

490 East Industrial Park Drive, Manchester, NH 03109
 120 York Street, Kennebunk, ME 04043
 Aquarian Analytical, 153 West Road, Canterbury, NH 03224

DISINFECTION OF WELLS

Newly constructed wells and those in which construction changes have been made should be disinfected before being used. The disinfection of a water supply that has become contaminated and unsafe because of its close proximity to a septic system will only yield a temporary disinfection; relocation of the contaminating source or of the well is essential. Similar, temporary results will be obtained if the well or spring is being contaminated because of inadequate construction. Improvements in the well construction must be performed before subjecting the well to the disinfection procedure outlined below.

Have separate water for drinking purposes during this time. Do not shower with the water as it will burn eyes and skin when the chlorine is most concentrated. **MAKE SURE ANY WATER TREATMENT EQUIPMENT IS SET IN BYPASS DURING CHLORINATION AS IT MAY BE DAMAGED BY THE CHLORINE.**

1. DETERMINE THE VOLUME OF WATER IN THE WELL.

a. **Artesian / drilled wells** are typically 6” in diameter and contain approximately 150 gallons per each 100 feet of water in the well.

Dug / Shallow wells – determine the volume of water in the well as follows:

WELL DIAMETER IN FEET	GALLONS PER FOOT OF WATER
2	24
3	53
4	94
5	147
6	212
7	288
8	377
9	477

2. **For dug wells**, remove any foreign matter from the well. Pump the old water from the well and clean Thoroughly removing any bottom / side accumulation of debris.

3. Add chlorine to the well in the following amounts:

- If using liquid household bleach (5.25% available chlorine) such as Clorox. Use approximately 1 quart of bleach per 100 gallons of well water.
- For deep wells or wells producing very high amounts of water, granulated calcium hypochlorite (70%) such as used for swimming pools may be used for improved results. Approximately 3 ounces per 100 gallons of water is recommended. Liquid shock chlorine may also be used. If the liquid shock is at a 15% concentration, then use about 1 pint (16oz) per 100 gallons of water in the well.

***It is better to overdose than under dose.**

4. After adding chlorine, turn on an outside faucet and let water run until a **STRONG** odor of chlorine is noticed.

CHLORINE WILL MIX MORE RAPIDLY IF AN OUTSIDE HOSE IS RUN INTO THE TOP OF THE WELL IMMEDIATELY FOLLOWING THE ADDITION OF CHLORINE. REMOVE THE HOSE WHEN A STRONG ODOR OF CHLORINE IS DETECTED. If little or no odor is detected, more chlorine is probably

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needed.

5. Then turn on all inside faucets and flush toilets just until a chlorine odor is detected at each location. Then turn off faucets and **keep system closed for 12-24 hours**.

6. Flush the chlorine out of the well through an outside faucet/garden hose until the odor of chlorine is gone. This may take several hours to all day. The well should be flushed with the outside spigot turned on approximately ½ way. Flushing with the spigot all the way open might over work the well pump and cause it to overheat. In addition, prior to flushing the well, it should be determined that the well makes enough water to support several hours of running at approximately 2-4 gallons per minute. Wells that do not generate this much water may pump dry, which can cause damage to the well pump.

7. Once the chlorine odor is gone at the outside spigot, flush all the inside faucets and toilets to remove the chlorinated water from the water pipes. When the chlorine is DEFINITELY gone from the entire system, the Coliform / E.coli Bacteria should be checked at this laboratory to make certain that disinfection was successful. If time permits, it is recommended to use the water for a week or more under normal conditions (after the chlorine is gone) prior to retesting the water for Coliform / E.coli bacteria. If time does not permit this, it is required at a minimum that the water is absolutely chlorine free prior to retesting.

Please contact us should you have any questions:

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