

## **DISINFECTING YOUR PRIVATE WATER WELL**

Please read full instructions before beginning the disinfection process.

For every 200 feet of depth you will want to add half of a gallon of **UNSCENTED HOUSEHOLD BLEACH. DO NOT ADD UNTIL THIS PROCEDURE SAYS TO.**

If you do not know the depth of your well, contact the Missouri Department of Natural Resources (DNR) Geological Survey Program at 573-368-2100 and request a well information report for a fee or visit the DNR Well Information Management System (WIMS) at [www.dnr.mo.gov/mowells](http://www.dnr.mo.gov/mowells) where this information is available to the public. Keep in mind that the owner name would be the individual that had the well drilled. Using the latitude/longitude search, all you need are your GPS coordinates and you can do a several mile radius search. If your well was installed before 1986, there may not be information available on your well; however, an estimate of the depth of your well can be determined by comparing the average depth of documented wells in your area.

If you do not feel comfortable disinfecting your well on your own, contact a licensed well driller for assistance. Visit the DNR Well Installation Contractors database at [www.dnr.mo.gov/mowells](http://www.dnr.mo.gov/mowells) and search by county to find one near you.

**NOTE:** Before doing this procedure be sure to bypass the water softening unit and remove any in-line filters. Once the procedure is completed (bleach is flushed from system) you can reinstall or change out (get a new filter) the in-line filter, and turn the water softener back on.

### **SHOCKING AND HOLDING THE BLEACH SOLUTION IN THE SYSTEM**

- 1) Remove as much water (**at your kitchen sink**) as necessary for general use (cooking, coffee) because you will need to hold the bleach solution in the system either overnight, or for at least six to eight hours during the daytime. You will also want to **remove any filters** (paper type, activated carbon, etc.) that are in the system's main water line before starting this procedure and bypass any softening or reverse osmosis (RO) units. Refer to your owner's manual to perform bypassing of a particular system.
- 2) Fill a five gallon bucket about three-fourths full with water and add the appropriate amount of unscented household bleach. Diluting the bleach will help avoid the corrosion of well components.
- 3) **TURN OFF THE ELECTRICAL POWER TO THE WELL PUMP.** Once you have turned the power off, go to the well head and remove the casing cap. Doing this will allow you to look down into the well's casing. This is a great opportunity to inspect your wellhead for any damage like cracks, damage to wires, missing vent screens, or a loose well cap.
- 4) With a garden hose close by (for recirculation purposes) you should pour the bleach solution into the well. Avoid getting any bleach solution on the well cap components and wires.

- 5) **TURN THE ELECTRICAL POWER TO THE WELL PUMP ON.** Be careful, the wires in the casing are now live. Turn on the water hose and rinse down the interior side of the casing with the water from the hose really well, allowing the water to run down the well's casing and back into the well.
- 6) Turn the water off and at the hose and **TURN OFF THE ELECTRICAL POWER TO THE WELL PUMP.** It is now safe to replace the well casing cap and turn the electrical power to the well pump back on.
- 7) Go into the house and at each individual sink turn the cold water tap on (**one sink at a time**) until you smell bleach and then turn it off. You can flush the toilet until you smell bleach. You should also run some cold water into the washing machine until you smell bleach. If you have any garden hose hydrants that come off of the house you will want to turn them on until you smell bleach and then shut them off. **AFTER DOING THIS, DO NOT RUN WATER FROM ANY OF THESE SOURCES FOR SIX TO EIGHT HOURS. THIS LOCKS THE BLEACH SOLUTION UP IN THE SYSTEM SO IT CAN PROPERLY DISINFECT!**

#### **OPENING THE SYSTEM AFTER SHOCKING THE WELL**

- 1) After waiting at least six to eight hours, go to the well and turn on the garden hose until you do not smell any bleach and then shut off the hose. **Keep in mind this bleach water can kill vegetation.**
- 2) Go into the house and open the cold water taps until you do not smell any bleach. Flush the toilets. Fill the washing machine with cold water until you no longer smell bleach in the water and then dump the water. **The first laundry load should probably be whites, just in case any bleach trapped in the cold water fed to the water heater would be eliminated from the system.** Open any hose bib(s) on the outside of the house until you no longer smell bleach. Once all this is done you should have good smelling and tasting water.
- 3) You can repeat this procedure as often as you feel it is needed; however, if the problem persists then you might decide to contact a well driller and discuss your problem with them. **Most people perform this bleach shocking procedure when they change the clocks for daylight savings. Some people annually shock their well as close to the middle of the year as possible. You can choose what works best for you.** If you have any questions please call the Missouri Department of Health and Senior Services at 573-751-6102 or toll free at 866-628-9891.

**Do not dump bleach water into your septic system.** Bleach water can sometimes kill the bacterial action found in your septic tank, so flushing as much of the bleach water as possible onto the ground (**surface area**) helps to limit this upset if any.