GILL BOARD OF HEALTH REGULATIONS FOR PRIVATE WELLS

Approved 8/28/2012, Effective 10/15/2012

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I. PURPOSE

These regulations are intended to protect the public health and general welfare by ensuring that private wells are constructed in a manner which will protect the quality of the groundwater derived from private wells. These regulations also provide for the periodic testing of private water supplies in accordance with maintaining a potable water supply as required by the Minimum Standards of Fitness for Human Habitation (State Sanitary Code).

II. AUTHORITY

These regulations are adopted by the GILL Board of Health, as authorized by Massachusetts General Laws, Chapter 111, section 31. These regulations supersede all previous regulations adopted by the Board of Health pursuant 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.

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.

Bentonite Grout: A mixture of bentonite (API Standard 13A) and water in a ratio of not less than one pound of bentonite per gallon of water.

Board: The Board of Health of Gill Massachusetts or its authorized agent.

Business of Digging or Drilling: A person who charges a fee for digging or drilling a well, or a person who advertises for hire the availability to dig or drill wells within the Commonwealth of Massachusetts.

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 well.

Certified Laboratory: Any laboratory currently certified by the Department of Environmental Protection for the analysis of drinking water. Provisional certification shall also qualify.

Certified Well Driller: Any person certified with the Department of Environmental Protection Well Driller Program to dig or drill wells in the Commonwealth of Massachusetts.

Concrete: A mixture consisting of Portland cement (ASTM Standard C150, type I or API Standard 10, Class A), sand, gravel, and water in a proportion of not more than five parts of sand plus gravel to one part cement, by volume, and not more than six gallons of water. One part cement, two parts sand, and three parts gravel are commonly used with up to six gallons of water.

Irrigation well: Well used for the sole purpose of watering or irrigation. These shall not be connected at any point in time to a dwelling or a building unless they meet the requirements of a Private Drinking Water Well and have the Board's written approval.

Neat Cement Grout: A mixture consisting of one bag (94 pounds) of Portland cement (ASTM Standard C 150, Type I or API Standard 10, Class A) to not more than six gallons of clean water. Bentonite (API Standard 13A), up to two percent by weight of cement, shall be added to reduce shrinkage. Other additives, as described in ASTM Standard C494, may be used to increase fluidity and/or control setting time.

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

Private Drinking Water Well: 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 that is not subject to regulation by 310 CMR 22.00

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

Sand Cement Grout: A mixture consisting of Portland cement (ASTM Standard C150, Type I or API Standard 10, Class A), sand, and water in the proportion of one part cement to three or four parts sand, by volume, and not more than six gallons of water per bag (94 pounds) of cement. Up to five percent, by weight of bentonite (API Standard 13A) shall be added to reduce shrinkage.

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

A.) Permit Required

A Massachusetts Certified Well Driller 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 Massachusetts certification
3) a plan with a specified scale, signed by a registered surveyor, professional engineer, or registered sanitarian, showing the location of the proposed well in relation to existing or proposed above or below ground structures.
4) a description of visible 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) a permit fee as set by the Board of Health Fee Schedule.

B.) Permit Expiration, Revocation, Extension, Transfer

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. WATER SUPPLY CERTIFICATE

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 well.

A.) Submission Required to Obtain Certificate

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 Protection Well Driller Program (310 CMR 46.03 (3)
3) a copy of the Pumping Test Report required pursuant to Section VII of these regulations
4) a copy of the Water Quality Report required pursuant to Section VIII of these regulations

B.) Issuance of Certificate, Denial, Conditions

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. These conditions may include, but not be limited to, requiring treatment or additional testing of the water.

VI. WELL LOCATION AND USE REQUIREMENTS

A.) Sources of Contamination Identified

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 up-gradient 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.

B.) Setback Requirements, Special Requirements

No well shall be permitted for use as a potable water source unless it meets the following setback requirements:

15 feet from the property line
25 feet from the roadway
15 feet from right of way
50 feet from building sewer line or septic tank
100 feet from leaching field or drywell
100 feet from stable, barnyard, manure storage
15 feet from power line or overhead distribution line
50 feet from surface water

Wells shall not be located in closed depressions subject to periodic inundation, or other areas subject to seasonal or periodic flooding. 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.

C.) Well Accessibility, Separation from Sewer Lines, Cross-Connections Prohibited

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.

