## Section II

## PRIVATE WELL WATER TESTING

In Pound Ridge, there is no public water supply system. Your water comes from a private well. You may have water delivered to your home to use for drinking or cooking, but the water you use to shower, clean dishes, do laundry, and brush your teeth is probably from your own well. As a private well owner, it is your responsibility to maintain the well and your water supply. A simple water test will tell you what is in your well water and what to do to solve potential problems.

Well maintenance and regular testing of the water is an important part of home maintenance and should be routine. (Click here to go to <u>Section III</u> for more information on well maintenance and <u>Section IV</u> for information on water treatment systems). Under local law, the well owner is the only one responsible for testing and maintaining a private well; the United States Environmental Protection Agency, New York State Department of Health and Westchester County will not test private wells or provide treatment systems if any primary standards are exceeded. You are only required to sample your well and meet certain drinking water standards when a new well is installed or the house is for sale.

Westchester has a private, well-water testing law (Local Law 7 of 2007, Chapter 707).

- A private well owner must test his or her wells used for drinking water according to the following guidelines and at specified times:
  - At the time of a signed contract for sale
  - On a regular basis for leased property (at least every 5 years)
  - Prior to the use of a new well or if the well has not been in use for 5 years
  - Note:These guidelines do not apply if more than 5 connections are hooked up to the well.

- Use of a Certified Laboratories for testing is required. There are 8 potable water laboratories certified by Westchester County (see <u>Section V</u>). The laboratories will send someone to your property to conduct the sampling.
- According to the Private Well-Water Testing Law, you must test for the following contaminants:
  - Primary contaminants: Primary contaminants can potentially cause health problems: Bacteria (total coliform); nitrate, arsenic, lead, vinyl chloride, MTBE (methyl tert Butyl ether, a gasoline additive that has been phased out but is still detected in groundwater), and primary organic contaminants listed in the New York State Sanitary Code.
  - Secondary contaminants: These are aesthetic parameters and are not considered to pose a health risk. Secondary contaminants include pH, iron, manganese, sodium, chloride.
- Both New York State and US EPA have drinking water standards called Maximum Contaminant Levels or MCLs. The laboratory will compare sampling results to drinking water standards. The sampling results report you receive from the laboratory will show which contaminants exceeded the drinking water standards. All sampling results are sent to the Department of Health.
- Primary contaminants: If a primary contaminant exceeds the drinking water standard, the problem must be corrected. The solution might be simple: installing a water treatment system for example, or adding a step to a water treatment system already in place. It could also mean you have a problem that may require more attention to resolve.
- Secondary contaminants: If a secondary contaminant exceeds the aesthetic standard there is no requirement to correct the problem even though you may chose to correct it anyway. Again, this might be a simple solution such as adding a filter or another step to a water treatment system.

<u>Table 1</u> provides a list of the primary and secondary contaminants included in the Westchester County private water well sampling requirements and the corresponding drinking water standards. A brief definition of the units used by the laboratory is presented below:

	Unit	Explanation
ug/L	microgram per liter	micrograms per liter or parts per billion. One liter of water has one billion micrograms. A microgram is 1000 less than a milligram.
mg/L	milligram per liter	milligram per liter or one part per million. One liter of water weighs one million milligram. A milligram is 1000 times more than a microgram
pCi/L	pico Curie per liter	one pico curie is 0.037 disintegration per second and is used to measure radon

You are not required to test your well water if you don't meet any of the criteria listed above such as a signed contract for sale or a new well. Testing your water regularly however, is a good idea so you know what you are drinking and using each day.

Pound Ridge has great quality groundwater and none of the industry or large scale agricultural operations that can contaminate groundwater. Because we are all on private wells and connected through the groundwater, we need to be mindful of how our behavior and actions can contribute to groundwater contamination.

Our groundwater and drinking water can be contaminated by:

 Septic – regularly maintain your septic tank. Poorly maintained septic tanks can leak and cause increases in bacterial counts in well water which can lead to potential health problems.

- Landscaping manage, limit or do not use pesticides, herbicides, and fertilizers especially near your well.
- Medication and other pharmaceuticals- should not be flushed down the toilet
- Underground heating oil storage tanks-- Tanks should be above ground.
- Road salt
- Swimming pools discharge of chlorinated swimming pool water

It is not possible to sample for everything that could potentially contaminate groundwater in one test. It would also be very expensive to test for everything. Westchester County has provided a list of contaminants that are relevant for Westchester County. If there is concern about impact from commercial nurseries, golf courses, or farms, testing will have to be done by a specialized laboratory.

Regularly testing of your well will let you know if there are any problems. For more
information please see the websites listed in the Reference and Resource sections (<u>Section</u>
<u>V</u>).

Pound Ridge water – Section I Well maintenance – Section III

Water treatment – Section IV – Table 2 treatment systems and Table 3 troubleshooting

References – Section V