

Town of Sturbridge
REGULATIONS FOR PRIVATE WELLS

Appendix A: Water Quality Testing

Revision of December 17, 2001

All water quality tests shall utilize an applicable US Environmental Protection Agency (EPA) approved method for drinking water testing and shall be conducted by an EPA or Massachusetts certified laboratory. The test results shall not exceed applicable Massachusetts drinking water primary and secondary standards for public water supplies in force at the time of the test.

For wells servicing new construction, a minimum of two rounds of tests is required. One round of tests shall be completed before construction commences, the second shall be done when construction is completed and the structure ready for use. A water sample shall be collected either after purging three well volumes or following the stabilization of the pH, temperature and specific conductance in the pumped well. An employee of the certified lab performing the analysis shall take the initial sample at the pump discharge or from a disinfected tap in the pump discharge line. Sample(s) for the second round of tests shall be taken from the tap farthest from the well in the structure served. In no event shall a water treatment device be installed prior to sampling. Successful demonstration of both water quantity and quality shall be a condition for granting an occupancy permit.

For all other wells including wells intended for irrigation purposes, a minimum of one round of tests is required. A water sample shall be collected either after purging three well volumes or following the stabilization of the pH, temperature and specific conductance in the pumped well. An employee of the certified lab performing the analysis shall take the sample at the pump discharge or from a disinfected tap in the pump discharge line. In no event shall a water treatment device be installed prior to sampling.

Testing of all new wells, initial tests of wells servicing new construction, and testing required by a change in ownership of the property on which a well is located shall include at a minimum analysis for the following parameters:

Total Coliform Bacteria
Turbidity

[Inorganic compounds]

Antimony
Arsenic
Barium
Beryllium
Cadmium
Chromium (total)
Cyanide
Lead
Mercury

Nickel
Nitrate
Nitrite
Selenium
Thallium
Sodium

[Volatile Organic Compounds (VOC) as per
EPA method 524.2)]

Benzene
Carbon Tetrachloride
Dichloromethane
o-Dichlorobenzene

para-Dichlorobenzene
 1,2 Dichloroethane
 cis-1,2 Dichloroethylene
 trans-1,2 Dichloroethylene
 1,1 Dichloroethylene
 1,2 Dichloropropane
 Ethylbenzene
 Methyl Tertiary Butyl Ether (MTBE)
 Monochlorobenzene
 Styrene
 Tetrachloroethylene
 Toluene
 Trichloroethylene
 1,1,1 Trichloroethane
 1,2,4-Trichlorobenzene
 1,1,2-Trichloroethane
 Vinyl Chloride
 Xylenes (total)
 Total Trihalomethanes (THM)

[Secondary Standards]

Aluminum
 Chloride
 Color
 Copper
 Corrosivity
 Fluoride
 Foaming Agents
 Iron
 Manganese
 Odor
 pH
 Silver
 Sulfate
 Total Dissolved Solids (TDS)
 Zinc

[Radionuclides]

Radon

Second tests of wells servicing new construction shall include at a minimum analysis for the following parameters.

Total Coliform Bacteria	Odor
Lead	Silver
pH	Zinc
Copper	

In certain situations the Sturbridge Board of Health may require analysis for Pesticides and PCB's as per analytical method 505 or 508; Herbicides as per analytical method 515; Gross Alpha Activity and Radium 266 and 288; or other parameters not listed.