

**Town of Westwood**  
Commonwealth of Massachusetts

**WESTWOOD BOARD OF HEALTH  
PRIVATE WELL REGULATIONS**

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I. **PURPOSE**

These regulations are intended to protect the public health and general welfare of the residents of the Town of Westwood by ensuring that private wells producing water for human consumption and irrigation purposes are constructed in a manner, which will protect the quality of the water obtained from these private wells.

II. **AUTHORITY**

The Westwood Board of Health adopts these regulations, as authorized by Massachusetts General Laws, Chapter 111, Section 31. These regulations supersede all previous regulations adopted by the Board of Health relative to the construction of private wells.

III. **DEFINITIONS**

**Agent:** Any person designated and authorized by the Board to execute these regulations. The agent shall have all the authority of the appointing Board and shall be directly responsible to the Board and under its direction and control.

**Applicant:** Any person who intends to have a private well constructed or altered.

**Aquifer:** A water bearing geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

**Bedroom:** A room providing privacy, intended primarily for sleeping with all of the following attributes:

- A) floor space of no less than 70 square feet;
- B) for new construction, a ceiling height of no less than 7'3";
- C) for existing houses and for mobile homes, a ceiling height of no less than 7'0";
- D) an electrical service and ventilation; and,
- E) at least one window.

Living rooms, dining rooms, kitchens, halls, bathrooms, unfinished cellars and unheated storage areas over garages are not considered bedrooms. Single family dwellings shall be presumed to have at least three bedrooms.

**Board:** The Board of Health of Westwood Massachusetts or its authorized agent.

**Casing:** Impervious durable pipe, placed in a boring to prevent the walls from caving in and to serve as a vertical conduit for water in a well.

**Certified Laboratory:** Any laboratory certified or provisionally certified by the Department of Environmental Protection for testing water used for domestic purposes.

**Domestic Well:** A private water supply which is the sole source of water for the household.

**Dug Well:** A private well that is excavated but not drilled.

**Irrigation Well:** A private water supply intended for irrigation purposes only.

**Maximum Contaminant Level (MCL):** The highest level allowed of any physical, chemical, biological, or radiological substance or matter in water as defined as drinking water standards by the U.S. Environmental Protection Agency or the State of Massachusetts.

**Person:** An individual, corporation, company, association, trust, or partnership.

**Private Well:** Any driven or drilled hole, with a depth greater than its largest surface diameter developed to supply water intended for domestic use and/or irrigation not subject to regulation *310 CMR 22.00* as public water supplies.

**Pumping Test:** A procedure used to determine the characteristics of a well and adjacent aquifer by installing and operating a pump.

**Registered Well Driller:** Any person registered with the Department of Environmental Management/Office of Water Resources to dig or drill wells in the Commonwealth of Massachusetts.

**Shallow Well:** A private well not more than 100 feet deep.

**Static Water Level:** The level of water in a well under non-pumping conditions.

**Structure:** A combination of materials assembled at a fixed location to give support or shelter, such as a building, framework, retaining wall, fence, or the like.

#### IV. **WELL CONSTRUCTION PERMIT**

The property owner or his designated representative shall obtain a permit from the Board of Health prior to the commencement of construction of a private well. Each permit application to construct a well shall include the following:

1. The property owner's name and address;
2. The well driller's name and proof of valid state registration;
3. A plan with a suitable scale, (one inch = forty (40) feet or fewer.); signed and stamped by a registered land surveyor or professional civil engineer, showing the location of the proposed well in relation to existing or proposed structures above or below ground;
4. A description of prior and current land uses within two hundred (200) feet of the proposed well location, which represent a potential source of contamination, including but not limited to the following:
  - a) existing and proposed structures;
  - b) subsurface sewage disposal systems;
  - c) subsurface fuel storage tanks;
  - d) public ways;
  - e) utility rights-of-way;
  - f) any other potential sources of pollution;

5. Documentation that the applicant has notified the abutting property owners by certified mail, return receipt of his/her intention to install a well.
6. A permit fee of Two Hundred Dollars (\$200.00).

The permit shall be on site at all times that work is taking place. Each permit shall expire one (1) year from the date of issuance unless revoked for cause. Permits may be extended for one additional six (6) month period provided that a written request is received by the Board prior to the one-year expiration date. No additional fee shall be charged for a permit extension provided there is no change in the plans for the proposed well.

