



# City of Gloucester **Board of Health** Regulations **Private Wells**

Adopted

Revised



**Public Health**  
Prevent. Promote. Protect.

Gloucester Health Department

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## REGULATIONS FOR PRIVATE WELLS

### **1. 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.

### **2. AUTHORITY**

These regulations are adopted by the City of Gloucester 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.

### **3. 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 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.

**Board:** The Board of Health of the City of Gloucester, 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.

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

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

**Private 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 and not subject to regulation by 310 CMR 22.00: DRINKING WATER REGULATIONS.

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

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

**Right of Way (ROW):** Any roadway or thoroughfare on which public passage is made, and any corridor of land over which facilities such as railroads, pipelines, power lines, conduits, channels, or communications lines are located.

**Static Water Level:** The level of water in a well under no-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.

#### **4. WELL CONSTRUCTION PERMIT**

The property owner or his designated representative shall obtain a permit from the Board of Health prior to the commencement of construction of a private well.

A non-refundable application fee will be charged to the applicant at the time of submission of the permit application. The amount of the fee will depend upon the current approved fee schedule.

Each permit application to construct a well shall include the following:

1. The property owner's name and address.
2. The well driller's name and proof of valid state registration.
3. A plan with a specified scale, signed by a registered surveyor or engineer, showing the location of the proposed well in relation to existing or proposed above or below ground structures.
4. A description and location of visible prior and current land used within five-hundred (500) 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. water lines
  - g. sewer lines
  - h. lot lines
  - i. surface and subsurface drains, including drywells
5. A permit fee of \$125.00. [Fee is subject to change at any time by vote of the Board of Health]

The permit shall be on site at all times that the 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-month period provided that a written request is received by the Board prior to the one-year expiration date. Well construction permits are not transferable.

## **5. 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.

In the case where an individual subsurface sewage disposal system (ISDS) will be installed on the lot, the initial plan submitted with the application for the ISDS shall include the information listed in section 4 above if a private well is to be constructed on the lot.

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 division of Water Resources (313 CMR 3.00).
3. A copy of the Pumping Test Report required pursuant to Section 7 of these regulations.
4. A copy of the Water Quality report required pursuant to Section 8 of these regulations.

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

1. Issue a Water Supply Certificate.
2. Deny the applicant a Water Supply Certificate and specify the reason for denial.
3. Issue a conditional Water Supply Certificate with those conditions which the Board deems necessary to ensure fitness, purity, and quantity of the water derived from that private well. Said conditions may include, but not be limited to requiring treatment or additional testing of the water.

## **6. WELL LOCATION AND USE REQUIREMENTS**

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.

**CATEGORY 1:      SETBACK REQUIREMENTS**

**Potential Contamination Source      Minimum Lateral Distance**

Subsurface sewage disposal system leaching area, cesspool, seepage pit	150 feet
Subsurface sewage disposal system leaching reserve area	150 feet
Septic tank	50 feet
Municipal sewers, building sewer	50 feet

**CATEGORY 2:      MINIMUM SETBACK REQUIREMENTS**

**Component                                      Minimum Lateral Distances**

Property Line	10 feet
Rights-of Way	25 feet
Swimming Pools	20 feet
Subsurface Drains	25 feet
Watercourse, Stream or Wetland	25 feet

The Board reserves the right to impose minimum lateral distance requirement from other potential sources of contamination not listed above. All such special well location requirements shall be listed, in writing, as a condition of the well construction permit.

No private well, or its associated distribution system, shall be connected to either the distribution system of a public water supply system or any type of waste distribution system. It is recommended that no well of any type intended for use as a potable water supply shall be installed where a municipal supply of water is accessible adjoining the property and where permission to connect to such a supply can be obtained from the authority having jurisdiction over it.

**7.      WATER QUANTITY REQUIREMENTS**

1. A pump test will be performed at a rate equal to the quantity of water required by design. The pump shall be operated continuously until a static level is determined.
2. Every well used as a potable supply shall supply a sufficient quantity of water to meet the ordinary needs of the users, and shall yield a minimum of two gallons per minute after a four hour pump test. **(Continued next page)**

3. All demands for water shall be provided from storage in a pressure tank.
4. A well log shall be submitted on forms furnished by the Board of Health and file for public record with the Board of Health office. A permit to construct an individual sewage disposal system (ISDS) will not be issued until said log is received by the Board. The well log shall include as a minimum:
  - a. well depth
  - b. log of well lithology
  - c. static water level
  - d. pump test static level
  - e. well yield
  - f. depth of casing.
5. Disinfection requirements:

Upon completion of construction, rehabilitation, or pump repair, the well shall be disinfected with a solution containing at least 100 ppm available chlorine. The well shall remain in contact with the chlorine solution for a minimum of 24 hours.

