



## **PRIVATE WATER SUPPLY REGULATIONS**

**Town of Randolph**

**Board of Health**

**Robert Eldridge, Chairman**

**Thomas J. Fisher, Co-Vice Chairman**

**Richard Brown, Co-Vice Chairman**

**DATE**

# RANDOLPH BOARD OF HEALTH

## PRIVATE WATER SUPPLY REGULATIONS

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1.00 [PURPOSE](#)  
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These regulations are intended to protect the public health and general welfare by ensuring that Private Wells are constructed and maintained in a manner that will protect the quality of the groundwater derived from Private Wells and to protect the groundwater resources of Randolph so that the consuming public can be assured of safe and healthy water.

## **2.00 AUTHORITY**

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These regulations are adopted by the Randolph Board of Health, as authorized by Massachusetts General Laws, Chapter 111, Section 31 and supersede all previous regulations adopted by the Board of Health relative to the construction of Private Wells. These regulations shall be construed in each and every instance in a manner consistent with the purpose stated herein and shall not be construed to relieve any individual or entity of any duty, obligation or restriction imposed by Massachusetts General Laws, the Code of Massachusetts Regulations or any other law, regulation or ordinance relative to the installation, maintenance or protection of Private Water Supplies.

## **3.00 DEFINITIONS**

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**Abandoned Well:** A Private Well that in the opinion of the Board meets any of the following criteria:

- (1) Construction was terminated prior to completion of the Private Well;
- (2) The Private Well owner has notified the Board of Health that use of the Private Well has been permanently discontinued;
- (3) The Private Well has been out of service for at least three years;
- (4) The Private Well is a potential hazard to public health or safety and the situation cannot be corrected;
- (5) The Private Well is in such a state of disrepair that its continued use is impractical; or
- (6) The Private 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.

**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.

**Alteration:** A change in the type of construction or configuration of a private water system, including but not limited to, adding a disinfection or treatment device, converting a water well with a buried seal to a well with a pitless adapter, extending a distribution system, converting a Private Well using a well pit to a Private Well with a pitless adapter, extending the Casing above ground, deepening a Private Well, changing the type of pumping equipment when that requires making new holes or sealing or plugging existing holes in the Casing or wall of a Private Well, and repairing, extending or replacing any portion of the inside or outside Casing or wall.

**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.

**Artesian Aquifer:** An aquifer that is bounded above and below by impermeable materials or materials of distinctly lower permeability than the Aquifer itself. The water in an Aquifer confined in this manner will rise in a drilled hole or well Casing above the point of initial penetration (above the bottom of the confining, or impermeable, layer overlying the Aquifer).

**Artesian Well:** A Private Well producing from an Artesian Aquifer. The term includes both flowing and nonflowing Private Wells.

**Board:** The Board of Health of Randolph, Massachusetts or its authorized Agent.

**Building:** Any structure used or intended for supporting or sheltering any use or occupancy.

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

**Certified Laboratory:** Any laboratory that has full certification by the Department of Environmental Protection as provided in the most recent edition of "Certification Status of Commercial Environmental Laboratories."

**Consolidated Formation:** Any geologic formation in which the earth

materials have become firm and coherent through natural rock forming processes. The term is used interchangeably with the word "bedrock" and includes, but is not limited to, basalt, granite, limestone, sandstone, and shale.

**Contaminant:** Any physical, chemical, biological or radiological substance or matter in water which, in the opinion of the Board of Health or other regulating agency, would present a threat to the public health.

**Contamination:** The presence of any physical, chemical, biological or radiological substance or matter in water at a concentration and/or for a duration or anticipated duration which, in the opinion of the Board of Health or other regulating agency, would present a threat to the public health.

**Cross Connection:** Any physical connection between two sources of water that in the opinion of the Board may allow the water to flow from one source to the other.

**Drilled Well:**A Private Well in which the hole is drilled using means such as rotary, cable tool or augers into the Consolidated Formation.

**Driven Well:**A Private Well in which the hole is driven using means such as rotary, cable tool or augers into the Unconsolidated Formation.

**Dug Well:** A Private Well in which the hole is excavated using means such as a shovel, backhoe or any other means other than those employed in creating Drilled Wells or Driven Wells as defined herein.

**Foundation Wall:** A wall below the floor nearest grade serving as a support for a wall, pier, column or other structural part of a Building.

**Nonpotable Well:** Any dug, driven, or drilled hole with a depth greater than its largest surface diameter developed to supply water not intended for human consumption.

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

**Potable Well/Potable Water Supply:** Any dug, driven, or drilled hole with a depth greater than its largest surface diameter developed to supply water intended and/or used for human consumption.