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.

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.

VII. WATER QUANTITY REQUIREMENTS

A.) Submission of Pump Test Report

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, static water level immediately before pumping commenced, discharge rate and, if applicable, the time the discharge rate changed, pumping water levels and respective times after pumping commenced, maximum drawdown during the test, duration of the test, including both the pumping time and the recovery time during which measurements were taken, recovery water levels and respective times after cessation of pumping, and reference point used for all measurements.

B.) Conduct of Pumping Test

In order to demonstrate that the well capacity can provide the required volume of water, a pumping test shall be conducted in the following manner:

1) The volume of water necessary to support the household's daily need shall be determined using the following equation: (number of bedrooms plus one bedroom) x (110 gallons per bedroom) x (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 twenty-four (24) hour period.

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

C.) Pumping Test Examples

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

1) *1 bedroom + 1 bedroom = (2 bedrooms) x (110 gallons per bedroom) x (safety factor of 2) = 440 gallons needed daily.*
2) *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 gal/ft.) = 300 gallons.
3) *440 gallons + 300 gallons =* 740 gallons *that must be pumped from the well in 24 hours or less to demonstrate suitable capacity. Recovery to at least 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 containing 100 ft. of standing water:

1) *4 bedroom house + 1 bedroom = (5 bedrooms) x (110 gallons per bedroom) x (safety factor of 2) = 1,100 gallons needed daily.*
2) *the volume of a 6-inch well is 1.5 gallons for every foot of water volume length.* Therefore, (100 ft. of standing water) x (1. 5 gal/ft.) = 150 gallons.
3) *1,100 gallons + 150 gallons=*1250 gallons *that must be pumped from the well in 24 hours or less to demonstrate suitable capacity. Recovery to at least 85% of the static water level must also occur within 24 hours after cessation of pumping.*

VIII. WATER QUALITY TESTING REQUIREMENTS

This regulation requires that potable private drinking water wells meet all current Massachusetts' Primary and Secondary Drinking Water Standards and Guidelines adopted by the MassDEP Office of Research and Standards (ORS).

The Board reserves the right to require retesting of the required 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 public health, safety, welfare and the environment. All costs and laboratory arrangements for the water testing are the responsibility of the applicant.

A.) Water Testing Required

After the construction of the well has been completed and disinfected, and prior to using it as a private drinking water well, baseline water quality testing shall be conducted.

A 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 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.

B.) Water Quality Parameters, Additional Testing for Bedrock Wells Advised

Water quality testing, utilizing the applicable US EPA approved method for drinking water testing, shall be conducted by a Massachusetts certified laboratory and shall include analysis for the following parameters: .

Arsenic, Chloride, Copper, Fluoride, Hardness, Iron, Lead, Manganese, pH, Sodium, Total Coliform Bacteria, E. coli Bacteria, Nitrate/Nitrite

In wells drilled into bedrock the Board of Health recommends that in addition to the parameters listed above, a Gross Alpha Screen and Radon test be performed.

The Board of Health may require additional testing in addition to the parameters listed above in this regulation, based on local knowledge or concern.

C.) Testing Irrigation Wells (Non-Potable Water) Required

For irrigation wells, the Board requires annual testing for E. coli bacteria and Nitrate/Nitrite, as accidental consumption could result in acute exposure. Testing shall be done every three (3) years.

D.) Rental Property Water Testing Required

The owner of every well used for drinking water that serves a property which is rented or leased shall have its water tested at a Massachusetts certified laboratory for the following chemical and bacteriological parameters at a minimum of once every three (3) years for:

total coliform bacteria, e. coli bacteria, nitrate, nitrite, pH, conductivity, sodium, and iron.

All other listed chemical parameters found in VIII.B. shall be tested at a minimum of every nine (9) years. Initial water quality testing shall be done within three months of adoption of this regulation, unless a test has been performed within the previous three years. The initial test shall include the parameters listed in VIII. B. unless such test results, less than nine (9) years old, are available. The Board of Health may require more frequent testing, or testing for additional parameters, where other water quality problems are known or suspected to exist.

The owner of a rental property shall make results of the most recent three (3) water quality tests available to all tenants of the property and the Board of Health. In cases where the well water does not meet the water quality standards outlined above, the Board of Health may require the property owner to provide treatment or an alternative approved source of drinking water for the tenants.

