

WRENTHAM BOARD OF HEALTH

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MINIMUM SANITATION STANDARDS FOR PRIVATE OR SEMI-PUBLIC WATER SUPPLY

EFFECTIVE DATE – FEBRUARY 1, 2003 – AMENDED APRIL 12, 2004
EFFECTIVE APRIL 20, 2004

The Board of Health of the Town of Wrentham, acting under the authority of Chapter 111, Section 31 of the General Laws and Amendments and Additions thereto, and by any other power thereto, enabling, and acting thereunder, have, in the interest of, and for the preservation of the public health, duly made and adopted the following rules and regulations:

SECTION 1: TERMS

- 1.1 **WELL** – The word **WELL** so used in these regulations shall include any pit, pipe excavation, spring, casing, drill hole or other source of water to be used for any purpose of supplying potable water in the Town of Wrentham and shall include dug wells, driven or tubular wells, drilled wells (artesian or otherwise) any springs, gravel packed, gravel walled wells, gravel developed and wash borings and as further described in U.S. Environmental Protection Agency Manual of Individual Water Supply Systems.
- 1.2 **WATER SYSTEMS** – The term **WATER SYSTEMS** as used in these regulations shall include pipes, valves, fittings, tanks, pumps, motors switches, distribution, filtration, treatment or purification of water for any use whether or not inside a building.
- 1.3 **PRIVATE WATER SUPPLY** – The term **PRIVATE WATER SUPPLY** means any water system serving or intended to serve water for human consumption or for domestic uses or purposes on one lot. The system shall include all of the sources, treatment work, and distribution lines to the point where distribution takes place within the building.
- 1.4 **SEMI-PUBLIC WATER SUPPLY** – The term **SEMI-PUBLIC WATER SUPPLY** means any water system serving or intended to serve water for human consumption or for domestic uses or purposes including a multiple dwelling, or to restaurants, dairies, schools, institutions, motels, mobile home parks, bottling plants, campgrounds, recreational camps for children, state forests, parks and beaches.
- 1.5 **POTABLE WATER** – Water that is safe for human consumption.
- Wells used for watering lawns and gardens shall be considered “potable” and shall meet the same water quality and setback requirements from wastewater system components as potable water wells serving the household or other facility.

- 1.6 **MCL – Maximum Contaminant Limit** – The maximum permissible limit of a contaminant that can be delivered to any user of the water system.

SECTION 2: WELLS

- 2.1 No well for a private water supply serving (1) less than 15 service connections, or (2) less than 25 individuals or (3) an average of twenty-five or more individuals daily for less than 60 days of the year, shall be installed until a permit has been obtained from the Board of Health or its Agent. The fee for this permit shall be set by the Board of Health from time to time. A permit so granted shall expire two (2) years from the date of issue unless construction is begun.
- 2.2 No occupancy of the facilities, which the well is to serve may be permitted until the well is installed, completed, and inspected and has been demonstrated to supply water of the quality and quantity specified herein.
- 2.3 The well contractor shall observe reasonable sanitary measures and precautions in the performance of his work in order to prevent pollution or contamination of the well.
- 2.3.1 Well drillers must be registered with the Department of Environmental Management.
- 2.4 A plot plan (drawn to scale) shall be submitted with the application for a well permit to the Board of Health indicating the proposed location of the well, all buildings, boundary lines, septic systems (within 200 feet). The scale of the plan shall be either 1"=20', 1"=30', 1"=40', or 1"=50, and preferably on a sheet 8 1/2" x 11".
- 2.4.1 **WELL LOCATION SETBACKS**
- A minimum of 25 feet from the normal driving surface of any roadway
 - A minimum of 15 feet from a road right-of-way
 - 10 feet from lot lines
 - 50 feet from any septic tank
 - 100 feet from any leaching system
 - A minimum of 5 feet from any building or projection thereof
 - 15 feet from a gas line
 - 15 feet from an overhead electric distribution line
 - 25 feet from an electric transmission line which is in excess of 50kV
 - 10 feet from the normal high water of any lake, pond, river, stream, or drainage ditch.
 - 10 feet from an underground electric distribution line
- 2.4.2 Well must be properly curbed and covered to prevent entrance or contamination, and to divert surface drainage away from the well.

- 2.4.3 A pitless adapter shall be provided such that the permanent watertight casing or the well shall terminate at a minimum of 12 inches above the finished grade and at a minimum of 24 inches above the elevation of the 100-year flood.
- 2.5 There shall be a minimum yield of 200 gallons per bedroom per day at 20 lbs. P.S.I. at the highest fixture serviced. System capacity for semi-public supplies must be adequate to meet the project needs.
 - 2.5.1 Pressure tanks for individual home single dwelling unit installations shall be diaphragm type and have an actual minimum liquid capacity of 32 gallons. Pressure tanks for other installations shall be determined on a case by case basis.
 - 2.5.2 Well yield shall be performed by a competent pump or well drilling contractors. A well shall produce a supply for each dwelling unit served by an on-site well as follows:

<u>WELL DEPTH</u>	<u>GPM - 4 HOURS</u>
0 to 150 feet	5-6
150 to 200 feet	4
200 to 300 feet	2-3
300 and over	1-2

- 2.5.3 Auxiliary power must be available to maintain a water supply for multiple dwellings.