Well Construction Permits are not transferable.

V. **WELL LOCATION AND USE REQUIREMENTS**

In locating a well, the applicant shall identify all potential sources of contamination, which exist, or are proposed, within two hundred (200) feet of the site. 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 possible, given the lay-out of the premises.

Each private well shall be accessible for repair, maintenance, testing, and inspection. The well shall be completed in a water bearing formation that will produce the required quantity of water under normal operating conditions. Dug and shallow wells shall be prohibited.

Private wells shall be prohibited from the Aquifer Protection District boundaries as delineated in Section 12B of the Westwood Zoning Bylaw.

Each private well shall be located at least ten (10) feet from any property line. The centerline of a well shall, if extended vertically clear any projection from an adjacent structure by at least five (5) feet.

All private wells shall be located a minimum of twenty-five (25) feet from the normal driving surface of any public roadway or a minimum of fifteen (15) feet from the road right-of-way, whichever is greater.

Each private well shall be located at least twenty-five (25) feet, laterally, from the normal high water mark of any lake, pond, river, stream, ditch, or slough. When possible, private water systems shall be located in areas above the 100-year floodplain.

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

Water supply lines shall be installed at least ten (10) feet from and 18 inches above any sewer line. Whenever sewer lines must cross over water supply lines, both pipes shall be

constructed of class 150-pressure pipe and shall be pressure tested to assure watertightness.

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, in writing, as a condition of the well construction permit.

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

VI. **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 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 for the discharge line, the 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 draw down during the test, duration of the test, including both the pumping time and recovery time during which measurements were taken, recovery water levels and respective times after cessation of pumping, and the reference point used for all measurements.

Pressure tanks for individual home installations shall have a minimum capacity of 42 gallons.

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

In order to demonstrate the capacity of the well to provide the required volume of water for domestic use, a pumping test shall be conducted in the following manner.

- 1) The volume of water necessary to support the household's daily need 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) above. It is this volume of water that must be pumped from the well within a 24-hour period.

The pumping test may be performed at whatever rate is desired. Following the pumping test, the water level must be shown to recover to within eighty-five (85) percent of the pre-pumped static water level within a twenty-four (24) hour period.

*Example 1: A one bedroom house with a well six (6) inches in diameter and contains 200 ft. of standing water:*

- A. *1 bedroom + 1 bedroom = (2 bedrooms) x (110 gallons per bedroom) x (safety factor of 2) = 440 gallons.*
- B. *The volume of a 6-inch well is 1.5 gallons for every foot of water column length. Therefore, (200 ft of standing water) x (1.5 gallons/ft) = 300 gallons.*
- C. *440 gallons + 300 gallons = **740 gallons** that must be pumped from the well in 24 hours or less to demonstrate suitable capacity. Recovery up to 85% of the static water level must also occur within 24 hours after cessation of pumping*

*Example 2: For a 4 bedroom house with a well that is six (6) inches in diameter and contains 100 ft. of standing water:*

- A. *4 bedrooms + 1 bedroom = (5 bedrooms) x (110 gallons per bedroom) x (safety factor of 2) = 1,100 gallons needed daily.*
- B. *The volume of a 6 inch well is 1.5 gallons for every foot of water column length. Therefore, (100 ft. of standing water) x (1.5 gallons/ft.) = 150 gallons.*
- C. *1,100 gallons + 150 gallons = **1250 gallons** that must be pumped from the well in 24 hours or less to demonstrate suitable capacity. Recovery up to 85% of the static water level must also occur within 24 hours after cessation of pumping.*

VII. **MANDATORY WELL TESTING PRIOR TO SALE**

The Board requires that a water quality test be conducted before the property on which the well is located changes ownership and a copy of the results shall be forwarded to the Board of Health. The water quality test shall be conducted at or within two (2) years prior to the time of sale of the property.

VIII. **WATER QUALITY TESTING REQUIREMENTS**

After the well has been completed and disinfected, and prior to using it for domestic or irrigation use, a water quality test shall be conducted.

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. The water sample to be tested shall be collected 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.

