



**TOWN OF BREWSTER**  
**2198 MAIN STREET**  
**BREWSTER, MA 02631**  
PHONE: (508) 896-3701 EXT 1120  
FAX: (508) 896-4538  
BRHEALTH@BREWSTER-MA.GOV

OFFICE OF  
HEALTH DEPARTMENT

## **BREWSTER BOARD OF HEALTH PRIVATE WELL REGULATIONS**

Under the authority of M.G.L., CH. 111, Sec. 31 and CH. 21G, Sec 20, to protect the public health of the inhabitants and the environmental quality of the Town of Brewster, the Brewster Board of Health voted to adopt the following regulation at its meeting held on June 16, 2015.

When these regulations become effective, all previous Private Well Regulations will be rescinded.

### **SECTION (1) DEFINITIONS:**

Abandoned Well- A well that has not been used for water supply for a period of one year or more, unless the owner declares his intention to use the well again for supplying water within one year.

Area of Restricted Groundwater Use- An area of land which has been designated by the Board of Health to have groundwater which has been degraded or may become degraded to a point where it is unfit for human consumption or other uses.

Board of Health- The Brewster Board of Health or its agents.

Decommissioning- The plugging of an abandoned well so that it will not serve as a conduit for movement of water to or from the well or between water bearing zones.

Groundwater Heat Pump- A refrigeration system which can heat or cool a dwelling which operates by exchanging heat with the groundwater. The groundwater can be supplied by either a closed loop system or an open loop system consisting of a supply and discharge well.

MassDEP- The Massachusetts Department of Environmental Protection (and its successor agency, if applicable).

Monitoring Well- A well used for groundwater monitoring purposes which is left in the ground for over 48 hours.

Non-Potable- Well water which will be used for purposes other than for human consumption and bathing.

Pollution- Adverse effect on water quality created by the introduction of any potentially harmful matter.

Potable- Water which is free from impurities that may cause disease or harmful physiological effects and is safe for human consumption and bathing.

Primary Water Quality Standards- Minimum standards of water quality set for the protection of public health.

Protection Zone- An area with a radius of one hundred (100) feet surrounding a well and an imaginary line extending one hundred fifty (150) feet up gradient (see attached figure A); or, where sufficient hydro geologic information is available and actual zones of contribution can be defined to the satisfaction of the Board of Health.

Rented or leased property- Any dwelling used for habitation or business purposes by an occupant other than the owner, for the use of which a fee is paid. This includes but is not limited to, campgrounds, motels, bed and breakfasts, inns and other accommodations used on a transient basis, as well as community –type building which are rented to community groups.

Secondary Water Quality Standards- Minimum standards of water quality established for constituents of water which may adversely affect the aesthetic quality of drinking water through taste, odor, color and appearance of drinking water.

Well- Any hole or shaft constructed into the ground for the purpose of injecting or extracting water and other fluids, or to monitor groundwater levels and water quality. Not included are wells used on a temporary basis for the purpose of dewatering excavations, stabilizing hillsides or earth embankments, sampling soil vapors, or sampling groundwater if the installation tool is left in the ground fewer than 48 hours.

Well Driller- Any licensed/certified individual, corporation, company association, trust, or partnership that drills, alters, or decommissions a well for a fee or advertises for hire to provide such services.

## **SECTION (2) GENERAL REQUIREMENTS**

### **A) Registration of Wells**

The owners of any property in the Town of Brewster on which there is a potable water, well or non-potable water well must register the well with the Board of Health. The registration of the well must include the property location, its street address, map and parcel number, year constructed, location of well on the property, and whether the well is potable or non-potable well water.

### **B) Registration of Well Drillers**

All well drillers doing business in the Town of Brewster shall annually file with the Board of Health a copy of their current well driller registration certificates issued by the MassDEP in accordance with 310 CMR 46.00.

### **C) Well Installation, Alteration, Repair and Abandonment**

(1) No well shall be installed, altered, repaired, replace or abandoned except by a well driller, who is certified by MassDEP pursuant to M.G.L. Chapter 21, Section 20, 310CMR 46.00; and the Brewster Board of Health.

(2) All wells shall be located on the property to be served.

#### **D) Well Construction**

- (1) The top of a potable well shall be 8" above ground which is higher than any surface sources of contamination and above any known conditions of flooding by drainage or runoff from the surrounding land, unless located in a flood-proofed well house or fitted with a sanitary seal.
- (2) Wells must be constructed so as to maintain existing natural protection against all known or potential pollution from entering the well.
- (3) All non-yielding holes which are installed in the process of constructing a well must be filled so as to not act as a conduit to the groundwater.
- (4) In areas where salt water or other pollutant intrusion is known or likely to occur, the Board of Health , working with the applicants design engineer, may specify the well screen level, pumping rate, water storage capacity, or any other construction parameter which must be used to ensure that water of adequate quality is obtained.

