TOWN OF HAWLEY, MASSACHUSETTS HAWLEY BOARD OF SELECTMEN AND BOARD OF HEALTH REGULATIONS FOR PRIVATE WELLS

Effective August 20, 2019 and Superseding All Prior Private Well Regulations

SECTION I. OVERVIEW:

These regulations are adopted by the Hawley Board of Health (hereinafter sometimes referred to as the "Board") 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 therefrom. These regulations also provide for the testing of private water supplies in order to maintain a potable water supply as required by the Minimum Standards of Fitness for Human Habitation (State Sanitary Code). Within these regulations, there are some provisions, specifically noted, that are recommended as opposed to being required. Additionally and depending upon the specific circumstances of any given case, measures and or testing additional to that set forth herein may be prudent. Ultimately, safety is the responsibility of the well owner and neither the Board nor the Town shall be responsible for the consequences of a well owner failing to follow the Board's non-mandatory recommendations or to otherwise act in a reasonably prudent manner.

SECTION II. LEGAL AUTHORITY:

These regulations are adopted by the 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 related to the construction of private wells. In addition to the specific regulations laid out herein, all applicable State and Federal laws and regulations that relate to the subject matter hereof, including future additions and amendments thereto, are hereby incorporated by reference.

SECTION III. DEFINITIONS:

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

Applicant: Any person or entity which 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.

Board: The Board of Health or, except for as follows, its Agent. The term "Board" shall not refer to the Board's Agent for purposes of issuance of orders (Sec. XI(b)); hearings (Sec. XII); penalties (Sec. XIV); and variances (Sec. XV). All of the foregoing are within the exclusive jurisdiction of the Board of Health as a whole and not its Agent, though the Agent may advise and assist the Board with these matters and carry out its directives.

Business of Digging or Drilling: A person or entity which charges a fee for digging or drilling a well, or a person or entity which 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 (including provisional certification) by the Massachusetts Department of Environmental Protection for the analysis of drinking water.

Certified Well Driller: Any person or entity certified by the Massachusetts Department of Environmental Protection's Well Driller Program to dig or drill wells in Massachusetts.

Irrigation Well: A well used for the sole purpose of watering or irrigation and not for providing drinking water to people. These regulations do not apply to Irrigation Wells.

Long Term Rental: Tenancy, by lease or *at will*, lasting thirty (30) or more consecutive days.

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, or the water collection system associated with a spring that supplies water for the same, that is not subject to regulation by 310 CMR 22.00.

Short Term Rental: Short term occupancy of residential or commercial dwelling units lasting less than thirty (30) consecutive days, including but not limited to motels, hotels, inns, Air B&B's, and bed and breakfasts.

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

SECTION IV: LANDOWNER RIGHTS

- **A)** Landowner Right to Construct Their Own Well: A private landowner may construct their own private well, regardless of licensure and certification level, provided that they comply with the provisions of these regulations.
- **B)** Alternative "Green" Systems: Nothing in these regulations prohibits the construction of gravity fed water systems, hand dug wells, spring fed wells, or other "green" alternatives that do not rely on electricity or the use of fossil fuels, provided the construction complies with all applicable laws and regulations and the well meets the required safety and potability standards contained herein, particularly including those in Section VIII.
- C) Exemption for Existing Systems: The requirements set forth herein apply to new construction only. These regulations do not affect the usage of wells and water systems existing prior to their passage, excepting the requirements relating to the testing of wells on rental properties, the

requirements for decommissioning, and the authority of the Board to take action under this policy if it has reasonable grounds to believe that an existing well poses a health or safety hazard.

SECTION V. WELL CONSTRUCTION PERMIT:

A) Permit Required:

The Applicant or a Massachusetts Certified Well Driller hired by the Applicant 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) if one is hired, the well driller's name and proof of valid Massachusetts certification
- 3) a plan with a visual depiction showing the location of the proposed well in relation to existing or proposed above or below ground structures and rendered with sufficient accuracy that compliance with the setback and other requirements laid out in these regulations may be determined.
- 4) a description of visible prior and current land uses within two-hundred (200) feet of the proposed well location, which are 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 without permission from the Board.

VI. 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 a structure. However, this does not apply to existing wells serving existing structures.

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) if a Certified Well Driller is hired, 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 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 decision on the application for a Water Supply Certificate. A 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.

VII. WELL LOCATION AND USE REQUIREMENTS:

A) Well Capacity: Wells shall be completed in water bearing formations that will produce a quantity of water necessary for use by the premises under normal operating conditions. While Hawley does not set specific numeric well output requirements, the Massachusetts DEP and Franklin Regional Council of Governments both have recommendations on this subject. The well must be able to produce sufficient water volume to meet the needs of the household and all occupants, including during periods of dry weather when the water table will be lower. Another important variable to consider is that different properties have drastically different water usages; for example, a farm with significant livestock will obviously require more water than a premises used exclusively for residential purposes. In all cases, the Board strongly recommends that a well be capable of producing more water than is needed by a safe margin.

