CATTARAUGUS COUNTY HEALTH DEPARTMENT

1 Leo Moss Drive, Suite 4010 Olean, New York 14760-1154 (716) 701-3386 (716) 938-2474 (Little Valley)

DISINFECTION OF PRIVATE WATER SUPPLY SYSTEMS

Note: Before disinfecting inspect your well to determine that it is properly developed and protected (i.e. casing not cracked, casing pipe extends 18 inches above ground, pitless adapter side seal, secure well cap, minimum 100 feet separation from all sources of contamination, surface water diverted away, etc.). Any deficiencies noted should be corrected before disinfection. For sources influenced by surface water (i.e. springs, dug wells) consideration must be given to installing continuous disinfection equipment and proper construction, or drilling a new well.

- 1. If you are disinfecting a new well for the first time, run the pump until the water appears clear or minimum 30 minutes, whichever is longer. Then flush all plumbing.
- 2. In a 5 gallon pail mix 4 gallons of water with 1 gallon standard chlorine laundry bleach (containing no scents or additives). Empty the bucket into your well, spring or other source of water supply.
- 3. From an outside faucet run a hose to the well and let it run onto the ground until a strong chlorine odor appears. Then thoroughly flush the inside of the well for 10 minutes, rinse the cap and secure it tightly onto the casing. Systematically open each faucet or tap in the house plumbing (including flushing toilets) until a chlorine odor is noticed at each location, then close.
- 4. Allow the chlorine to remain in the system for at least 12 hours.
- 5. At the end of the 12 hours, open an outside faucet and let the water run onto the ground until you cannot notice the chlorine odor. Then flush the remaining pipes in the house. (Note: Do not drain all strongly chlorinated water into your septic system as it will kill the needed bacteria in the septic tank.)
- 6. Notify the Health Department after the disinfection has been completed and all chlorine has been removed so the system can be resampled.

<u>IMPORTANT:</u> By following these steps you have <u>temporarily</u> disinfected your water system. If your well or spring is not safely protected the raw water will contain bacteria, contamination will occur again, and continuous disinfection equipment should be installed. Contact the Health Department office in your area for a sanitary survey of your water supply if you are not sure your system is safe.

INTERPRETING THE RESULTS OF MICROBIOLOGICAL ANALYSIS

Water is said to be microbiologically "contaminated" when laboratory analysis reveals the presence of microorganisms which are members of the coliform group of bacteria.

While the coliform organisms which are analyzed are generally not harmful themselves, their presence is evidence that polluted water has found its way into the water supply and the supply may be contaminated with organisms which can cause disease. The presence of E. coli bacteria in the water is serious because it is associated with sewage or animal waste. Drinking water is considered "potable" only if no coliform bacteria are present.

<u>AS A TEMPORARY MEASURE</u>: Water contaminated with coliform organisms can be disinfected before consumption by <u>EITHER</u>:

- 1) Boiling for at least two minutes <u>OR</u>;
- 2) Mixing five (5) drops of liquid chlorine bleach to one gallon of water and allowing it to stand for 30 minutes. (NOTE: Groundwater quality can vary widely. If the chlorine taste is too strong with five drops, the number of drops added might be reduced.)

If you have any questions, contact the Health Department representative in your area:

OLEAN - (716) 701-3386 LITTLE VALLEY - (716) 938-2474

If the bacteriological analysis of the sample of water collected from your water supply indicates that there is contamination present, it is recommended that you disinfect the water supply in accordance with the instructions on the reverse side of this sheet.