#### **E) Well Decommissioning**

- (1) Prior to destruction of any well, the well driller must obtain a well destruction permit from the Board of Health.
- (2) The fee for this permit shall be set by the Board of Health.
- (3) Any abandoned well shall be filled and sealed with clean puddle clay, neat cement grout, bentonite or concrete grout in such a manner as to prevent it from acting as a channel for pollution to the groundwater.
- (4) Within 30 days following the completion of the plugging procedure, the certified well driller who plugged the abandoned well, test hole, or dry or inadequate boring must submit a Well Completion Report to MassDEP with a copy to the Board of Health in accordance with 310 CMR 46.03, and must submit a Decommissioning Report to the owner, agent and Board of Health, where the well, test hole, or boring is located.

The following information shall be included in the Decommissioning Report:

- (a) name and address of the property owner
  - (b) name and address of the certified well driller who performed the plugging
  - (c) reason for abandonment
  - (d) location of the well, test hole, or boring referenced to at least two permanent structures or, when possible, use GPS coordinates
  - (e) static water level before plugging
  - (f) types of plugging material used, including mix specifications
  - (g) a copy of the abandonment permit
- (5) At the time of selling, conveying, or transferring title to real property in the Town of Brewster, abandoned wells must comply with sections 3 & 4 above.

## **F) Prohibitions**

- (1) Dug wells are prohibited in the Town of Brewster.
- (2) The extraction of water from lakes, ponds, streams and springs is prohibited in the Town of Brewster, with the exception of extracting water for productive agricultural/horticultural uses as permitted by the State.

## **SECTION (3) REQUIRMENTS FOR NON POTABLE WATER WELLS**

### **A) Well Construction Permit**

- (1) No well shall be installed, altered, or repaired, until a Well Construction Permit has been obtained from the Board of Health. A permit so granted shall expire six (6) months from the date of issue, unless construction has begun.
- (2) The fee for this permit shall be set by the Board of Health.
- (3) An application for a Well Construction Permit shall be submitted by the drilling contractor, or his agent, to the Board of Health on forms furnished by the Board of Health. The well driller is responsible for obtaining said permit prior to construction.
- (4) The Board of Health must approve the location and design of the well, prior to issuance of a Well Construction Permit. Prior to approval, the Board of Health requires the following information be submitted:
  - (a) The assessor's map, parcel and lot number of the property on which the well will be located.
  - (b) A site plan showing the proposed location of the well in relation to building foundations, property lines, building sewer lines, subsurface drainage systems, subsurface sewage disposal systems serving the lot and all other lots within 100' and any other known source of contamination within 100' which could affect the well.
- (5) Permit conditions- All permits issued shall be subject to the conditions that all facilities shown shall be constructed in the location approved by the Board of Health. All permits issued shall be subject to the requirements of these regulations and to such further conditions as the Board of Health shall prescribe.
- (6) Cross Connections- Cross connections between public and private water supplies are prohibited.

### **B) Well Location**

- (1) In general, wells intended for non-potable purposes shall be located as far as possible from potential sources of contamination. The following minimum distances are required:

Property Line	<b><u>10 feet</u></b>
Roadway	<b><u>10 feet</u></b> (from edge of road layout, not edge of pavement)

Leaching catch basin/drywell **25 feet** (but recommend that this distance be maximized)

\*Septic tank **10 feet**

\*\*Septic leaching facility **25 feet**

Septic distribution box **10 feet**

Building sewer **10 feet**

Subsurface drains **25 feet** (but recommend that this distance be maximized, as pollutants frequently travel along the outside of subsurface drainpipes.

\*Inlet and discharge wells used solely to serve open loop heat pumps shall be located not less than 10' from a septic tank

\*\*Inlet and discharge wells used solely to serve open loop heat pumps shall be located not less than 50' from a septic leaching facility

(2) Where, in the opinion of the Board of Health, adverse conditions exist, the above distances may be increased. In certain cases, the Board of Health may require the owner to provide additional means of protection. Where possible, the well shall be located up the groundwater gradient from sources of contamination.

Prior to approval of the well, the owner, or his agent, shall take a water sample(s) from the well and submit it to a state certified testing laboratory for analysis, with the cost to be borne by the owner. The results of all analyses shall be submitted to the Board of Health. At a minimum, water must be tested for Total Coliform:

#### **Primary Standard**

Total Coliform

0 colonies/100ml. by membrane filtration

In locations where potential sources of contamination are believed to exist, additional water testing and special standards may be required by the Board of Health to ascertain that the well water is safe for the use intended.

