WELL DISINFECTION PROCEDURES

The bacteriological quality of domestic water is determined by testing for coliform bacteria. Coliform organisms are indicators of contamination, which may originate from human, animal, or other sources. The current standard for acceptable drinking water is less than 1.1 (<1.1) Total and Fecal Coliform. Drinking water that does not meet bacteriological standards may not necessarily result in illness, but the possibility exists. The finding of coliform bacteria should not be ignored and it is recommended that you follow the water well disinfection procedures below.

1a. If you have the type of storage tanks which can be opened, introduce two (2) quarts of household bleach (Clorox, Purex) per 1000 gallons of storage into each tank. Then proceed with step #2.

1b. If you have the type of tanks which cannot be opened, drain all tanks in the system, including pressure tanks. Then proceed with step #2 below. (If you have an extremely large storage tank, or a well that produces a very small volume of water, there may be alternatives. Call the number listed at the bottom of this sheet for further information).

2. Introduce one (1) gallon of household chlorine bleach into the well casing.

3. After introducing the chlorine bleach, let it sit in the well for two (2) hours to thoroughly mix with the water before being pumped through the system. Do not run the water until the two (2) hours have passed.

4. Starting with the faucet closest to the well, flush the line until chlorine can be detected by smell or by use of a chlorine test kit. Continue with each outside faucet until chlorine is detected at all outside faucets. Then flush each inside faucet until chlorine is detected. This will insure that all pipes within the system will be disinfected in addition to the well.

   It is very important that you run the bleach through every line that is connected to your system. Leaving even one (1) line out of the chlorination procedure may mean inadequate disinfection which may then result in having to repeat the chlorination and testing procedure.

5. Do not run the pump or the water for the next twelve (12) hours, in order to allow time for the chlorine to kill the bacteria.

6. Flush all lines and tanks, and run the pump until the odor of the bleach can no longer be detected. If you have a pool test kit, test your water for residual chlorine. Flush the outside faucets first. Do not flush large volumes of highly chlorinated water into an individual sewage disposal system (septic tank system). Also avoid flushing highly chlorinated water into ponds, streams, or onto lawns or into flowerbeds in order to prevent damage to plants, lawns, and animals.

7. Forty-eight (48) hours after completing the above procedure, resample the system to make sure that the system is free of bacteria.

8. If the resample indicates that coliform organisms are still present, then introduce one (1) cup of nonstabilized granulated chlorine into the well casing. The granular type of chlorine can usually be purchased from a pool supply store, and should be packaged as “64% to 70% calcium hypochlorite”. Once the granular chlorine has been placed in the well, add at least 5 gallons of water to flush any granular chlorine that may have adhered to any wiring, piping, or casing. Then repeat steps 3 through 7.

If you have any questions, please call the Fresno County Department of Public Health, Environmental Health Division at (559) 600-3357.