

**ERIE COUNTY DEPARTMENT OF HEALTH  
ENVIRONMENTAL HEALTH SERVICES**

**DISINFECTION OF WELLS AND SPRINGS**

\* Wells that were covered by flood waters should be run to waste until the water runs clear prior to disinfection. For some wells this may take a few minutes for others this may take several minutes or longer.

Well disinfection can be conducted by a New York State Department of Environmental Conservation certified well driller. If you decide to disinfect your well, you should follow the procedure below carefully.

1. Mix two quarts of chlorine bleach, such as Clorox™\* in ten gallons of water.
2. Pour the solution into the well or spring, then turn the power to the pump off. Once the chlorine solution has been poured into the well the following items are recommended:
  - a. If you have a steel pressure tank:
    - i. Drain all the water from the pressure tank by opening the drain valve found at the pressure tank “tee” fitting. Turn the power to the pump back on and refill the tank with the highly chlorinated water from the well. Bleed all the air out of the top of the tank (open the valve or remove the plug), so that the entire tank is filled with the chlorine solution. When the entire pressure tank is filled with chlorine solution, shut off the pump and reseal the tank.
    - ii. Allow the well or spring to stand idle for at least six hours (preferably twelve to twenty-four hours). Then pump it to waste away from grass and shrubbery. This should be done through a hose attached to a hose bib. **NEVER FLUSH THE CHLORINE SOLUTION FROM THE WELL INTO THE ONSITE WASTEWATER TREATMENT SYSTEM.**
    - iii. After the well disinfection procedure is finished and the chlorine solution has been flushed from the well, turn off the power to the pump, and drain the chlorine from the pressure tank as per the instructions above. Turn the pump back on and refill the pressure tank with fresh clean water from the well. This will restore the 50% air to water volume you need.
  - b. IF you have a bladder pressure tank:
    - i. Drain all the water from the pressure tank by opening the drain valve found at the pressure tank “tee” fitting. Turn the power to the pump back on and refill the tank with highly chlorinated water from the well.
    - ii. After you are finished and the chlorine has been flushed from the well, turn off the power to the pump and drain the tank as per the instructions above. Turn the power back on and let the tank fill up to the normal pressure.

- c. Bypass all water treatment units.
    - i. Cartridge filter: Remove the filter cartridge and put the unit back together and disinfect the housing. Replace the cartridge with a new one once the chlorine has been flushed from the system.
    - ii. Water Softeners: Disinfect the water softener either just before or immediately after the water system has been disinfected. To disinfect the softener add  $\frac{1}{4}$  to  $\frac{1}{2}$  cup of bleach to the small fill tube in the large brine tank and do a manual recharge (if you are unsure how to do this, please contact your water treatment equipment supplier).
  - d. Hot water tanks:
    - i. While the power to the pump is off and you are draining the pressure tank, if you can, turn off the heater and drain and flush the sediment from the hot water tank.
    - ii. Bring the highly chlorinated water from the well into the water heater.
    - iii. After the chlorine has been flushed from the well and while you are draining the pressure tank, turn off and drain the chlorine solution from the hot water tank. Refill the water heater with fresh water and turn it back on.
3. Mix two more quarts of bleach in ten gallons of water and pour this chlorine solution into the well or spring.
  4. Pour the solution into the well or spring while it is being pumped. Keep pumping until chlorine odor appears at all taps. Then close the taps and stop the pump.
  5. Allow the water system to stand idle for at least six hours (preferably twelve to twenty-four hours). Then flush the system to waste, away from grass and shrubbery. Flush through a hose attached to an outdoor hose bib until the chlorine odor is no longer detectable. **NEVER FLUSH THE CHLORINE SOLUTION FROM THE WELL INTO THE ONSITE WASTEWATER TREATMENT SYSTEM.** After flushing from a hose bib, you should then flush the remaining taps in the house until the chlorine odor is no longer detectable.

\*Chlorox™ and other bleaches containing **5 ¼% available chlorine** can be purchased in most drug stores, grocery stores and supermarkets.

NOTE: This procedure is to remove bacteriological contamination in the well casing and/or piping in the house; the disinfection procedure is no assurance that the water entering the well or spring is free of pollution.

If further information is needed, please call the Erie County Department of Health at (716) 961-6800.