#### **C) Well Approval**

(1) A non potable well shall not be placed into use until the Board of Health issues a Certificate of Approval for the well to the owner of the property which the well serves.

(2) The certified well driller shall submit a copy of the Well Completion Report, as required by 310 CMR 46.00 Certification of Drillers and Filing of Well Completion Reports, to the Brewster Board of Health within 30 days of well completion.

## **SECTION (4) REQUIREMENTS FOR POTABLE WATER WELLS**

### **A) Well Construction Permit**

(1) No well shall be installed, altered, or repaired until a Well Construction Permit has been obtained from the Board of Health. A permit so granted shall expire six (6) months from the date of issue, unless construction has begun.

(2) The Board of Health shall set the fee for this permit.

(3) An application for a Well Construction Permit shall be submitted by the drilling contractor, or his agent to the Board of Health on forms furnished by the Board of Health. The well driller is responsible for obtaining said permit prior to well construction.

(4) The Board of Health must approve the location and design of the well prior to issuance of a Well Construction Permit. Prior to approval, the Board of Health requires the following to be submitted:

- (a) The assessor's map, parcel and lot number of the property on which the well will be located.
- (b) Design and capacity of the water system, as described under well yield and water system design.
- (c) A site plan, drawn by a registered professional civil engineer, registered sanitarian, or registered land surveyor. Such plan must show the proposed location of the well in relation to building foundations, property lines, building sewer lines, the subsurface sanitary disposal systems serving the property and other septic systems within 150 feet and any other known sources of contamination within 150 feet which could affect the well. Such sources of contamination shall include: sanitary landfills, auto junk yards, municipal sewage treatment facilities with on site disposal of primary or secondary effluent, car washes, road salt stockpiles, dry cleaning establishments, boat and motor vehicle service and repair, cabinet making, electronic circuit assembly, metal plating, finishing and polishing, right-of-ways, motor and machinery service and assembly, commercial paint, wood preserving and furniture stripping, sites where pesticides and herbicides are regularly applied, including golf courses and cranberry bogs ( but not including pesticide application at single family dwellings), photographic processing, printing, chemical and bacteriological laboratories, transportation terminals, funeral homes, any principal use involving the sale, storage, or transportation of fuel or oil, and any use which involves as an activity the manufacture, storage, use, transportation or disposal of toxic or hazardous materials. To meet this requirement, well location shall be shown on the same plot plan submitted to the Board of Health for approval of septic system installation.
- (d) Proof that the owner of any property abutting the applicant's property and/or in the protective zone has been notified of the applicant's intention to install a well.

(5) For emergency repair, alteration, or replacement of an existing well, the Board of Health may waive the requirements that a site plan be submitted if a registered engineer, registered land surveyor or registered sanitarian locates the well in the field prior to the repair, alteration or replacement of the well commencing. A plot plan, in compliance with these regulations, must be submitted within 30 days upon completion of the

emergency repair, alteration or replacement. Notification as required in A (4) d above can be done within ten (10) days of replacement of the well.

(6) Permit conditions – all permits issues shall be subject to the conditions that all facilities shown shall be constructed in the location approved by the Board of Health. All permits issues shall be subject to the requirements of these regulations and to such further conditions as the Board of Health shall prescribe.

(7) Cross Connections- Cross connections between public and private water supplies are prohibited.

## **B) Well Location**

(1) On-site private wells shall be permitted only if a protection zone around the proposed well does not include any septic systems.

(2) Groundwater flow directions will be determined using the USGS Brewster Water Table Map (1992), or measuring the site –specific flow conditions using at least three (3) observation wells in which water table elevations will be measured.

(3) In general, well water intended for human consumption shall be located as far as possible from potential sources of contamination. The following minimum distances are required:

Property Line	<b><u>10 feet</u></b>
Roadway	<b><u>25 feet</u></b> (from edge of road layout, not edge of Pavement)
Leaching catch basin/drywell	<b><u>25 feet</u></b> (but recommend that this distance be maximized)
Septic tank	<b><u>50 feet</u></b>
Septic distribution box	<b><u>50 feet</u></b>
Building sewer	<b><u>10 feet</u></b>
Subsurface drains	<b><u>50 feet</u></b> **

\*\*This distance should be maximized as pollutants frequently travel along the outside of subsurface drainpipes.