**Water Testing for Domestic Wells**

The water quality test, utilizing an applicable US EPA approved method for domestic water testing, shall be conducted by an EPA or Massachusetts certified laboratory. The water quality test shall include analysis for the following parameters and the results shall not exceed Massachusetts Drinking Water Standards and Guidelines for public water supplies, including Massachusetts primary and secondary standards.

Domestic wells shall be tested for the following:

<b>Volatile Organic Compounds</b>	<b>*MCL (mg/l)</b>	<b>Volatile Organic Compounds</b>	<b>*MCL (mg/l)</b>
Benzene	0.005	Monochlorobenzene	0.1
Carbon Tetrachloride	0.005	Styrene	0.1
Dichloromethane	0.005	Tetrachloroethylene	0.005
o-Dichlorobenzene	0.6	Toluene	1
para-Dichlorobenzene	0.005	Trichloroethylene	0.005
1,2-Dichloroethane	0.005	1,1,1-Trichloroethane	0.2
cis-1,2-Dichloroethylene	0.07	1,2,4-Trichlorobenzene	0.07
trans-1,2-Dichloroethylene	0.1	1,1,2-Trichloroethane	0.005
1,1-Dichloroethylene	0.007	Vinyl Chloride	0.002
1,2-Dichloropropane	0.005	Xylenes (total)	10
Ethylbenzene	0.7	Perchlorate (09/01/07)	0.002

<b>Radionuclides</b>	<b>*MCL</b>	<b>Coliform Bacteria</b>	<b>*MCL</b>
Gross Alpha Activity	15 pC/l	Coliform Bacteria	Absent
Radon	10,000 pC/l		
If Gross Alpha Activity exceeds 15 pC/l, then test the following:			
Radium-226 & 228	5 pC/l		
Uranium	0.03 mg/l		

<b>Inorganic Compounds</b>	<b>*MCL (mg/l)</b>	<b>Massachusetts Secondary Standards</b>	<b>*MCL (mg/l)</b>
Antimony	0.006	Aluminum	0.05 to 0.2
Arsenic	0.01	Chloride	250
Barium	2	Color	15 color units
Beryllium	0.004	Copper	1
		Corrosivity (12/19/06)	Non-corrosive
Cadmium	0.005	Fluoride	2
Chromium (total)	0.1	Foaming Agents	0.5
Cyanide	0.2	Iron	0.3
Thallium	0.002	Manganese	0.05
Lead (action level)	0.015	Methyl tertiary butyl ether (12/19/06)	0.020-0.040
Copper (action level)	1.3	Odor	3 TON
Mercury	0.002	pH	6.5-8.5
Nitrate (N)	10	Silver	0.10
Nitrite (N)	1	Sulfate	250
Total Nitrate & Nitrite (N)	10	Total Dissolved Solids (TDS)	500
Selenium	0.05	Zinc	5

**Maximum Contaminant Levels (MCL)** The Massachusetts Drinking Water Standards (310 CMR 22.00) are updated periodically. The water quality of each private well must meet the most up-to-date standard as promulgated by the Department of Environmental Protection (DEP).

### Water Testing for Irrigation Wells

The water quality testing for irrigation wells shall utilize an applicable US EPA approved method for water testing, and shall be conducted by an EPA or Massachusetts certified laboratory. The water quality test results for coliform bacteria shall be **absent**.

Following a receipt of the water quality test results, the applicants 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 to right to require re-testing of the above parameters, or testing for additional parameters when, in the opinion of the Board, it is necessary due to local conditions 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.

In areas where current or historical aldrin use includes agriculture, the Board may require testing for pesticides and herbicides.

### IX. WATER SUPPLY CERTIFICATE

A Water Supply Certificate shall be issued for the use of a private well prior to the issuance of an occupancy permit for an existing structure, or prior to the issuance of a building permit for new construction which is to be served by the well.

The following shall be submitted to the Board of Health to obtain a Water Supply Certificate:

- 1) A well construction permit;
- 2) A copy of the Water Well Completion Report as required by the Department of Environmental Management, Office of Water Resources (*313 CMR 3.00*);
- 3) A copy of the Pumping Test Report required pursuant to Section VI of these regulations; and
- 4) A copy of the Water Quality Report required pursuant to Section VIII of these regulations.

