

County of Yolo

DEPARTMENT OF COMMUNITY SERVICES

Environmental Health Division

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BASIC WELL DISINFECTION PROCEDURES

After well construction, repairs, surface flooding, or other episodes of potential bacteriological contamination, a drinking water well should be adequately disinfected and tested. The following procedures may be used for minor contamination episodes. If the contamination is severe or persistent please refer to the bulletin "Optimized Well System Disinfection Procedures."

- 1. Repair all well or system defects, which could potentially cause the well to become contaminated. With exception of a screened casing vent, the well casing should be tightly sealed to exclude such things as insects, rodents, animal excrement, dust, or contaminated water.
- 2. If the water is cloudy, pump the well until the water is clear.
- 3. Add a sufficient amount of household bleach or chlorine directly into the casing access or casing vent pipe. For every 100 feet of water, use 2.5 cups of chlorine/bleach if the casing diameter is between 6 inches. Use 7 cups if the casing diameter is 10 inches. If the well depth is not known, use one gallon (16 cups).
 - *Do not use stabilized pool chlorine or <u>scented</u> household bleach. Do not use excessive amounts of bleach. Excessive bleach in a well is corrosive and can extend the flushing period to weeks.
 - **Household bleach is usually a 6% concentration (inexpensive bleach can be 3%), while pool chlorine can typically be found in strength between 10% and 12%. All of this is sodium hypochlorite, and works the same in sanitizing your water.
- 4. Mix the chlorine/bleach by turning the pump on and off several times.
- 5. Disinfect the pipelines of the house and yard by opening faucets and then shutting off each faucet when the smell of chlorine/bleach is present.
- 6. If possible, wash down the interior of the well casing by connecting a garden hose to a nearby faucet and injecting the chlorinated water back down the well via the well casing vent.
- 7. Shut down the water system for 8 hours or more.
- 8. After the shut down time is completed, flush the entire system of all chlorinated water by turning on faucets. If there is *absolutely* no chlorine/bleach detected, then the system is ready to be tested for coliform bacteria. Use a pool or spa test kit to check for any remaining chlorine/bleach.

BEFORE the well water is used for drinking, have the system tested for the presence of coliform bacteria. If the system tests negative for coliform bacteria, the water is considered safe to drink.

Note: The Yolo County Environmental Health approval consists of two negative coliform tests with minimum 24 hours apart if the water system was previously positive for coliform bacteria.

PRECAUTIONS

Handle chlorine/bleach safely according to the manufacturer's instructions.

Do not drink the water during the disinfection process. Do not dispose of chlorinated water in areas harmful to fish, animals, or vegetation. Do not dispose of excessive water into the septic system.

If you have any questions regarding disinfection of water systems, contact our office at (530) 666-8646.