## Will County Health Department Environmental Laboratory 501 Ella Ave Joliet, IL 60433 (815)727-8517

## Disinfection of Private Water Wells:

Enclosed is a copy of the bacteriological analysis recently conducted on a water sample collected from your well. The analysis indicates that your well water is unsatisfactory for drinking or culinary purposes. Based on this analysis, the water from your well should not be used for drinking, washing of food, brushing of teeth, or bathing of babies, or bathing if open wounds present until it has been proven to be of satisfactory bacteriological quality.

The following procedure can be extremely helpful in the disinfection of your well. This procedure should also be used for the disinfection of new wells or following the repair of existing wells.

- 1. Check the well seal and vent to be certain of good, tight construction. Replace any worn or damaged parts.
- 2. Remove the well seal. Mix 1 gallon of ordinary household chlorine bleach with 3 gallons of clean water in a clean bucket (if bleach comes in contact with skin or clothing, rinse immediately). Pour this solution directly into the well casing, making sure that the inside of the casing pipe is rinsed with the bleach solution. With the use of a clean garden hose, re-circulate the chlorinated water back into the well casing for 10-15 minutes. This process will disinfect the well. Replace the well seal and be sure the connection is watertight.
- 3. Turn on each water faucet (including your utility sink) in your home and let them run until you can smell the chlorine bleach at each tap.
- 4. Turn off the taps and allow the solution to stand in the water lines several hours or overnight.
- 5. The following morning connect a garden hose to an outside tap and run the water into the roadside ditch until the odor of the bleach has disappeared. Next, open each tap in the house and let the water run until the odor of the bleach has disappeared.
- 6. Wait 3-5 days before taking a new sample and bringing it to the laboratory or a branch office. If there is any chlorine present in the sample, the laboratory will not run the sample and the sample will be declared invalid. Mark the new sample as a Repeat on the requisition form.

All water from private wells should be analyzed for bacteria at least once every year. Sample bottles for this purpose are available at the Will County Health Department Environmental Health Lab from 8:30 am to 4:30 pm and the branch offices from 8:00 am to 4:00 pm Monday through Friday.

If further information is desired, please do not hesitate to call upon this department. For your convenience, members of the Environmental Health staff are available for consultation between the hours of 8:30 am and 4:30 pm Monday through Friday, excluding holidays.

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**Description of test:** The Will County Health Department Laboratory has tested your water for the presence or absence of indicator bacteria called "Coliforms." There is no simple test for the presence of actual disease producing bacteria.

Why test for Coliforms: Coliform bacteria are normally present in the intestinal tract of humans, animals, and birds. Coliform bacteria are found in large numbers in sewage. They are also found in surface water and in top soil or rock. If found in drinking water they usually indicate that contamination of some kind is entering the supply. New or recently repaired wells or water systems have coliforms present until the well pump and piping system have been adequately disinfected.

**How serious is this:** If the well is open for surface water, shallow ground water, or sewage to enter the water supply then actual disease producing bacteria may enter the water supply as well. Intestinal diseases that may be transmitted by contaminated water are diarrhea, dysentery, infectious hepatitis, and typhoid fever. Also, parasitic intestinal worms and amoebic cysts that cause dysentery may be present in contaminated water.

## What to do if the water is contaminated:

- 1. Abandon the water supply for a water supply of known safety or bring the water to a rolling boil for several minutes before use until improvements have made the supply safe. Boiled water may be kept safely in boiled glass jars or bottles with tight covers.
- 2. If the well is satisfactorily located but is not of proper construction, it should be reconstructed in an approved manner and disinfected properly to obtain safe water.
- 3. If the well is not properly located, it should be relocated and reconstructed in an approved manner whereby it should not be subject to possible contamination and should provide safe water.

It is the recommendation of this Department that if you have any doubt that your well is not of proper construction or of proper location, you should contact your well driller or representatives of this department at (815)727-8490.

For your convenience, members of the Environmental Health staff are available for consultation between the hours of 8:30 am and 4:30 pm Monday through Friday, excluding holidays.