Upon receipt and review of the above documents, the Board shall make a final decision on the application for a Water Supply Certificate. A final decision shall be in writing and shall comprise of one of the following actions:

- 1) Issue a Water Supply Certificate;
- 2) Issue a conditional Water Supply Certificate, which will specify the conditions, which the Board deems necessary to ensure fitness, purity and quantity of the water, derived from that private well. Said condition(s) may include but not be limited to requiring treatment or additional testing of the water; or



- 3) Deny the applicant a Water Supply Certificate and specify the reason for the denial.

X. **WELL CONSTRUCTION REQUIREMENTS**

Pursuant to *313 CMR 3.00*, no person in the business of digging or drilling shall construct a well unless registered with the Department of Environmental Management/Office of Water Resources.

Any work involving the connection of the private well to the distribution system of the residence must conform to the local plumbing code. All electrical connections between the well and the pump controls and all piping between the well and the storage and/or pressure tank in the house must be made by a pump installer or registered well driller, including the installation of the pump and appurtenance in the well or house.

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 Town and State Regulations.

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 hydrogeologic environment that occurs at the well site.
- 2) no unsealed opening 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.

Permanent construction materials shall not impart toxic substance taste, odors, or bacterial contamination to the water in the well.

The driller shall operate all equipment according to generally accepted standards in the industry and shall take appropriate precautions to prevent damage, injury or other loss to persons and property at the drilling site.

Well construction design shall insure that surface water does not enter the well through the opening or seepage through the ground surface. Construction site waste and materials shall be disposed of in such a way as to avoid contamination of the well and the aquifer. During anytime that the well is unattended, the contractor shall secure the well in a way as to prevent either tampering with the well or the introduction of foreign material into the well.

Well yield shall be measured and recorded at least every fifty (50) feet during drilling.

All water used for drilling, well development, or to mix a drilling fluid shall be obtained from a source, which will not result in contamination of the well or the water bearing zones penetrated by the well. Water shall be conveyed in clear sanitary containers or water lines and shall be chlorinated to an initial concentration between 50 mg/l and 100 mg/l.

The installation of the pipes shall be done in such a manner that they are protected from crushing, freezing and/or attack by rodents.

A free-chlorine residual of 10 mg/l shall be maintained in any water used at the drill site. Water from wetlands, swamps, ponds and other similar surface features shall not be used.

All drilling equipment, including pumps and down-hole tools, shall be cleaned and disinfected prior to drilling each new well or test hole.

All drilling fluids shall be nontoxic. Drilling fluid additives shall be stored in clean containers and shall be free of material that may adversely affect the well, the aquifer, or the quality of the water to be pumped from the well. Surfactants should be biodegradable. The use of biodegradable organic polymers shall, when possible, be avoided.

All wells, including those that have been hydrofractured, shall be developed in order to remove fine materials introduced into the pore spaces or fractures during construction. One or more of the following methods shall be used for development: overpumping, backwashing, surging, jetting, and/or airlift pumping.

The completed well shall be sufficiently straight so that there will be no interference with installation, alignment, operation or future removal of the permanent well pump.

## **B. Well Casing**

Private water supply wells shall be constructed using either steel or thermoplastic well casing. The casing shall be of adequate strength and durability to withstand anticipated formation and hydrostatic pressures, the forces imposed on it during installation, and the corrosive effects of the local hydrogeologic environment.

Steel casing shall be used with cable tool drilling or when the casing is installed in an open drillhole in which formation materials may suddenly collapse against the casing.

All casing used in the construction of private water supply wells shall be free of pits, breaks, gouges, deep scratches and other defects. If previously used casing is installed, it shall be decontaminated and disinfected prior to installation.

Installation of well casing shall be done in a manner that does not alter the shape, size, or strength of the casing and does not damage any of the joints or couplings connecting sections of the casing. A standard drive shoe shall be used when casing is installed. The driveshoe shall be either welded or threaded to the lower end of the string of casing and shall have a beveled metal cutting edge forged, cast, or fabricated for this specific purpose.

Upon completion of the installation procedure, the entire length of the casing above the intake shall be watertight.

For wells completed above grade, the casing shall extend at least 12 inches above the finished grade. For wells constructed in a floodplain, the casing shall extend at least two feet above the level of the highest recorded flood. The top of the casing shall be reasonably smooth and level.

A pitless adapter shall be provided such that the permanent water-tight casing of the well shall terminate a minimum of 12 inches above finished grade.