(2) Where, in the opinion of the Board of Health, adverse conditions exist, the above distances may be increased. In certain cases, the Board of Health may require the owner to provide additional means of protection. Where possible, the well shall be located up the groundwater gradient from sources of contamination.

### **C) Water Quality**

(1) Prior to approval of the well, the owner or his agent shall take a water sample from the well and submit it to a state certified testing laboratory for analysis, with the cost to be borne by the owner. The results of all analyses shall be submitted to the Board of Health. At a minimum, water must be tested for the following: total coliform, nitrate-nitrogen, pH, conductivity, sodium, iron and manganese.

(2) The Board of Health will determine potability of the well using as guidelines the National Interim Primary and Secondary Drinking Water Standards and the U.S. EPA Maximum Contaminant Levels (MCLs). The water quality standards for common parameters are as follows:

#### **Primary Standards**

Total Coliform	0 Colonies/100ml. by membrane filtration
Nitrate/Nitrogen	10ppm

#### **Secondary Standards**

pH	Recommend pH above 5.0
Sodium	20ppm
Iron	0.3ppm

Manganese	<b>Current Massachusetts Regulatory Limit</b> Office of Research and Standards Guideline (ORSG)
-----------	--

Target Population	Exposure Period	ORSG, Mg/L (ppm)
General Population	Lifetime	0.3
General Population	10-day	1.0
Infants/children less than 1 year of age	< 10 days (Address within 10 days or sooner if possible)	0.3



(3) In locations where potential sources of contamination are believed to exist, or where geologic or hydrologic conditions require more restrictive or additional standards than those outlined above, additional water testing and special standards may be required by the Board of Health to ascertain that water meets the Maximum Contaminant Levels set for public water supplies by the U.S. EPA under the Safe Drinking Water Act and 1986 SDWA amendments. Such testing may include EPA methods 601, 602, 502, 503, 624 and 625 analyses for purgeable halocarbons, and purgeable aromatics, analysis the Board of Health deems necessary to ascertain water quality. The Board of Health may approve wells which fail to meet some or all of these standards.

(4) When the Board of Health deems it necessary, the health agent or other agent of the Board of Health may be present to witness the taking of a water sample and/or may take the water sample and deliver it to the testing laboratory him/herself.

(5) The Board of Health further recommends that all well owners have their wells tested at a minimum of every two years and at more frequent intervals when water quality problems are known to exist.

(6) The owner of every well intended for human consumption and serving property which is rented or leased shall have its water tested at a state certified laboratory for the water quality parameters outlined above, at a minimum of once every year. Where water quality problems are known or suspected to exist, the Board of Health may require more frequent testing or testing for additional parameters. Should the owner fail to have the test done, a tenant may have the water tested with the cost of such test reimbursed by the owner.

(7) Result of all water quality tests shall be made available to all tenants of the property and to the Board of Health, by the owner of the property.

(8) In cases where the well water does not meet the Primary Water Quality Standards outline above, the Board of Health may require the property owner to provide an alternative approved source of drinking water for the inhabitants of the building served by the well.

#### **D) Submission of Well Water Test Results**

(1) Prior to issuance of a Certificate of Approval for well water intended for human consumption, the results of all water quality shall be submitted to the Board of health on a form which includes the minimum standards of the parameters being tested for.

**(2) Well water test results shall be valid for one (1) year.**

#### **E) Well Approval**

(1) Water from a new well shall not be placed into use for human consumption until the Board of Health has approved the potability and quantity of the water provided and issued a Certificate of Approval for the well to the owner of the property which the well serves.

(2) A Certificate of Approval for a well will not be issued until the well water has been shown to meet the water quality criteria outlined in the regulations

(3) The Board of Health shall not sign off on a Building Permit or a Certificate of Occupancy until it has issued a Certificate of Approval for the well serving that building.

(4) The certified well driller shall submit a copy of the Well Completion Report, as required by 313 CMR 3.00 Registration of Well Drillers and Filing of Well Completion Reports, to the Brewster Board of Health within 30 days of well completion.

(5) The Board of Health may approve wells, which fail to meet some or all of the requirements in these regulations, after a hearing at which a variance from these standards may be granted.

#### **Section (5) Areas of Restricted Groundwater use**

##### **Reserved**

#### **Section (6) Monitoring Wells**

##### **Reserved**

#### **Section (7) Fees**

(1) The Fee for an application for a Well Construction Permit shall be set by the Board of Health and payable at the time of application.

(2) The fee for an application for a well destruction permits shall be set by the Board of Health payable at the time of application.