## **8. WATER QUALITY TESTING REQUIREMENTS**

After the well has been completed and disinfected, and prior to using it as a drinking water supply, a water quality test shall be conducted.

A water sample shall be collected after the disinfection procedure. 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.

The water quality test, utilizing EPA approved methods for drinking water testing (not methods used for analyzing wastewater), shall be conducted by a certified laboratory and shall include analysis for the following minimum parameters:

**(Continued next page)**

**PARAMETER** **MAXIMUM ACCEPTABLE LIMIT**

**REQUIRED:**

Total Coliform Bacteria	0/100 ml
Nitrogen (Nitrate)	10 mg/L
Sodium	20 mg/L

**OPTIONAL:**

Turbidity	1 Turbidity Unit
pH	8.5
Odor	Threshold number 3
Color	15 Color units
Taste	-----
Hardness	200 mg/L
Sodium	20 mg/L
Manganese	0.05 mg/L
Iron	0.3 mg/L

The water quality report submitted with the well permit application shall include:

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.

Additional chemical and physical analyses, including testing for volatile organic compounds (EPA 624), herbicides, pesticides, and any additional parameters may be required, as well as retesting of the above parameters, when, in the opinion of the Board, it is necessary because of local conditions or for the protection of the public health, safety and welfare. All costs and laboratory arrangements and procedures for the water testing are the responsibility of the applicant.

**9. WELL CONSTRUCTION REQUIREMENTS**

1. Pursuant to 313 CMR 3.00, no person in the business of digging or drilling shall construct a well unless registered with the Department of Environmental Protection, Division of Water Resources.
2. 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 building must be made by a pump installer or registered well driller, including the installation of the pump and appurtenance in the well or building.

## **10. DECOMMISSIONING AND REGISTRATION REQUIREMENTS**

### **A. Decommissioning Wells**

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 the well meets any of the following criteria:

1. Construction of the well is terminated prior to the 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, after extended use, been out of service for at least one year.
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.
7. The well is not the primary source of potable water and municipal water is available to provide a source of potable water.
8. The well has not been used within one year of installation.
9. The requirements of this regulation have not been met to the satisfaction of the Board.

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

### **B. Registration of older wells**

Private wells installed prior to the adoption of these regulations must be registered with the Board, on a form provided by the Board specifically for the registration of wells.

As a minimum, registration of a well will provide the name of the owner of the property, the street address, and the assessor's map and lot number.



## **11. 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 the public health and the enforcement of these regulations.

If an investigation reveals a violation of these regulations, or the Water Supply certificate conditions, the Board shall order the private well owner to comply with the violate provisions.

These orders shall be in writing and served in the following manner:

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

## **12. 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 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 thereof in writing. The hearing shall be commenced not later than 30 days after the day on which the order was served. The Board, upon application of the well owner, may postpone the date of hearing for a reasonable time beyond such 30 day period if in the judgment of the Board the well owner has submitted a good and sufficient reason for such postponement.

At the hearing the well owner shall be given an opportunity to be heard and to show why the order should be modified or withdrawn. After the hearing, the Board shall sustain, modify, or withdraw the order and shall inform the well owner in writing of its decision. If the Board sustains or modifies the 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 Board of Health.

If a written petition for a hearing is not filed with the Board within 7 days after the day an order has been served or if after a hearing, 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.

### **13. PENALTIES**

Any person who violates any provisions 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 no less than ten nor more than five hundred dollars. Each day's failure to comply with an order shall constitute a separate violation.

### **14. 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 the 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 thereof. The writing shall contain all the information needed to assure the Board that, despite the issuance of a variance, the public health and the environment will be protected. Notice of the hearing shall be given by the Board, at the applicant's expense, at least ten 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 City of Gloucester. The notice shall include a statement of the variance sought and the reasons thereof.

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 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 these regulations.

### **15. 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, 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.

## **16. EFFECTIVE DATE**

These regulations were adopted by unanimous vote of the Gloucester Board of Health, at their regularly scheduled meeting held on October 4, 1990, and are to be in full force and effect on and after October 15, 1990.

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.

## **17. DISCLAIMER**

The issuance of a well permit shall not be constructed 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.

**ADOPTED 10/4/90**