**Private Water Supply/Private Well:** Any dug, driven, or drilled hole with a depth greater than its largest surface diameter developed to supply

water not subject to regulation by 310 CMR 22.00.

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

**Subsurface Sewage Disposal System:** A Subsurface System consisting of any or all of a septic tank, Leaching Facility (including reserve area) and the piping starting at the exterior foundation wall of the Structure connecting all of the various parts of the system, that is designed and constructed for the purpose of disposing of the sanitary sewage on a lot generated by the Structure on that lot.

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

**Structure:** Anything constructed or erected at a fixed location on the ground and supported by a foundation wall to give support or provide shelter for any common use and occupancy.

**Unconsolidated Formation:** Any naturally occurring uncemented, unlithified material such as sand, gravel, clay or soil.

**Water table:** Water found in cracks, fissures and pore spaces in the Zone of Saturation below the ground surface.

**Watertight:** A condition which does not allow the entrance, passage or flow of water or other fluids under normal operating conditions.

**Well Driller:** A Person who charges a fee for digging or drilling a Private Well, or a Person who advertises for hire the availability to dig or drill Private Wells within the Commonwealth of Massachusetts.

**Zone of Saturation:** The zone below the Water Table in which all interstices are filled with groundwater.

#### 4.00 **PRIVATE WELL REGISTRATION** [Contents](#)

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4.01 Property owners shall register all Private Water Supplies (Private Wells), both Potable and Nonpotable with the Board of Health.

#### 5.00 **PRIVATE WELL CONSTRUCTION PERMIT** [Contents](#)

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5.01 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.

5.02 Each permit application to construct a Private Well shall include the following:

(1) The property owner's name and address;

(2) The Well Driller's name and proof of valid D.E.M. state registration;

(3) A plan with a specified scale, signed by a registered surveyor or engineer, showing the location of the proposed Private Well in relation to existing or proposed above or below ground structures;

(4) A description and location of all existing and proposed structures as well as location of any potential source of pollution within 500' of the Private Well;

(5) Proof that the owner of any property abutting the Applicant's property has been notified of the Applicant's intention to install a Private Well;

(6) A permit fee shall be required as established by the Board.

5.03 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 Private Well.

5.04 Private Well Construction Permits are not transferable.

## **6.00. WATER SUPPLY CERTIFICATE**

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6.01 The issuance of a Water Supply Certificate by the Board shall certify that the Private Well may be used as a drinking water supply. A Water Supply Certificate must 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 Private Well.

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

- (1) A Private Well Construction Permit;
- (2) A copy of the *Water Well Completion Report* as required by the Division of Water Resources (CMR 313, section 3.00);
- (3) A copy of the Pumping Test Report required pursuant to **Section 8.00** of these regulations;
- (4) A copy of the Water Quality Report required pursuant to **Section 9.00** of these regulations.

6.03 Upon the 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 one of the following actions:

- (1) Issue a Water Supply Certificate;
- (2) Deny the Applicant a Water Supply Certificate and specify the reasons for the denial;
- (3) Issue a conditional Water Supply Certificate with those conditions which the Board deems necessary to ensure fitness, purity and quantity of the water derived from that Private Well. Said conditions may include, but not be limited to requiring treatment or additional testing of the water.

**7.00 PRIVATE WELL LOCATION**  
**AND USE REQUIREMENTS**

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7.01 In locating a Private Well, the Applicant shall identify all potential sources of Contamination which exist or are proposed within five hundred (500) feet of the Private Well. When possible, the Private 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 layout of the premises. A Private Well must be located on the lot which it serves.

7.02 Each Private Well shall be accessible for repair, maintenance, testing and inspection. The Private Well shall be completed in a water bearing formation that will produce the required quantity of water under normal

operating conditions.

7.03 All Private Wells must conform to the minimum setback distance measured in feet and as set forth below:

<b>Nonpotable Well Line</b>	<b>Potable Well or Suction Line</b>	<b>or Suction</b>
Property Line 25	25	
Street Layout 25	25	
Subsurface Sewage Disposal System	250	100
Other Wells 50	50	
Subsurface Drain	25	25
Underground Oil/Gas Tanks and Distribution Lines	100	100
Normal High Water Mark of any Lake, Pond, River, Stream, Ditch or Slough	25 <sup>1</sup>	25 <sup>1</sup>
Building Sewer/Sewer Mains	250	100

<sup>1</sup> When possible, Private Water Supplies shall be located in areas above the 100-year floodplain.

7.04 Water supply lines shall be installed at least ten (10) feet from and eighteen (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 watertightness.