#### 1. **Steel Casing**

Steel casing shall consist of schedule 40 pipe that complies with material standards approved by the American Water Works Association.

Segments of steel casing shall be coupled by using threaded casing, coupling, or by welding the joint. Recessed or reamed and drifted couplings shall be used on threaded casing and no threads shall be left exposed once the joint is completed. When welding casing joints are used, they shall conform to the most recent revision of AWWA C206, "Standard for Field Welding of Steel Water Pipe." The weld shall be at least as thick as the wall thickness of the well casing and shall be fully penetrating. When completed, a welded casing joint shall have a tensile strength equal to or greater than that of the casing.

#### 2. **Thermoplastic Casing**

Thermoplastic casing used in the construction of private water supply wells shall be capable of withstanding pressures equal to or greater than 200 pounds per square inch and shall conform to the most recent revision of ASTM Standard F480, "Specification for Thermoplastic Water Well Casing Pipe and Couplings Made in Standard Dimension Ratios (SDR)." In addition, the casing and couplings shall meet the requirements of the most recent revision of National Sanitation Foundation Standard Number 14, entitled "Plastics Piping System Components and Related Materials." Materials complying with Standard Number 14 can be recognized by the marking "NSF-WC."

Thermoplastic casing shall be stored in such a manner as to prevent deformation, sagging, or bending. Storage of thermoplastic casing and couplings in direct sunlight shall be avoided. Thermoplastic casing shall be installed only in an oversized drillhole and shall not be driven, pushed, or forced into a formation. Thermoplastic casing shall be joined by mechanical means only. When pulling back thermoplastic well casing to expose a well screen, the force applied shall not exceed the casing weight.

#### C. **Well Screen**

A well screen is necessary for all drilled wells that are completed in unconsolidated formations. Wells completed in bedrock do not require a screen unless the bedrock formation is brittle in nature or has a potential for collapse. The well screen aperture openings, screen length, and diameter shall be selected so as not to limit the aquifers'

water yielding characteristics while preventing access of soil particles that would detract from well efficiency and yield.

#### **D. Grouting and Sealing**

Private wells drilled in bedrock shall be grouted from the top of the weathered rock interface to fifteen (15) feet into competent bedrock. Either neat cement grout or sand cement grout shall be used and it shall be emplaced using standard grouting techniques as described in the DEP Private Well Guidelines.

All wells completed with the casing extending above grade shall have a surface seal designed to eliminate the possibility of surface water flowing down the annular space between the well casing and the surrounding backfilled materials. The surface seal shall extend to a depth below the local frost line.

#### **E. Pumps and Pumping Equipment**

All pumps shall be installed either below the frost line with a pitless adapter or in some other heated and protected sanitary location.

Deep-well reciprocating pumps shall be installed directly over the well. Submersible and helical rotor pumps must be installed in the well. A deep-well jet may be offset from the well.

#### **F. Wellhead Completion**

Well casing shall not be cut off below the land surface unless a pitless adapter or a pitless unit is installed or an abandoned well is being permanently plugged. Well casing terminating above-grade shall extend at least 12 inches above the predetermined ground surface at the wellhead except when the well is located in a floodplain. When a well is located in a floodplain, the well casing shall extend at least 2 feet above the level of the highest recorded flood. The top of the well casing shall be reasonably smooth and level.

Any well that does not terminate at the ground surface in the base of a pump shall be equipped with a sanitary seal or watertight cap designed to prevent surface water and foreign matter from entering the well. A flowing artesian well shall be equipped with a shut-off valve and backflow preventer so that the flow of water can be stopped completely when the well is not in use.

All wells except flowing artesian wells shall be vented. The opening of the vent pipe shall be covered with a 24 mesh corrosion resistant screen and shall be large enough to prevent water from being drawn into the well through electrical conduits or leaks in the seal around the pump when the pump is turned on. The vent pipe shall terminate in a downward position at or above the top of the casing.

All connections to a well casing made below ground shall be protected by either a pitless adapter or a pitless unit that complies with the most recent revision of National Sanitation Foundation Standard Number 56, entitled "Pitless Well Adapters."

Above grade connections into the top or side of a well casing shall be at least 12 inches above the established ground surface or two feet above the level of the highest known flood, whichever is higher. Above ground connections shall be sealed so that they are watertight.