E.) Water Testing at the Time of Title Transfer

Prior to selling, conveying, or transferring title to real property, the owner shall have tested the water of every private drinking water well serving that property. A water sample from each well shall be submitted to a Massachusetts certified laboratory for testing for the parameters outlined in the Water Quality section of this document. This water quality testing shall have been performed not more than one (1) year prior to transfer of the property. Results of the water quality testing shall be submitted to the Board of Health prior to property transfer.

In addition, the owner shall give copies of all available water quality test results of which he/she has knowledge (regardless of age of results) for the private well in question to any buyer and/or broker identified with the transfer. In the event that there is no buyer at the time the water is tested, a copy of all water test results must be given by the owner to the buyer before the property is put under agreement.

F.) Submission of Water Quality Report

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

IX. WELL CONSTRUCTION REQUIREMENTS

Pursuant to 310 CMR 46.02 (1), no person in the business of digging or drilling shall construct a well unless certified by the MassDEP Well Drillers Program.

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 certified well driller, including the installation of the pump and appurtenance(s) in the well or house.

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 substances, 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 by 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 any time 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.

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 from wetlands, swamps, ponds and other similar surface features shall not be used. 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/1.

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, air-lift 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.

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 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 driveshoe 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.

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

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 well is located in a floodplain. When a 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.

C. Well Screen

A well screen is necessary for all drilled wells that are completed in unconsolidated formations. All well screens shall be of Grade 304 stainless steel. 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 ground surface or to the bottom of the pitless adaptor (if present) to fifteen (15) feet into competent bedrock. Neat cement grout, sand cement grout, or Bentonite grout shall be used. It shall have a permeability of at least 1×10^{-7} and be emplaced using standard grouting techniques as described in the MassDEP 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. Wellhead Completion

All wells 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 and dug 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 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.

The ground 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.

F. 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 a 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, the well, the pumping equipment, and the distribution system, if connected, shall be disinfected 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 Massachusetts 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.

X. 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 the private well shall decommission the well if any of the following criteria are met:

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 (3) 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 certified well drillers may plug abandoned wells, test holes, and borings.

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 overburden wells or borings shall be completely filled with a low permeability grout, which cures with a final permeability of less than $1x10^{-7}$ cm/sec. Wells shall be plugged with 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
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 install a surface seal 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 (4) 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.

XI. ENFORCEMENT

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 public health and safety, the environment, 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 provisions(s).

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 civic 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) 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, if the well owner's last and usual place of residence is unknown or outside the Commonwealth.

XII. 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 day the order was served a written petition requesting a hearing on the matter. Upon receipt of such petition, the Board shall set a time and place for such hearing and shall inform the well owner in writing. The hearing shall commence not later than thirty (30) days after the day on which the order was served. The Board, upon application by the well owner, may postpone the date of hearing for a reasonable time beyond such thirty (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 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 modified the original order, it shall be carried out 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 clerk of the city or town, or in the office of the Board.

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 shall constitute an additional offense.

XIII. 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.

XIV. PENALTIES

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 then ten (10) nor more than five hundred (500) dollars. Each day's failure to comply with an Order shall constitute a separate violation.

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 for seeking the variance. The writing shall contain all the information needed to assure the Board that, despite the issuance of a variance, the public health, safety, 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 in the town or city in 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 approving or denying the variance. A copy of each variance shall be conspicuously posted for thirty (30) days following its issuance and shall be available to the public at all reasonable hours in the Office of the Town Clerk or Office of the Board of Health. No work shall be done under any variance until thirty (30) days elapse from its issuance, unless the Board certifies in writing that an emergency exists.

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 XI 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

A public hearing on these regulations was begun on July 24, 2012. First publication of notice of public hearing was made July 9, 2012 in the Greenfield Recorder, and second notification was made on July 16, 2012 in the Greenfield Recorder. These regulations were adopted by vote of the Gill, Massachusetts Board of Health, at their regularly scheduled meeting held on August 28, 2012 and are to be in full force and effect on October 15, 2012. A copy of these regulations shall be placed on file in the Board of Health Offices and filed with the Department of Environmental Protection, Division of Wastewater Management 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.

XIX. SIGNATURES

Signed and Certified under the
pains and penalties of perjury,

Chairperson

Board Member

Board Member