

PRIVATE WELL REGULATIONS
SOUTHBOROUGH BOARD OF HEALTH
DECEMBER 17, 1991

It is the purpose of these regulations to protect the public health, safety and welfare by ensuring that housing units lacking access to public water supplies have a supply of safe drinking water from private wells and to provide for the protection of the town's groundwater resources.

In accordance with the authority granted by M.G.L. Ch. 111 sec. 31 the Board of Health hereby adopts the following regulations regarding the construction of and the water quality of private drinking water wells and wells used for purposes other than drinking water.

Any and all previous regulations concerning private wells are hereby repealed.

1.0 WELL CONSTRUCTION PERMIT:

1.1 No person shall install a private drinking water well or a well to be used for a purpose other than drinking water until a completed application has been submitted to the Board of Health and a well construction permit has been issued.

1.2 A fee may be charged for plan review, and for the permit to construct a well. The fee is considered part of the application. The current fee will be posted in the offices of the Board of Health and the Town Clerk

1.3 The application shall include:

- (a) the property owner's name and address.
- (b) The well driller's name and business address and proof of valid state registration.
- (c) Two (2) copies of a site plan prepared by a professional engineer or registered sanitarian.

1.4 Well construction permits are not transferable and expire after one (1) year. Permits may be renewed if in the opinion of the Board of Health the conditions on which the design is based are unchanged and the design conforms with current state and local applicable regulations.

1.5 Every licensee (permittee) must notify the Board of Health of any changes of status or address.

2.0 SITE PLAN:

2.1 The plan must provide the property owner's name, and identify the property location by street name and number, and the assessor's map and parcel number in the lower right hand corner.

2.2 The submitted plan must be drawn using a 1" = 20' scale. Another scale will require prior approval from the Board of Health or its Agent.

2.3 North must be indicated on the plan and a minimum of two benchmarks must be given. Existing and proposed contour intervals shall be no less than two foot.

2.4 Property lines must be actual.

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- 2.5 Existing or proposed above and/or below ground structures must be shown.
- 2.6 A description and location of visible and or known prior and current uses of the property within two hundred (200) feet of the proposed well location, which represent a potential source of contamination must be shown.
- 2.7 The permit shall be on site at all times that work is taking place.

3.0 WELL LOCATION AND USE REQUIREMENTS: Each private well shall be accessible for repair, maintenance, testing and inspections.

3.1 When possible, the well shall be located upgradient of all potential sources of contamination and shall be as far removed from potential sources of contamination as practical, given the layout of the property. The following minimum lateral distances shall apply:

<u>SOURCE OF CONTAMINATION</u>	<u>MINIMUM LATERAL DISTANCE</u>
Driveway	25 Feet
Property Line	10 Feet
Public Way	25 Feet
Right of Ways	15 Feet
Stable, barnyard, manure storage	100 Feet
Septic Tank	100 Feet
Subsurface Sewage Disposal Field	100 Feet
Underground fuel storage tank	200 Feet
Wetland or High Water Elevation of any lake, pond, river stream or ditch	25 Feet

3.2 The centerline of a well shall, if extended vertically, clear any projection from an adjacent structure by at least five (5) feet.

3.3 When possible, private water systems shall be located in areas above the 100-year floodplain.

3.4 A suction line from a well shall be located a minimum of 10 feet from a building sewer constructed of durable corrosion resistant material with watertight joints, or 50 feet from a building sewer constructed of any other type of pipe; 50 feet from a septic tank; 100 feet from a leaching field; and 100 feet from a privy.

3.5 Pressure water supply lines shall be installed at least 10 feet from and 18 inches above any sewer line. Whenever water supply lines must cross sewer lines, both pipes shall be constructed of class 150 pressure pipe and shall be pressure tested to assure water tightness.

3.6 The Board reserves the right to impose minimum lateral distance requirements from other potential sources of contamination not listed above. All such special well location requirements shall be listed as a condition of the well construction permit.

3.7 No private well, or its associated distribution system, shall be connected to the distribution system of a public water supply.

4.0 WATER QUANTITY REQUIREMENTS: The applicant shall submit to the Board for review and approval a Pumping Test Report. The Pumping Test Report shall include the name and address of the well owner, well location which must be referenced to at least two permanent structures or landmarks, date the pumping test was performed, depth at which the pump was set for the test, location of the discharge line, static water level immediately before pumping commenced, discharge rate and, if applicable, the time the discharge rate changed, pumping water levels and respective times after pumping commenced, maximum drawdown during the test, duration of the test, including both the pumping times, and recovery time during which measurements were taken, recovery water levels and respective times after cessation of pumping, and reference point used for all measurements.

In order to demonstrate the capacity of the well to provide the Required Volume of water, a pumping test shall be conducted in the following manner:

- (1) The volume of water necessary to support the household' daily needs shall be determined using the following equation: (number of bedrooms plus one bedroom) X (110 gallons per bedroom) X (a safety factor of 2) = number of gallons needed daily.
- (2) The storage capacity of the well shall be determined using the measured static water level and the depth and radius of the drillhole or casing
- (3) The Required Volume shall be calculated by adding the volumes of water in (1) and (2). It is this volume of water that must be pumped from the well within a 24 hour period.

5.0 WATER QUALITY REQUIREMENTS: After the well has been completed and disinfected, and prior to using it as a drinking water supply, a water quality test shall be conducted.

