

Disinfection Procedure

Coliform bacteria are a broad group of bacteria found on the earth's surface. The presence of coliform bacteria in a water system is an indication that contamination has occurred and there is a possibility that disease-causing bacteria are present.

If you have received a positive coliform test result, it may be due to construction or maintenance work such as pump replacement, plumbing repairs, or by some other means where bacteria from soil or vegetation have temporarily contaminated the well water. Usually coliform contamination in a well is a temporary problem and can be eliminated by disinfecting and flushing the entire system according to the following procedure.

1. Add 1 gallon of freshly opened household bleach to the well. To gain access to the inside of the well casing you will need to determine which of the two main kinds of well caps or seals your well has.
 - If it has a raised or rounded and lopsided dome held on by a ring of small bolts, it should be fairly easy to access by removing these bolts.
 - If it has a flat, round iron plate the same size as the well casing and is split in the middle with four bolts holding it on, **do not try to remove these bolts**. There are three other features to this type of seal; a water pipe through the center, a hole with electrical wires going through into the well and, a ½ or ¾ inch threaded hole where a venting device should be screwed in. Often this vent hole is erroneously left open or has a pipe plug instead of a venting device. Remove whatever is plugging the vent hole and use a funnel to pour in the bleach
2. To be sure the bleach mixes thoroughly with the well water, attach a hose from the pump or a service line and run water into the well through the same hole in the top of the sanitary seal used to add the bleach.
3. When you can smell the bleach from the hose, turn off the water. One at a time, turn on each faucet (indoor and outdoor) served by the well until you smell the bleach, and then turn it off. Allow the bleach to remain undisturbed in the system for 8 hours (overnight).
4. Thoroughly flush the system. Purge outside faucets first and inside ones last to minimize the amount of bleach entering the septic tank.
5. When you can no longer smell the bleach, resample for total coliform bacteria, following sampling instructions. *For real estate transactions, one must wait 5 days after bleaching before taking the resample.*

Warning: Bleach used in the process must be flushed thoroughly from all services lines. Remember that bleach contains chlorine and chlorine is harmful to aquarium fish. Also, if the system has a water softener, do not leave strong bleach water in the softener for a long period of time. In this situation one should probably seek advice as to what to do about the softener.

If repeat samples are positive for total coliform, disinfect the well again by following steps 1-5 above. Sometimes it is necessary to disinfect a well more than once in order to eliminate coliform bacteria from the system.