SECTION 3: WATER QUALITY AND QUANTITY

- 3.1 Sanitary protection must be incorporated into the construction of the well and final finishing at grade shall include a cone extending at least 2 feet in all directions from the well casing itself.
- 3.2 All newly completed wells shall be disinfected in accordance with instructions from the U.S. Environmental Protection Agency Manual of Individual Water Supply Systems.
- 3.3 Before approval, well log and pump test data shall be submitted to the Board of Health in the form attached to these regulations. It shall include a log of the well, showing depth and type of over-burden, depth of casing installed below ground, surface diameter of casing, and diameter of the hole in the rock, static water level and pumping rate which can be sustained for four (4) hours. The well (after pump testing) shall recover to within eight-five (85) percent of the original static water level within a twenty-four-- (24) hour period. The results of all testing shall be submitted to the Board of Health for approval and the well contractor shall be responsible for all data submitted.
- 3.4 A physical and bacteriological analyses of the water, conducted by a Massachusetts Certified Laboratory shall be required. Water, which does not meet the accepted standards of agencies of the State or Federal Government for potable water supplies,

shall be grounds for the rejection of the well. One sample shall be taken from a tap in the dwelling (kitchen or bathroom) before occupancy by the testing laboratory or independent contractor who shall maintain the necessary chain-of-custody. It is recommended that a sample also be taken from the well installation when completed.

3.4.1 A bacteriological test indicating a 0 per 100-ml coliform density shall be required. A total bacteria count shall be determined at 35 degree C. If the total bacteria count is greater than 100, the well and water system shall be disinfected and retested for total bacteria count.

3.4.2 Chemical and physical analyses shall be required. Analyses shall be performed for at least the following:

Volatile organic compounds (EPA 524.2 or equivalent), pH, color, odor, turbidity, iron, manganese, ammonia nitrogen, nitrite nitrogen, nitrate nitrogen, alkalinity, total hardness, sodium, chlorides, arsenic, and lead.

The Board of Health may require other parameters to be tested when, in its opinion, circumstances particular to the subject location warrant it.

Concentrations shall not exceed the U. S. Environmental Protection Agency and/or the Massachusetts Department of Environmental Protection Recommended Maximum Contaminant Levels for Primary and Secondary Drinking Water Regulations in effect at the time of testing, whichever is the stricter.

If Sodium is in excess of 20 mg/l or if volatile organic compounds in any concentration are detected, a document shall be attached to the deed and recorded in the Norfolk County Registry of Deeds which identifies the chemicals, their concentrations, and health effects. A whole house treatment system for the removal of volatile organic compounds shall be installed. If they are detected, a statement shall be included in the recorded document to the effect that the treatment unit requires regular maintenance. If volatile organic compounds are detected in the water sample and then found to be absent in a subsequent sampling, the requirement for a recorded document and treatment unit shall only be removed following two successive samplings and analyses, which show the absence of such contamination. When treatment units are installed, sampling and analyses must be performed and submitted to the Board of Health to demonstrate that the treatment unit is effective.

3.5 The owner(s) of a semi-public water supply shall possess and display a valid permit from the Board of Health, which signifies the status of sanitary protection, maintenance, operation and improvements recommended.

3.6 Pump house, pump or pipe pits and wells shall be designed and constructed so as to prevent flooding and to prevent the entrance of pollution or contaminants.

- 3.6.1 Pump houses, pump rooms, and pitless adapters shall be installed in accordance with the "INDIVIDUAL WATER SYSTEM MANUAL".
- 3.7 No person shall install or enter into a contract for installing or making additions, modification, or alterations to any "Semi-public" water supply before submitting complete plans, specifications and descriptions to the Board of Health and receive from them a written approval. Private and semi-private water supply systems shall be approved by the Board of Health before occupancy is permitted.

SECTION 4: WATER CONDITIONING

Permanent disinfection of a polluted supply is prohibited. If the natural water quality does not meet the physical and chemical criteria as listed in 3.4.2, water conditioning shall be required. Water softener or other treatment backwash shall not be discharged into the septic system.

SECTION 5: PIPES AND EQUIPMENT

- 5.1 All service pipes and connections shall be of non-toxic material and meet the specifications approved by the New England Water Works Association.
- 5.2 The installation of pipes shall be such that they are protected from crushing, freezing, and attack by rodents.
- 5.3 Dissimilar metals should be discouraged in the water system. The use of non-conductive plastic inserts between pipes and fittings or the installation of sacrificial anodes is helpful in minimizing electrochemical corrosion problems.
- 5.4 Electrical service grounds shall not be attached to the water piping. All electrical service and controls of wells must be permitted, inspected and approved according to the Town and State Regulations.

SECTION 6: PROHIBITIONS

- 6.1 Surface water supplies for private or semi-private water supplies shall be prohibited.
- 6.2 Drinking Water Cisterns shall be prohibited.
- 6.3 Cross connections shall be prohibited. No cross connection between a private source of water supply and the public water supply shall be allowed.
- 6.3.1 Other cross connections for whatever purpose shall not be allowed without a written permit from the Massachusetts Department of Environmental Protection.