The ground material immediately surrounding the well casing shall be sloped downward and away from the well in all directions to eliminate the possibility of surface water ponding.

#### **G. Disinfection**

Upon completion of well construction, the well contractor shall disinfect the well. If a pump is to be installed by the well contractor immediately upon completion of the well, the contractor shall disinfect the well and the pumping equipment after the pump has been installed.

If the pump is not installed upon completion of the well, the pump contractor shall, upon installation, disinfect the well and the pumping equipment. The pump contractor shall also disinfect the entire water supply system after any maintenance or repair work is done on the pump.

When the well is disinfected, the initial chlorine concentration shall be 100 mg/l throughout the entire water column.

For newly constructed or altered wells in which the pump is not immediately installed, the chlorine concentration used to disinfect the well shall be 100 mg/l. Upon installation of the pump, disinfection of the well, the pumping equipment and the distribution system, if connected, shall be accomplished with a chlorine concentration of 100 mg/l.

The disinfectant solution shall remain, undisturbed, in the well for a minimum of two (2) hours. After all the chlorine has been flushed from the water supply system, a water sample shall be collected and submitted to a state certified laboratory. For new wells, the sample shall be tested pursuant to Section VI of these regulations. For wells, which have undergone repair, the sample shall be tested for coliform bacteria and any other parameters deemed appropriate by the Board.

#### **XI. 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.

The owner of a private well shall decommission the well if the well meets any of the following criteria:

- 1) Construction of the well is terminated prior to completion of the well.
- 2) The well owner notifies the Board that the use of the well is to be permanently discontinued.
- 3) The well has been out of service for at least three years.

- 4) The well is a potential hazard to public health or safety and the situation cannot be corrected.
- 5) The well is in such a state of disrepair that its continued use is impractical.
- 6) The well has the potential for transmitting contaminants from the land surface into an aquifer or from one aquifer to another and the situation cannot be corrected.

The property owner shall be responsible for ensuring that all abandoned wells and test holes or borings associated with private well installation are properly plugged. Only registered well drillers may plug abandoned wells, test holes, and borings.

In the case of existing shallow or dug wells, abandonment shall require the well be filled with clean fill.

In the case of new well construction, all test holes and borings shall be plugged before the well driller completes work at the site.

Abandoned wells or borings shall be completely filled with a neat cement grout, sand cement grout, concrete, or bentonite grout.

Regardless of the type used, the grout:

- 1) shall be sufficiently fluid so that it can be applied through a tremie pipe from the bottom of the well upward;
- 2) shall remain as a homogeneous fluid when applied to the subsurface rather than disaggregating by gravity into a two phase substance;
- 3) shall be resistant to chemical or physical deterioration; and,
- 4) shall not leach chemicals, either organic or inorganic, that will adversely affect the quality of the groundwater where it is applied.

The plugging materials shall be introduced at the bottom of the well or boring and placed progressively upward to a level approximately four (4) feet below the ground surface. Sealing materials shall never be poured from the land surface into the well, borehole, or annular space being sealed.

The contractor shall emplace the surface seal no sooner than 24 hours after the well or boring has been plugged. Before the surface seal is placed, casing remaining in the hole shall be cut off. The remaining four feet at the top of the well or boring shall then be filled with concrete. The top of the seal shall comprise a concrete slab above the top of the plugged well or boring. This concrete slab shall be at least six (6) inches thick and shall be at least two (2) feet greater in diameter than the well casing or borehole wall.

XII. **ENFORCEMENT /PENALTIES**

The Board shall investigate violations of these regulations and/or violations of any Water Supply Certificate conditions and may take such actions as the Board deems necessary for the protection of the public health and the enforcement of these regulations.

If any investigation reveals a violation of these regulations or the Water Supply Certificate conditions, the Board shall order the private well owner to comply with the violated provision(s) within thirty (30) days or such other time period as the Board deems necessary.

The Board shall further order that failure to comply may result in the issuance of violation tickets.

The order shall be in writing and served in the following manner:

- a) personally, by any person authorized to serve civil process; or
- b) by any person authorized to serve civil process by leaving a copy of the order at the well owner's last and usual place of abode; or
- c) by sending the well owner a copy of the order by registered or certified mail, return receipt requested, if the well owner is within the Commonwealth; or
- d) if the well owner's last and usual place of abode is unknown or outside the Commonwealth, by posting a copy of the order in a conspicuous place on or about the premises and by advertising it for at least three out of five consecutive days in one or more newspapers of general circulation within the municipality wherein the private well affected is situated.