B) Sources of Contamination Identified:

In locating a well, the applicant shall identify potential sources of contamination, which exist or are now known as being proposed, within two-hundred (200) feet of the site. When possible, the well shall be located up-gradient of potential sources of contamination and shall be as far removed therefrom as practicable.

C) Setback Requirements, Special Requirements:

- 1) No well shall be constructed for use as a potable water source unless it meets the following setback requirements:
 - a) 15 feet from any property line
 - b) 25 feet from the roadway
 - c) 15 feet from a right of way
 - d) 50 feet from a sewer line or septic tank
 - e) 100 feet from leaching field or drywell
 - f) 100 feet from stable, barnyard, manure storage
 - g) 15 feet from power line or overhead distribution line
 - h) 50 feet from surface water
- 2) 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 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.

D) Well Accessibility, Separation from Sewer Lines, Cross-Connections Prohibited:

- 1) Each private well shall be accessible for repair, maintenance, testing, and inspection.
- 2) Water supply lines shall be installed at least eighteen (18) inches above and, wherever possible, ten (10) feet horizontally away from any sewer line. Whenever water supply lines must cross sewer lines, both pipes shall be constructed of watertight pressure pipe.
- 3) 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. A physical connection is not permitted between a private well or drinking water supply which conforms to the requirements of these regulations and another water supply which does not conform to the requirements of these regulations (i.e. an irrigation well) without prior approval of the Board, except for a connection which only allows water to flow in one direction, from the conforming system to the non conforming one.

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 reasonable judgment 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.

Massachusetts certified laboratories for testing drinking water can be found at: http://eeaonline.eea.state.ma.us/DEP/Labcert/Labcert.aspx

A) Water Testing Required:

After the construction of the well has been completed and the water system 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 after purging three (3) well volumes subsequent to disinfection. The water sample to be tested shall be collected at the pump discharge, from a disinfected tap in the pump discharge line, or, if there is no pump, from the disinfected tap nearest to where the waterline enters the dwelling. In no event shall a water treatment device be installed prior to sampling, except in the case of a test done subsequent to the baseline test for the purpose of assessing the effectiveness of the treatment device.

B) Water Quality Parameters:

- 1) Water quality testing, utilizing the applicable US EPA approved method for drinking water testing, shall be conducted by a Massachusetts certified laboratory or, with the Board's approval, a laboratory of good repute utilizing similar standards and methods, 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.
- 2) In wells drilled into bedrock the Board of Health strongly recommends that, in addition to the parameters listed above, a **Gross Alpha Screen** and **Radon Test** be performed.
- 3) The Board of Health may, on a case by case basis and informed by the facts and circumstances surrounding a particular situation, require additional testing beyond the parameters listed above if it has cause to reasonably believe such testing is warranted.

C) Testing for Rentals:

The owner of any rental property, whether a short or long term rental, shall make available to the Board of Health and, upon request, to any prospective tenant, the results of the most recent water quality test for the private well providing potable water to said property. If no water quality test has been performed in the past ten years, the tenant may request that the owner have one performed, which shall be done at no additional expense to the tenant. The results shall be provided to the tenant and copied to the Board or 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. Nothing in this Section shall be construed to limit or supersede any other requirements or rights existing under state or federal law.

D) Testing on Transfer:

The Board recommends, but does not require, that the same water quality tests as outlined in **Subsection B** be conducted any time a property is sold or transferred.

E) 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 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:

A) General Rules:

- 1) 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. (This does not apply to a private land owner constructing their own well but not otherwise engaged in the business of digging or drilling).
- 2) Any work involving the connection of the private well to the distribution system of a residence must conform to the local plumbing code.
- 3) A physical connection is not permitted between a private well or drinking water supply which conforms to the requirements of these regulations and another water supply which does not conform to the requirements of these regulations (i.e. an irrigation well) without prior approval of the Board, except for a connection which only allows water to flow in one direction, from the conforming system to the non conforming one.

B) Well Design and Construction

- 1) All private water supply wells shall be designed such that:
 - a) the materials used for the permanent construction are durable in the specific hydrogeologic environment that occurs at the well site
 - b) no 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.
- 2) Construction materials shall not impart toxic substances, taste, odors, or bacterial contamination to the water in the well.

- 3) 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.
- 4) Well construction design shall insure that surface water does not enter the well. 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 well shall be secured in a way as to prevent the introduction of foreign material into the well.
- 5) 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.
- 6) Water utilized for drilling, well development, or to mix a drilling fluid, shall be conveyed in sanitary containers or water lines and shall be chlorinated to an initial concentration between 50 mg/l and 100 mg/l.
- 7) All drilling equipment, including pumps and down hole tools, shall be cleaned prior to drilling each new well or test hole.
- 8) 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.
- 9) All wells, including those that have been hydro-fractured, 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: over-pumping, backwashing, surging, jetting, air-lift pumping.
- 10) The completed well shall be sufficiently straight so that there will be no interference with installation, alignment, operation or future removal of a permanent well pump, if the design calls for the installation of such a pump (i.e., this does not apply to systems relying solely on gravity).