#### **Section (8) Test of Water Quality upon Transfer of Real Estate**

(1) Prior to selling, conveying or transferring title to real property in the Town of Brewster, the owner thereof shall have tested the water of every potable well serving that property. A water sample from each well shall be submitted to a state certified laboratory for testing for the parameters outline under Water Quality, above. This water quality test shall be performed not more than sixty (60) days prior to the transfer of the property. Results of the water test shall be submitted to the Board of Health prior to property transfer on a form provided by the Board of Health on which the owner will certify that the sample was taken from the well serving the property being transferred.

(2) In addition, the owner shall give copies of all water test results of which he has knowledge (regardless of age of results) for the private potable well in questions 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. In the event that the water is not tested by the owner, the buyer will be required to do so.

(3) This regulation shall not apply to the conveyance or devise of a property to a surviving spouse or to any of the heirs or devisees of the property owner, and further, shall not apply to a sale under power of sale in a bonafide mortgage affecting the property.

#### **Section (9) Test of Water Quality upon Receipt of a Disposal Works Construction Application**

(1) When town water is not provided, permission to construct sewage disposal systems will not be granted by the Board of Health on individual lots until the well is installed and certification submitted as to the

bacteriological and mineral content of the water by a State Approved Laboratory. In the case of an existing dwelling or building, a well must be tested prior to the issuance of the Disposal Works Construction Permit.

### **Section (10) Variance and Enforcement Procedure**

#### **A) Variance**

(1) The Board of Health may vary the application of any provision of this article with respect to any particular case when, in its opinion, the enforcement thereof would do manifest injustice and provided that the decision of the Board of Health shall not compromise the protection of human health and environmental quality.

(2) Every request for a variance shall be made in writing and shall state the specific variance requested and the reasons therefor. Any variance granted by the Board of Health shall be in writing. At least ten (10) days prior to submission of the application to the Board, the applicant shall provide notice of their intent to request a variance by certified mail, return receipt requested to all abutters of the property upon which the private well will be or is located. The notice shall include at a minimum: the name and address of the applicant, a statement of the provisions of this regulation from which a variance is sought, and the reason for seeking the variance. Any denial of a variance shall also be in writing shall state the reasons for the denial. A copy of any variance granted shall be available to the public at all reasonable hours in the office of the Town Clerk of the Board of Health, while it is in effect.

(3) Any variance or other modification, authorized to be made by these regulations, may be subject to such qualification, revocation, suspension or expiration, as the Board of Health expresses in its grant. A variance or modification, authorized to be made by these regulations, may otherwise be revoked, modified or suspended, in whole or in part, only after the holder thereof has been notified, in writing and has been given an opportunity to be heard in conformity with the requirements of 310 CMR 11.00 for orders and hearings.

(4) As a condition of granting a variance, the Board of Health may require a restriction to be recorded at the Registry of Deeds when, in the opinion of the Board of Health, knowledge that the well does not meet minimum standard, should be available to future potential consumers of water supplied by that well.

#### **B) Enforcement, Penalties**

(1) The Brewster Board of Health, its designated agents, enforcement officers and anyone with police powers, may enforce this regulation.

(2) Violations of this regulation will be subject to the provision of Massachusetts General Laws, Chapter 40, Section 21D, regarding non-criminal dispositions as adopted by the Town of Brewster.

(3) Any person who violates any provision of this regulation may be subject to a two hundred (\$200) dollar fine for each offense and to suspension of privileges to drill wells in the Town of Brewster.

#### **C) Severability**

(1) Each section of these rules and regulations shall be construed as separate. If any section, regulation, paragraph, sentence, clause, phrase or word of these rules and regulations shall be declared invalid for any reason, the remainder of these rules and regulations shall remain in full force and effect.

The provisions of Title 1 of the State Environmental Code (310 CMR 11.00) shall govern the enforcement of these regulations.

**Adopted: November 21, 1989**  
**Effective: January 1, 1990**  
**Amended: February 6, 1990**  
**Effective: February 16, 1990**  
**Amended: June 19, 2007**  
**Amended: June 16, 2015**  
**Amended: November 17, 2015**

**Amended: October 16, 1990**  
**Effective: November 11, 1990**  
**Amended: July 15, 1997**  
**Effective: October 3, 1997**  
**Effective: Upon publication**  
**Effective: June 26, 2015**  
**Effective: January 8, 2016**

#### BREWSTER BOARD OF HEALTH

---

Lemuel Skidmore, MS, MPH

---

Mary Chaffee, RN, PhD

---

Joe Ford

---

Collette Williams, Town Clerk

---

Annie Dugan, RN

---

Carmen Scherzo, DVM

FIGURE A-PROTECTIVE ZONE