The Board may suspend or revoke any contractor's permit upon a finding that the holder of such permit has violated any of these regulations or has failed to comply with any lawful order of the Board pursuant to these regulations.

Whoever violates any provision of these regulations shall be subject to a fine of \$100.00 for the first offense, \$200.00 for the second offense, and \$300.00 for any subsequent offenses in any calendar year pursuant to Chapter 1 of the General By-Law of the Town of Westwood and MGL, Chapter 40, Section 21D.

XIII. **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 seven (7) days after 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 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 original order, the well owner shall comply within the time period allotted in the original order or in the modification.

Every notice, order, or other record prepared by the Board in connection with the hearing shall be entered as a matter of public record in the office of the Board of Health.

If a written petition for a hearing is not filed with the Board within seven (7) days after the day an order has been served, or, if after a hearing, the order has been sustained in any part, failure to comply with the order as issued or modified shall constitute an additional offense.

#### XIV. APPEAL

Any person aggrieved by the final decision of the Board may seek relief therefrom within thirty (30) days in any court of competent jurisdiction, as provided by the laws of this Commonwealth.

#### XV. VARIANCE

The Board may, after a public hearing, grant a variance to the application of these regulations when, in its opinion, the enforcement thereof would do manifest injustice, and the applicant has demonstrated that the equivalent degree of protection will still be provided to the private water supply without strict application to particular provisions of these regulations.

Every request for a variance shall be made in writing and shall state the specific variance sought and the reasons therefor. The letter shall contain all the information needed to assure the Board that, despite the issuance of a variance, the public health and environment will be protected. Notice of the hearing shall be given by the Board, at the applicant's expense, at least ten (10) days prior thereto, by certified mail to all abutters of the property upon which the private well is located and by publication in a newspaper of general circulation. The notice shall include a statement of the variance sought and the reasons therefor. Any grant or denial of a variance shall be in writing and shall contain a brief statement of the reasons for approving or denying the variance. A copy of each variance shall be conspicuously posted at the facility serviced by the well for thirty (30) days following its issuance and shall be available to the public at all reasonable hours in the office of the Board of Health.

Any variance may be subject to such qualification, revocation, suspension, condition, or expiration as is provided in these regulations or as the Board expresses in its grant of the variance. A variance 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 be heard, pursuant to Section XIII of these regulations.



XVI. **SEVERABILITY**

If any provision of these regulations or the application thereof is held to be invalid by a court of competent jurisdiction, the invalidity shall be limited to said provision (s) and the remainder of these regulations shall remain valid and effective. Any part of these regulations subsequently invalidated by a new state law or modification of an existing state law shall automatically be brought into conformity with the new or amended law, and shall be deemed to be effective immediately, without recourse to a public hearing and the customary procedures for amendment or repeal of such regulation.

XVII. **EFFECTIVE DATE**

These regulations were amended by vote of the Westwood Board of Health, at their regularly scheduled meeting held on November 8, 2000 and are in full force and effect on and after November 30, 2000. Before said date, these regulations shall be published and copy thereof be place on file in the Board of Health office and filed with the Department of Environmental Protection, Division of Wastewater Management (formerly the Division of Water Pollution Control) in Boston. These regulations or any portions thereof may be amended, supplemented or repealed from time to time by the Board, with notice as provided by law on its own motion or by petition.

XVIII. **DISCLAIMER**

The issuance of a well permit shall not be construed as a guarantee by the Board or its agents that the water system will function satisfactorily nor that the water supply will be of sufficient quality or quantity for its intended use.

Regulation Adopted: May 16, 1996, Amended: November 8, 2000, Effective: November 30, 2000, Amended: March 14, 2001, Effective: April 5, 2001, Amended: October 9, 2002, Effective: October 21, 2002, Amended: April 20, 2004, Effective: May 6, 2004 Amended April 18, 2006 Effective: April 24, 2006 Amended: October 16, 2007 Effective: October 23, 2007 Amended: October 8, 2013 Effective Date: October 31, 2013