C. Well Screen:

A well screen is necessary for all drilled wells that are completed in unconsolidated formations. All well screens shall be stainless steel. Wells completed in bedrock do not require a screen unless the bedrock formation is brittle or has a potential for collapse. 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 particles that would detract from well efficiency and yield.

D. Well Casing/Tile

Drilled wells shall be installed with a steel or thermoplastic well casing that 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 hydro-geologic environment. Dug wells shall be internally lined with concrete tile or masonry to prevent the collapse or introduction of dirt and foreign material into the cistern.

D. Wellhead Completion:

- 1) All wells shall be equipped with a seal or cap designed to prevent surface water and foreign matter from entering the well.
- 2) All wells except flowing artesian and dug wells shall be vented. The opening of the vent pipe shall be covered with a 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. The vent pipe shall terminate in a downward position at or above the top of the casing.
- 4) The ground immediately surrounding the well casing or upper tile shall be sloped downward and away from the well in all directions to eliminate the possibility of surface water ponding.

F. Disinfection:

- 1) Upon completion of well construction, the well shall be disinfected. If a pump is to be installed immediately upon completion of the well, the well and pumping equipment shall be disinfected 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.
- 2) When a well is disinfected, the initial chlorine concentration shall be 100 mg/l throughout the entire water column as well as the pumping equipment and distribution system if applicable.
- 3) The disinfectant solution shall remain undisturbed in the well for a minimum of two (2) hours. Only after all the chlorine has been flushed from the water supply system, shall any samples be collected and submitted for testing.

X. DECOMMISSIONING AND PLUGGING REQUIREMENTS

- **A)** In General: 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 is deemed a hazard to public health or safety and the situation cannot be corrected

- 4) The well is in such a state of disrepair that its continued use is impractical.
- 5) 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

B) Rules Surrounding Decommissioning and Plugging:

- 1) The property owner and or well driller shall be responsible for ensuring that all abandoned wells and test holes or borings associated with private well installation are properly plugged.
- 2) In the case of new well construction, all test holes and borings shall be plugged before the well driller completes work at the site.
- 3) Abandoned overburden wells or borings shall be completely filled with a low permeability grout. Wells shall be plugged with neat cement grout, sand cement grout, concrete, or bentonite grout. Regardless of the type used, the grout:
 - a) shall be sufficiently fluid so that it can be applied through a tremie pipe from the bottom of the well upward
 - b) shall remain as a homogeneous fluid when applied to the subsurface rather than disaggregating by gravity into a two phase substance
 - c) shall be resistant to chemical or physical deterioration
 - d) shall not leach chemicals that will adversely affect the groundwater where it is applied.
- 4) 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 remaining four (4) feet at the top of the well or boring shall then be filled.

XI. ENFORCEMENT:

A) Investigation:

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.

B) Issuance of Order:

If any investigation reveals a substantial violation of these regulations or the Water Supply Certificate Conditions, the Board may order the private well owner or the responsible contractor to comply with the violated provisions(s). These orders shall be in writing and served as follows:

- (a) personally;
- (b) by leaving a copy of the order at the well owner's last and usual place of abode,
- (c) by sending the well owner or contractor a copy of the order by registered or certified mail, return receipt requested, and/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:

A) General Procedure:

The private well owner or contractor 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. Upon receipt of such petition, the Board shall set a time and place for such hearing and shall inform the petitioner 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 petitioner, may postpone the hearing for a reasonable time beyond such thirty (30) day period if, in the judgment of the Board, the petitioner has submitted a good and sufficient reason. At the hearing, the petitioner 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 petitioner 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 (however no modification shall establish a time period shorter than the original order).

B) Public Record:

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

C) Subsequent Failure to Comply:

If a 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 subsequent week's failure to comply with the order as issued or modified, beyond the date set forth therein, shall constitute an additional violation, however the Board may waive this Section for good cause.

XIII. APPEAL:

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

XIV. PENALTIES:

The Board may fine any person who violates these regulations or who fails to comply with a lawful order by the Board, for which a penalty is not otherwise provided in any of the General Laws, up to five hundred dollars (\$500.00) per violation, (or less at its discretion).

XV. VARIANCE:

A) In General:

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, or the applicant has demonstrated that the equivalent degree of protection will be provided to the private water supply without strict application to particular provisions of these regulations.

B) Procedure:

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. 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 therefore. A copy of each variance shall be conspicuously posted at the Town Office for thirty (30) days following its issuance and shall be available to the public through the Office of the Town Clerk. 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.

C) Subsequent Changes:

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 XII** of these regulations.

XVI. SEVERABILITY:

If any provision of these regulations or the application thereof is deemed or rendered invalid by a court of competent jurisdiction or by operation of future legislation or regulation, the remainder of these regulations shall remain valid and effective.

XVII. EFFECTIVE DATE:

These regulations are effective as of August 20, 2019. They were passed following the publication of a Legal Notice in the Greenfield Recorder at least 14-days and 7-days prior to holding a duly

posted Notice of Public Hearing. These regulations were then adopted by a vote of the Board of Health, after careful consideration of commentary received. A copy of the Town's regulations is on file at the Town Office and has also been 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.

Should you have any questions, please feel free to write, call, or email

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