A water sample shall be collected by a laboratory certified by the Commonwealth for drinking water analysis either after purging three well volumes or following the stabilization of the p^H , temperature and specific conductance in the pumped well. The water sample to be tested shall be collected at the pump discharge. In no event shall a water treatment device be installed prior to sampling.

The water quality test, utilizing approved drinking water test methods, shall be conducted by a laboratory certified by the Commonwealth for drinking water analysis. This test shall include analysis for those parameters that the Commonwealth of Massachusetts has established maximum contaminant levels (MCLs) in 310 CMR 22.00 for groundwater as follows:

- A. Required Parameters:
 - Bacteria
 - Inorganic Compounds to include toxic metals
 - Volatile Organic Compounds
- B. Site-Specific Required Parameters:
 - Organic Compounds such as pesticides and herbicides, Radionuclides

Following a receipt of the water quality test results, the applicant shall submit a Water Quality Report to the Board which includes:

- (1) a copy of the certified laboratory's test results.
- (2) the name of the individual who performed the sampling.
- (3) where in the system the water sample was obtained.

The Board reserves the right to require retesting of the above parameters, or testing for additional parameters when, in the opinion of the Board, it is necessary due to local conditions or for the protection of the public health, safety, and welfare. All costs and laboratory arrangements for the water testing are the responsibility of the applicant.

6.0 **WELL CONSTRUCTION REQUIREMENTS** Any work involving the connection of the private well to the distribution system of the residence must conform to the applicable codes.

A physical connection is not permitted between a water supply, which satisfies the requirements of these regulations, and another water supply that does not meet the requirements of these regulations without prior approval of the Board.

A. **General Well Design and Construction** All private water supply wells shall be designed such that:

- (1) The materials used for the permanent construction are durable in the specific hydrogeological environment that occurs at the well site.
- (2) No unsealed openings will be left around the well that could conduct surface water or contaminated groundwater vertically to the intake portion of the well or transfer water from one formation to another.
- (3) Permanent construction materials shall not impart toxic substances, taste, odors or bacterial contamination to the water in the well.

B. **Well Completion Report** Upon completion of the well the driller shall submit to the Board of Health its copy of the "WATER WELL COMPLETION REPORT"

7.0 **WATER SUPPLY CERTIFICATE**: No well will be put into use until the Board of Health has issued a "**Water Supply Certificate**" indicating that the well has been located and constructed in accordance with these regulations and that the water is of the quantity and quality required by these regulations. The Board of Health shall require supervision of all construction and testing by the designer and require him to certify in writing that all work has been completed in accordance with the terms of the permit and the approved plans.

8.0 **DECOMMISSIONING REQUIREMENTS**: Abandoned wells, test holes, and borings shall be decommissioned so as to prevent the well, including the annular space outside the casing, from being a channel allowing the vertical movement of water.

9.0 **VARIANCES**: The Board of Health may vary the application of any provision of these regulation, with respect to any particular case when, in its opinion, the enforcement thereof would do manifest injustice; provided, that the decision of the Board of Health shall not conflict with the

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spirit of any minimum standards established by these regulations. Any variance must be requested in writing. Any variance granted by the Board of Health shall be in writing. A copy of any such variance shall, while it is in effect, be available to the public at all reasonable hours in the office of the Board of Health.

10.0 ENFORCEMENT: The Board of Health, its agents, officers, and employees, shall have the authority to enter upon privately owned land for the purpose of performing their duties for the administration and review of this regulation, and may make or cause to be made such examinations, surveys, or samplings as the Board of Health deems necessary.

The Board shall have the authority to enforce these regulations and permits issued therunder by violation notices, administrative orders, and civil and criminal court actions.

Any person who violates any provision of this regulation or permits issued hereunder, shall be subject to a fine of not more than three hundred dollars. Each day or portion thereof constitutes a separate offense, and each provision of the regulation or permit that is violated shall constitute an separate offense.

As an alternative to criminal prosecution the Board may elect to utilize the non-criminal disposition procedure set for in M.G.L. Chapter 40, section 21D. For the purpose of this provision, the penalty to apply in the event of a violation shall be as follows: \$25.00 for the first offense; and \$50.00 for the second offense; \$100.00 for the third offense; and \$200.00 for the fourth and each subsequent offense. Each day on which a violation exists shall be deemed a separate offense.

11.0 HEARING The private well owner to whom any order has been served may request a hearing before the Board by filing with the Board within 7 days after the day the order was served, a written petition requesting a hearing on the matter. Upon receipt of such petition the Board shall set a time and place for such hearing and shall inform the well owner thereof in writing. The hearing shall be commenced not later than 30 days after the day on which the order was served. The Board, upon application of the well owner, may postpone the date of the hearing for a reasonable time beyond such 30 day period if, in the judgment of the Board, the well owner has submitted a good and sufficient reason for such postponement. At the hearing the well owner shall be given an opportunity to be heard and to show why the order should be modified or withdrawn. After the hearing, the Board shall sustain, modify, or withdraw the order and shall inform the well owner in writing of its decision. If the Board sustains or modifies the order it shall be carried out within the time period allotted in the original order or in the modification.

12.0 INVALIDATION: If any section, paragraph, sentence, clause or phrase of these rules and regulation shall be decided invalid for any reason whatsoever, such decision shall not affect the remaining portions of these regulations, which shall remain in full force and effect.

13.0 REPEAL: All previous rules and regulations relating to private drinking water wells in the Town of Southborough are hereby repealed.

14.0 ADOPTION: These rules and regulations were adopted by vote of the Board of Health and are to be in full force and effect upon publication in a newspaper serving the residents of the community. December 17, 1991