SECTION 7: ENFORCEMENT

- 7.1 Variances

- 7.1.1 The Board of Health may vary the application of any provision of these regulations 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 spirit of these minimum standards. Any variance granted by the Board of Health shall be in writing.
- 7.2 Variance, Granted of special permission, Expiration, Modification, Suspension of
- 7.2.1 Any variance or other modification authorized to be made by these regulations may be subject to such qualification; revocation, suspension or expiration as the Board of Health expresses its grant. A variance or modification authorized to be made by these regulations may otherwise be revoked, modified, or suspended, in whole or in part, only after the holder thereof has been notified in writing and has been given an opportunity to respond.
- 7.3 General Enforcement
- 7.3.1 The provisions of Article 1 of the State Environmental Code shall govern the enforcement of these regulations.
- 7.4 Orders: Service and Content
- 7.4.1 If an examination as provided for in regulation 3.4.1 or 3.4.2 reveals failure to comply with the provisions of these regulations, the Board of Health may order the person responsible to comply with the violated provision.
- 7.5 The inspection and these regulations cannot be construed as a guarantee by the Town of Wrentham, or its agents, that the water system will function satisfactorily.
- 7.6 The Board of Health may require a restriction to be recorded in the Registry of Deeds in cases which, in the opinion of the Board of Health, the water analyses show marginal compliance with the criteria of these regulations, or when other circumstances warrant.

SECTION 8: WELL LOCATION AND RECORDING

A certified as-built plan showing the well location, prepared by a professional engineer or land surveyor, should be submitted to the Board of Health and recorded at the Registry of Deeds prior to the issuance of the Certificate of Compliance.

SECTION 9: WELL TESTING ON TRANSFER OF PROPERTY

The Board of Health requires that prior to transfer of title to real property located in the Town of Wrentham, any private water supply for that particular parcel be sampled and tested by a Massachusetts Certified Water Testing Laboratory for yield and for chemical, physical and biological water contamination according to Wrentham Board of Health's "MINIMUM SANITATION STANDARDS FOR PRIVATE OR SEMI-PUBLIC WATER SUPPLY", Sections 2 and 3. Such sampling and testing shall have been

performed no more than 1 year prior to the date of the property transfer. It is the responsibility of the owner, and not of the Wrentham Board of Health, to inform buyer of the results of the tests. The results of the well test shall be submitted to the Wrentham Board of Health along with evidence of notification to the buyer.

The Board shall issue an advisory indicating whether or not the results meet said standards for a private drinking water supply. A copy of the advisory shall be placed on file at the office of the Board of Health and shall be deemed a public record. Failure to meet MCL water quality requirements shall not constitute grounds for condemnation of the water supply provided that the requirements can be met by treatment of the water supply. Failure to meet non-MCL requirements shall not constitute grounds for condemnation of the water supply. Failure to meet well location or yield requirements shall not constitute grounds for condemnation of a well.

SECTION 10: NOTICE TO ABUTTERS

When the required zone of protection/influence 100' radius from the proposed well location extends over the lot line, a public hearing shall be held and the affected property owner(s) "Abutters" shall be notified at the applicant's expense by delivery whether in hand or by certified mail, return receipt requested at least 14 days before the date of the public hearing, "Except in the event the abutting owner is the same as the owner of the subject lot, a public hearing is not required." The notice shall contain the date, time, location of the hearing, and a copy of the application and submitted site and locus plan showing the location of the proposed well and the lot lines and other details as appropriate. No well permit shall be approved until after the public hearing. The applicant at his/her expense shall obtain a certified list of abutters from the Board of Assessors.

After the hearing is closed the applicant and abutter(s) shall receive a copy of the Board's decision and they shall have fourteen (14) days to submit in writing to the Board of Health their objections to the board's action.

If an appeal is received by the Board of Health, they shall consider the facts of the appeal within thirty days of receipt and shall notify all parties (Applicant and Appeller) of the date, time, and location of that meeting. The Board of Health shall consider the facts and allow testimony and make a record of their proceedings and render a decision within thirty (30) days of its decision. The decision shall be filed with the Town Clerk and sent to all parties involved by certified mail return receipt requested.

SECTION 11: ADOPTION AND DATE OF EFFECT

These rules, regulations and amendments were adopted by votes of the Board of Health, Town of Wrentham, Massachusetts, on April 1, 1981, amended March 18, 1987, and July 10, 2000. The entire document was revised and adopted by a vote of the Board of Health, Town of Wrentham, Massachusetts, on December 9, 2002. These regulations are to be in full force and effect on February 1, 2003. Amended: April 12, 2004. Section 10 "Notice to abutters"

WRENTHAM BOARD OF HEALTH

Ravi Nadkarni, Chairman

Glenn E. Brown, Vice Chairman

Marion E. Cafferky, Clerk

Adopted: _____

Effective: _____

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Adopted: April 12, 2004

Effective: April 20, 2004

A TRUE COPY ATTEST:

Eileen M. Robertson, Assistant
TOWN CLERK