foot of water standing in a 6" cased drilled well).

## PROCEDURE:

- 1. Mix the appropriate amount of bleach (for example, 3 quarts for a well with 200 feet of standing water) in the clean bucket with 4+ gallons of water. This will provide you with a large working volume.
- 2. Remove the well cap from the wellhead being careful not to drop any materials down the well casing. Carefully move all the wire connections to the side and out of the casing.
- 3. Pour the bleach/water down the well casing (Do not pour on wire connections).
- 4. Connect a hose to either an outdoor faucet or to a frost-free hydrant near the well. Stick the end of the hose down the well casing (far enough so that it will not pull out). Turn on the water and allow it to re-circulate until you can smell bleach coming out of the hose.
- 5.\*\*\*If there is no outside spigot, then pull the water through the household plumbing until you can smell the bleach. Turn off all water and follow instructions below.
- 6. Turn off the spigot and go into the house and turn on each spigot and let it run until you smell the bleach and then turn each one off. DO NOT ALLOW WATER TO RUN INDEFINITELY (If you have an onsite sewage disposal system you do not want to flood the drain field and/or kill the bacteria in the septic tank with large amounts of bleach).
- 7. Allow the water to stand in all plumbing (undisturbed) for at least 8 hours (or overnight). If possible, allow the water to remain undisturbed in the pipes for 24 hours. This is the "contact time" and will disinfect the column of water in the well and in the plumbing as well as the fixtures in the house.
- 8. To flush system connect the hose to an **outside spigot** and allow the water to run (away from any drain field lines or septic system components) until all traces of bleach are gone from the water. (Your testing lab should be able to provide you with test packets to test for the presence of chlorine (bleach). Do not flush system through inside faucets; this could damage your drain field or septic system. Do not run on plants if bleach smell is strong. If it is a low yielding well and there are concerns about running the well dry, run the well for short periods and shut off for recovery.
- 9. Once ALL of the bleach is gone from the system you may take the water sample. It is suggested that you take the sample from a fixed (non-swiveling) spigot that has no plastic parts. Sometimes the kitchen faucet (swiveling) and fittings are difficult to disinfect and the results may be affected.
- 10. To disinfect the fixture, swab with alcohol (be sure all aerators/screens and washers have been removed and be sure it is a metal fixture). See your laboratory's sampling instructions for more specifics. Allow the water to run for about 5 minutes (or until the pressure tank has emptied and refilled with fresh water) and then take your sample, BEING VERY CAREFUL NOT TO TOUCH THE INSIDE OF THE BAG/BOTTLE.
- 11. Water samples should be submitted within 30 hours to your local lab. Contact your laboratory for specific handling/delivery instructions.