

## **Somerville Private Water Supply Regulations**

### **1. Purpose**

The Somerville Board of Health (hereinafter called the Board of Health) seeks to establish and maintain minimum standards for the installation and use of private wells for potable water, irrigation, and geo-thermal wells within the City of Somerville. These regulations are intended to protect the public health and general welfare of the residents of Somerville by ensuring that private wells are constructed and maintained in a manner, which will protect the quality of groundwater derived from private wells.

### **2. Authority**

The Somerville Board of Health adopts these regulations, as authorized by Massachusetts General Law Chapter 111, section 31. These regulations any and all previous regulations adopted by the Board of Health pursuant to the construction and maintenance of private wells.

### **3. Definitions**

**Agent:** Any designated representative of the Board authorized 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 by filing the appropriate application with the Board.

**Board:** The Board of Health of the City of Somerville, Massachusetts or its authorized agent.

**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 Commonwealth of Massachusetts Department of Environmental Protection for the analysis of drinking water quality.

**Irrigation Well:** A private water supply intended for irrigation purposes only.

**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 for irrigation purposes and/or groundwater source heat pump and not subject to regulation by 310 CMR 22.00.

**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 Commonwealth of Massachusetts Department of Environmental Management/Office of Water Resources to dig or drill wells in the Commonwealth of Massachusetts.

#### **4. Well Construction Permit**

4.1 The applicant, who shall be the owner of the property where the well is located or his/her authorized agent, shall submit a plan to the Board of Health showing the location of the proposed well. Said plan shall show all lot lines, structure locations, including septic systems and underground storage tanks, roadways, drains and sewer lines, along with distances to the proposed well. The plan shall be drawn on a scale of approximately one-inch equals forty feet. An application, provided by the Board of Health, shall accompany the plan.

4.1.1 All Geo-Thermal wells must have a UIC registration from the Department of Environmental Protection prior to review from the Board.

4.2 The Board of Health shall review the plan within 90 days of its receipt. If the Board of Health approves the plan, it shall issue a well permit. If it disapproves, it shall notify the applicant, in writing.

4.3 A well may not be installed until a well permit has been received from the Board of Health.

4.4 The Board of Health may charge a reasonable well permit fee.

4.5 The well permit shall expire if a well is not installed within twelve months.

4.6 Well construction permits are non-transferable.

#### **4.7 Access to Public Water Supply**

4.7.1. No application for a private well which is not a geothermal well will be approved if public water supplies are available within 400 feet of the proposed structure to be served. Said distance shall be measured as the shortest linear distance that the applicant could legally traverse through his own property, public or private ways and utility easements available for use by the applicant.

4.7.2 Geothermal wells are not evaluated by this criterion.

#### **5. Plumbing and Cross Connections**

5.1 No private potable well, or its associated distribution system, shall be connected to the distribution system of the City of Somerville.

5.2 Plumbing connected to any private well used for irrigation purposes shall not enter any building served by the Somerville water system.

## **6. Well Locations**

6.1 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.

6.2 Each private well shall be accessible for repair, maintenance, testing, and inspection.

6.3 Wells shall be located the following minimum distances from sources of contamination:

- |                               |           |
|-------------------------------|-----------|
| (1) Property lines            | 5 feet    |
| (2) Roadways                  | 25 feet   |
| (3) Leaching facilities       | 100 feet  |
| (4) Septic or pump tanks      | 50 feet   |
| (5) Underground storage tanks | 100 feet  |
| (6) Building or public sewers | 50 feet * |
| (7) Subsurface drains         | 25 feet * |

\*10 feet if well constructed of durable, corrosion-resistant material with watertight joints.

6.4 In any particular case, the Board may increase the above distances when it decides that specific conditions justify such an increase.

6.5 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.

## **7. Well Construction Requirements**

7.1 Any person installing a well by digging, driving, jetting, drilling or any other method shall be registered, as required by Massachusetts General Laws, Chapter 21, Section 16, as amended by Section 1 through 3 of Chapter 4 of the Acts of 2009, Chapter 21G, Section 20 as shall be effective October 1, 2009, and 313 CMR 3.00, all as may be amended from time to time.

7.2 Any work involving the connection of the private well to the distribution system of the residence must conform to all applicable plumbing codes. 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 registered well driller.

7.3 No private well source can be connected to the public water supply system.

7.4 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.

7.5 There shall be no direct discharge of any unfiltered water byproducts produced during the well drilling into any catch basins, storm drains and/or surface water.

7.6 It shall be the well drillers responsibility to correct any damage to city owned property, private property, or ways and/or utilities caused during the well construction process.