7.05 The Board reserves the right to impose minimum lateral distance requirements from other potential sources of Contamination not listed above. All such special Private Well location requirements shall be listed, in writing, as a condition of the Well Construction Permit.

7.06 No Private Well, or its associated distribution system, shall be connected to either the distribution system of a public water supply system

or any other water distribution system.

**8.00 WATER QUANTITY REQUIREMENTS**  
**FOR POTABLE WELLS**

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8.01 The Applicant shall submit to the Board for review and approval a copy of the D.E.M./Division of Water Resources *Water Well Completion Report*.

8.02 Test pumping shall be conducted at a rate at least equal to the pumping rate expected during normal Private Well use. The pump test for a **Potable Well** shall be conducted for a minimum of four (4) hours. The Board of Health may also require additional testing: The Applicant shall submit to the Board for review and approval a copy of the D.E.M./Division of Water Resources *Water Well Completion Report*.

<b>Depth of Water Column in well Gals/Min. within 15 minutes of Completion of Pump Test</b>	<b>Yields-</b>
Less than 150' per bedroom	1.67
150' to 300' per bedroom	1.00
Greater than 300' per bedroom	.80

8.03 In all cases, Private Wells used as a Potable Water Supply must yield a minimum of 2.5 gallons per minute.

8.04 No Private Well used for a Potable Water Supply shall be approved if the average vertical depth of storage in the Private Well is less than 15' at the time of installation, or if the water level in the Private Well fails to recover to eight-five (85) percent of the prepumped Static Water Level within a twenty-four (24) hour period.

8.05 Installation of a water storage reservoir, excluding an approved water pressure tank, requires approval of the Board of Health or its Agent.

**9.00 WATER QUALITY TESTING**  
**REQUIREMENTS**

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9.01 After the Private Well has been completed and disinfected, and prior to using it as a drinking water supply, a water quality test shall be

conducted.

9.02A water sample shall be collected either after purging three (3) well volumes or following the stabilization of the pH, temperature and specific conductance in the pumped Private 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.

9.03The water quality test, utilizing EPA approved methods and DEP maximum acceptable limits for drinking water testing and not methods used for analyzing wastewater, shall be conducted by a Certified Laboratory and shall include analysis for the following parameters:

<b>Parameter</b>		<b>Potable</b>
<b>Nonpotable</b>		
coliform bacteria		
Yes	Yes	
nitrogen (nitrate)		
Yes	Yes	
turbidity		
Yes	No	
Volatile Organic Compounds (V.O.C.s)		Yes
No		
sodium		
Yes	No	
alkalinity		
Yes	Yes	
calcium		
Yes	No	
chloride		
Yes	No	
color		
Yes	No	
hardness		
Yes	No	
iron		
Yes	No <sup>1</sup>	
lead		
Yes	No	
magnesium		
Yes	No	
manganese		
Yes	No	
nitrogen (ammonia)		
Yes	No	

nitrogen (nitrite)	
Yes	No
odor	
Yes	No
pH	
Yes	Yes
potassium	
Yes	No
sediment	
Yes	No
sulfate	
Yes	No
total dissolved solids	
Yes	No

<sup>1</sup>Although not required, it is recommended to determine these parameters to avoid staining of structures around irrigated areas that are associated with iron and manganese.

9.04 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;
- (4) Water sample chain of custody.

9.05 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.

**10.00 PRIVATE WELL CONSTRUCTION**  
**REQUIREMENTS**

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10.01 Pursuant to 313 CMR 3.00, no Person in the business of digging or drilling shall construct a Private Well unless registered with the D.E.M./Division of Water Resources.

10.02 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 Private Well and the pump controls shall be made pursuant to an electrical permit. All piping between the Private 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 Private Well or house.

10.03A 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.

#### 10.04 General Private Well Design and Construction

(a) All Private 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 Private Well site;

(2) No unsealed openings will be left around the Private Well that could conduct surface water or contaminated groundwater vertically to the intake portion of the Private Well or transfer water from one formation to another.

(b) Permanent construction materials shall not impart toxic substances, taste, odors or bacterial Contamination to the water in the Private Well.

(c) 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.

(d) Private Well construction design shall insure that surface water does not enter the Private Well through the opening or by seepage through the ground surface. Construction site waste materials shall be disposed of in such a way as to avoid Contamination of the Private Well and the Aquifer. During any time that the Private Well is unattended, the Well Driller shall secure the Private Well in a way as to prevent either tampering with the Private Well or the introduction of foreign material into the Private Well.

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

(f) 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 Private Well or the water bearing zones penetrated by the Private Well. Water shall be conveyed in clean

sanitary containers or water lines and shall be chlorinated to an initial concentration between 50 mg/l and 100 mg/l. 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.

(g)All drilling equipment, including pumps and down hole tools, shall be cleaned and disinfected prior to drilling each new Private Well or test hole.

(h)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 Private Well, the Aquifer, or the quality of the water to be pumped from the Private Well; surfactants should be biodegradable. The use of biodegradable organic polymers shall, when possible, be avoided.

(i)All Private 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, airlift pumping.

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

#### 10.05 Well Casings

(a)Private 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.

(b)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.

(c)All Casing used in the construction of Private 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.

(d)Installation of water 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 drive shoe 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.

(e) Upon completion of the installation procedure, the entire length of the Casing above the intake shall be watertight.

(f) For Private Wells completed above grade, the Casing shall extend at least twelve (12) inches above the finished ground surface unless the well is located in a floodplain. For Private Wells constructed in a floodplain, the Casing shall extend at least two (2) feet above the level of the highest recorded flood. The top of the Casing shall be reasonably smooth and level.

#### 10.06 Steel Casing

(a) Steel Casing shall consist of schedule 40 pipe that complies with materials standards approved by the American Water Works Association (AWWA).

(b) Segments of steel Casing shall be coupled by using threaded Casing, couplings, 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 welded 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 tensile strength equal to or greater than that of the Casing.

#### 10.07 Thermoplastic Casing

(a) Thermoplastic Casing used in the construction of Private 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 Coupling 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."

(b) 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.

(c) 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.

#### 10.08 Well Screen

(a) A well screen is necessary for all Drilled Wells that are completed in Unconsolidated Formations. Private 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 Private Well efficiency and yield.

#### 10.09 Grouting and Sealing

(a) 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.

(b) All Private 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.

#### 10.10 Pumps and Pumping Equipment

(a) All pumps shall be installed either below the frost line with a pitless adapter or in some other heated and protected sanitary location. Aboveground pumps shall be installed in sheltered, dry, accessible locations and shall be protected from freezing.

(b) Shallow-well pumps shall be installed as near the Private Well or Private Water Supply as possible to minimize suction lift.

(c) Deep-well reciprocating pumps shall be installed directly over the

Private Well. Submersible and helical rotor pumps must be installed in the Private Well. A deep-well jet pump may be offset from the Private Well.

#### 10.11 Wellhead Completion

(a) 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 twelve (12) inches above the predetermined ground surface at the wellhead except when the Private Well is located in a floodplain. When a Private Well is located in a floodplain, the well Casing shall extend at least two (2) feet above the level of the highest recorded flood. The top of the well Casing shall be reasonably smooth and level.

(b) Any Private Well that does not terminate 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 Private 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 Private Well is not in use.

(c) All Private 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 Private 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.

(d) 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."

(e) Above-grade connections into the top or side of a well Casing shall be at least Twelve (12) inches above the established ground surface or Two (2) feet above the level of the highest known flood, whichever is higher. Above-grade connections shall be sealed so that they are watertight.

(f) The ground immediately surrounding the well Casing shall be sloped downward and away from the Private Well in all directions to eliminate the possibility of surface water ponding.

## 10.12 Disinfection

(a) Upon completion of Private Well construction, the Well Driller shall disinfect the Private Well. If a pump is to be installed by the Well Driller immediately upon completion of the Private Well, the Well Driller shall disinfect the Private Well and the pumping equipment after the pump has been installed.

(b) If the pump is not installed upon completion of the Private Well, the pump contractor shall, upon installation, disinfect the Private 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.

(c) When a Private Well is disinfected, the initial chlorine concentration shall be 100 mg/l throughout the entire water column.

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

(e) The disinfectant solution shall remain, undisturbed, in the Private Well for a minimum of two (2) hours. After all the chlorine has been flushed from the Private Water Source system, a water sample shall be collected and submitted to a state Certified Laboratory. For new Private Wells, the sample shall be tested pursuant to Section 6.00 of these regulations. For Private Wells which have undergone repair, the sample shall be tested for coliform bacteria and any other parameters deemed appropriate by the Board.

## 11.00 DECOMMISSIONING REQUIREMENTS

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11.01 Abandoned Wells, test holes and borings shall be decommissioned so as to prevent the Private Well, including the annular space outside the Casing, from being a channel allowing the vertical movement of water.

11.02 The owner of the Private Well shall decommission the Private Well if the Private Well in the opinion of the Board meets any of the following criteria:

(1) Construction of the Private Well is terminated prior to completion of the Private Well;

(2)The Private Well owner notifies the Board that the use of the Private Well is to be permanently discontinued;

(3)The Private Well has been out of service for at least three (3) years;

(4)The Private Well is a potential hazard to public health or safety and the situation cannot be corrected;

(5)The Private Well is in such a state of disrepair that its continued use is impractical; or

(6)The Private 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.