#### **7.7 General Well Designs and Construction**

7.7.1 All private water supply wells shall be designed such that: 1) the materials used for the permanent construction are durable in the specific hydro geologic environment that occurs at the well site; and 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.

7.7.2 Permanent construction materials shall not impart toxic substances, taste, odors, or bacterial contamination to the water in the well.

#### **7.8 Well Casing**

7.8.1 the space surrounding the well casing should be sealed with a watertight grouting extending from the surface of the ground to a depth of ten (10) feet.

### **8. Existing Wells:**

Repair or replacement of existing wells will be governed by these regulations and any regulations enacted by the Commonwealth in Title VI of the State Environmental Code. The location of all existing wells shall be reported to the Board of Health on or before September 1, 2009. The Board shall maintain a register of the location of all private wells reported to the Board.

8.1 The owner of any existing well or his/her agent shall register the well with the Board of Health on a form provided by the Board of Health. Failure to register the potable or irrigation well with the Board of Health shall be considered a violation of this regulation.

8.2 The Board of Health may charge a reasonable fee for the registration of any existing well.

8.3 Current owners must submit recent testing well completion reports.

## **9. Testing**

9.1 The Board of Health may require the testing of a new or existing well at the property owner's expense, or at times in the interest of the public health, the Board feels a health hazard exists.

9.2 The Board reserves the right to require retesting for additional parameters when, in the opinion of the Board, it is necessary due to local conditions or for the protection of the public health, safety and welfare. All costs and laboratory arrangements for the water testing are the responsibility of the property owner.

## **10. No Cross Connection.**

10.1 No well shall be connected to the water distribution system at all. The customer must at his or her own expense have the water tested at a certified laboratory approved by the Department of Environmental Protection. The Board of Health and the Water department shall be provided with a copy of the report analysis. If any additives are used for system operation the Material Safety Data Sheets (MSDS) must be submitted with application. No cross connections between the water distribution system and private wells will be allowed. All private wells may be required to have an appropriate back flow device approved by the Board of Health. Prior to installation of such device a Design Data Sheet and Plumbing Plan must be submitted to the Water department. The owner of the well will be responsible for any fees associated with the testing.

10.2 Irrigation wells are for the sole purpose of irrigation and shall not be deemed or used as a potable supply for human consumption. Irrigation wells shall not be connected to a dwelling. There shall be no cross connection between the irrigation well and domestic supply.

10.3 No potable water wells shall be allowed. Any tap, spigot or other faucet device connected to a private well shall be protected from use for drinking or other non-irrigation purposes and shall have a permanent, legible sign made of weather resistant material stating "DO NOT DRINK, FOR IRRIGATION ONLY."

10.4 There will be no existing wells in the City of Somerville used for potable water.

## **11. Decommissioning Requirements**

11.1 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.

11.2 The owner of the private well shall decommission the well if the well meets any of the following criteria:

## Section 21D.

### 13. Hearing

13.1 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 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 original order, it shall be carried out within the time period allotted in the original order or in the modification.

13.2 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.

### 14. Penalties

14.1 The penalty for violation of any provision of these regulations shall be a fine of not more than three hundred dollars (\$300.00). Each day's failure to comply with an order from the Board of Health shall constitute a separate violation of these regulations.

14.2 Violations of this regulation and penalties may be subject to non-criminal disposition, M.G.L. Chapter 40, Section 21D.

### 15. Variances

15.1 Variances to these regulations may be granted by the Board of Health, if in their opinion strict compliance with these regulations would do manifest injustice and the applicant proves that the same degree of protection as required under these regulations can be achieved with the variance.

15.2 All requests for variances shall be in writing.

15.3 Written notice of the decision of the Board of Health shall be given within 90 working days of the hearing.

## **16. 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 say 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.

## **17. Effective Date**

These regulations were adopted by vote of the City of Somerville Board of Health, at their regularly scheduled meeting held on May 21, 2009 and are to be in full force and effect on and after September 1, 2009. Before said date, these regulations shall be published and a copy thereof be placed on file in the Office of the Board of Health and filed with the Massachusetts Department of Environmental Protection, Division of Wastewater Management (formerly Division of Water Pollution Control). 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.

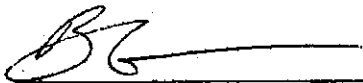
## **18. Disclaimer**

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 shall not construe the issuance of a well permit as a guarantee.

**Adopted: May 21, 2009**  
**Effective: September 1, 2009**

Brian Green, MD, Chairperson  
Babette Mello, Board Member  
Paula Machado, Board

Member



Brian Green, MD, Chairperson



Babette Mello, Board Member



Paula Machado, Board Member