11.03The 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 Well Drillers may plug Abandoned Wells, test holes and borings.

11.04In the case of new Private Well construction, all test holes and borings shall be plugged before the Well Driller completes work at the site.

11.05Abandoned Wells or borings shall be completely filled with a grout which cures with a final permeability of less than  $1 \times 10^{-7}$  cm/sec. Private Wells shall be plugged with neat cement grout, sand cement grout, concrete or bentonite grout.

11.06Regardless 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 Private 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;

(4)Shall not leach chemicals, either organic or inorganic, that will adversely affect the quality of the groundwater where it is applied.

11.07The plugging materials shall be introduced at the bottom of

the Private 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 Private Well, borehole, or annular space being sealed.

11.08 The Well Driller shall emplace the surface seal no sooner than 24 hours after the Private Well or boring has been plugged. Before the surface seal is placed, Casing remaining in the hole shall be cut off. The remaining four (4) feet at the top of the Private 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 Private 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.

**12.00 PRIVATE WELL INSPECTION**  
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**AT THE TIME OF TRANSFER**

12.01 At the time of real estate transfer, a well inspection will be performed which includes the location of the Private Well and the testing results in accordance with these regulations.

12.02 The Seller shall provide a copy of the Private Well location and test results to the Town of Randolph Health Department within thirty (30) days after the inspection has been completed and to the Buyer prior to the closing, but in no case less than twenty-four (24) hours prior to closing.

**13.00 ENFORCEMENT**  
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13.01 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.

13.02 If an 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).

13.03 These orders 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 Private Well owner's last and usual place of abode;

**OR**

(c)By sending the Private Well owner a copy of the order by registered or certified mail, return receipt requested, if the Private Well owner is within the Commonwealth;

**OR**

(d)If the Private 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 (3) out of five (5) consecutive days in one or more newspapers of general circulation within the municipality wherein the Private Well affected is situated.

**14.00****HEARING**  
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14.01The 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 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 Private Well owner thereof in writing. The hearing shall be commenced not later than thirty (30) days after the day on which the order was served. The Board, upon application of the Private Well owner, may postpone the date of hearing for a reasonable time beyond such Thirty (30) day period if in the opinion of the Board the Private Well owner has submitted a good and sufficient reason for such a postponement. At the hearing the Private 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 Private 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.

14.02Every 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 clerk of the town or in the office of the Board.

14.03 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, each day's failure to comply with the order as issued or modified may constitute an additional offense.

**15.00 APPEAL**  
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15.01 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.

**16.00 PENALTIES**  
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16.01 Any Person who violates any provision of these regulations or who fails to comply with any order by the Board, for which a penalty is not otherwise provided in any of the General Laws, shall upon conviction be fined not less than ten (\$10.00) nor more than five hundred (\$500.00) dollars. Each day's failure to comply with an Order may constitute a separate violation.

**17.00 VARIANCE**  
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17.01 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.

17.02 Every request for a variance shall be made in writing and shall state the specific variance sought and the reasons therefore. The writing shall contain all the information needed to assure the Board that, despite the issuance of a variance, the public health environment will be protected. Notice of the hearing shall be given by the Applicant or the Applicant's Agent, at least ten (10) days prior thereto, by certified mail to all abutters within 250 feet of the property line upon which the Private Well is located. The notice shall include a statement of the variance sought and the reasons therefore. Any grant or denial of a variance shall be in writing and shall contain a brief statement of the reasons for denying the variance. A copy of each variance shall be available to the public at all reasonable

hours in the office of the Board. Any person aggrieved by the decision of the Board may appeal said decision within thirty (30) days in a Court of Competent Jurisdiction.

17.03 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 13.00 of these regulations.

**18.00 SEVERABILITY**

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18.01 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.

**19.00 EFFECTIVE DATE**

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19.01 These regulations were adopted by vote of the Town of Randolph Board of Health, at their regularly scheduled meeting held on \_\_\_\_\_ and are to be in full force and effect on and after \_\_\_\_\_. Before said date, these regulations shall be published and a copy thereof be placed on file the Board of Health Office and filed with the Department of Environmental Protection, Division of Water Supply in Boston.

19.02 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.

**20.00 DISCLAIMER**

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20.01 The issuance of a Water Supply Certificate 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.

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Robert Eldridge

DATE

Chairman

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Richard Brown                      DATE  
Co-Vice Chair

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Thomas Fisher                      DATE  
Co-Vice Chair

