

**BOSTON PUBLIC HEALTH COMMISSION
REGULATIONS FOR INDUSTRIAL, IRRIGATION, GEOTHERMAL,
AND HUMAN CONSUMPTION WATER WELLS**

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Preamble

Industrial, irrigation, and human consumption water wells within the City of Boston may present a significant threat to the public health, safety, and general welfare for the following reasons:

- Few locations in Boston pass the Massachusetts Department of Environmental Protection's (MADEP) site selection criteria for the installation of public human consumption water wells;

- Many areas of Boston are filled land that were used for waste disposal prior to legal prohibition of hazardous material dumping;
- Licensed Site Professional site evaluations demonstrate that much of the land and ground water in Boston is contaminated and unsuitable for the installation of human consumption water wells;
- There have been more than 600 hazardous material spill sites reported in Boston since the enactment of spill reporting laws;
- Many human consumption water wells in Massachusetts are contaminated by chemicals or potentially infectious microorganisms;
- Private well water has not been subject to stringent water quality testing and health protection requirements, and private well water safety cannot be assured without Boston Public Health Commission (BPHC) regulations;
- Private wells cross connected to the Boston Water and Sewer Commission water system and taken out of service by the city of Boston have later been found restored to service by building owners without authorization;
- Stringently tested high quality water that is safe for human consumption, at reasonable cost, is readily available throughout Boston from the Boston Water and Sewer Commission.

Section 1.01. Definitions and Guidelines

The BPHC may issue guidelines for the implementation of these regulations, including but not limited to definitions of terms as used in these regulations and in the guidelines. Applicants and permit holders are presumed to have knowledge of these regulations and guidelines. In the event of a conflict between these regulations and the guidelines, as either may be amended, the regulations shall control.

Section 1.02. Scope and Exceptions

Scope: These regulations are applicable in Boston to all water wells, including but not limited to new and existing industrial, irrigation, geothermal, and human consumption water wells, unless exempted below.

Exemptions. These regulations shall not apply to monitoring wells, construction site dewatering wells, groundwater recharging wells, or hazardous material recovery wells.

Section 1.03. Well Classification by Construction

Wells constructed and installed in accordance with the general practices or requirements for industrial, irrigation, geothermal, or human consumption water wells shall be deemed industrial, irrigation, geothermal, or human consumption water wells unless otherwise determined in writing by the BPHC upon the submission of credible evidence.

Section 1.04. Construction Plan Approval and Construction Permit

- A. No person shall dig, drill, drive, or otherwise establish or install an industrial, irrigation, geothermal, or human consumption water well, without construction plan approval and a well construction permit from the BPHC. To obtain a permit, an applicant shall submit the requisite permit application and application fee.
- B. The applicant must verify in writing that he or she has filed copies of the permit application with the Inspectional Services Department and the Boston Water and Sewer Commission. The applicant shall comply with any other applicable local, state, and federal laws, statutes and regulations. The applicant must provide a final determination from the Inspectional Services Department and Boston Water and Sewer Commission whether any other by-laws or regulations mandate additional permits, requirements, or conditions.
- C. The BPHC may grant the petitioner's application for a permit, when in its opinion the construction of the private well will not result in harm to the public health or local environment and that such permit is otherwise in the public interest. The BPHC may also request additional information from the applicant before rendering a decision.
- D. A Well Construction Permit shall be maintained on site at all times. Each permit shall expire one (1) year from the date of issuance unless revoked for cause. A permit may be extended for one additional six (6) month period provided that a written request is received by the BPHC at least three (3) months 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(s).
- E. Well Construction Permits are site specific and non-transferable.

Section 1.05. Annual Well Use Permit

- A. No person shall operate, use, or maintain an industrial, irrigation, geothermal, or human consumption water well in the City of Boston without an Annual Well Use Permit issued by the BPHC. Each permit shall expire one (1) year from the date of issuance unless revoked for cause.
- B. To obtain a permit, an applicant shall submit the requisite permit application and application fee.
- C. No permit shall issue until the well installation has been inspected by the BPHC to validate compliance with the approved installation plan. The BPHC may grant the petitioner's application for the permit, when in its opinion the operation of the private well will not result in harm to the public health or local environment and that such permit is otherwise in the public interest. The BPHC may also request additional information from the applicant before rendering a decision.
- D. A copy of the current Annual Well Use Permit shall remain posted in a prominent and visible location at the well at all times until such time as the well is decommissioned.

Section 1.06. Water Supply Certificate

- A. The issuance of a Water Supply Certificate shall certify that the private well may be used as a private water supply for human consumption. The Water Supply Certificate shall issue as an endorsement on the Annual Well Use Permit and may be renewed annually with the Annual Well Use Permit.
- B. To obtain a certificate, an applicant shall submit the requisite certificate application and application fee.
- C. Upon receipt of a completed application, the BPHC shall make a final decision. A final decision shall be in writing and shall comprise one of the following actions:
 - 1) issuance of a Water Supply Certificate, upon determination that such certificate will be in the public interest;
 - 2) denial of the application for a Water Supply Certificate and specification of reasons for denial; or
 - 3) issuance of conditional Water Supply Certificate with those conditions which the BPHC deems necessary to ensure fitness, purity, and quantity of water derived from that private well. Said conditions may include, but not be limited to, requiring specific treatment or additional testing of the water.
- D. A Water Supply Certificate may be rescinded, suspended, revoked or modified by the BPHC upon its determination that the water system or the water delivered may present a nuisance or threat to the public health, or upon failure to comply with any conditions contained in a conditional Water Supply Certificate.
- E. A copy of any Water Supply Certificate decisions will be forwarded to Inspectional Services Department and Boston Water and Sewer Commission.
- F. Water from private wells with a Water Supply Certificate may not be cross connected to the public water supply. Upon issuance of a Water Supply Certificate, the applicant shall disconnect any existing water service to the property from the public water supply at the location of the public water main in accordance with Boston Water and Sewer Commission specifications.
- G. An applicant receiving a Water Supply Certificate for a property serviced by the Boston Water and Sewer Commission Combined or Sanitary Sewer System shall install a Boston Water and Sewer Commission approved water meter for the purposes of calculating sewer charges for the property.

Section 1.07. Human Consumption Water Well Siting

No person shall establish, maintain, or use a human consumption water well unless such well is located at a site that meets Massachusetts Department of Environmental Protection's (MADEP) ground water protection criteria for the siting of public drinking water wells pursuant to 310 CMR 22.21.

Section 1.08. Prohibition in Certain Facilities

No person shall establish, maintain, or use an industrial or irrigation water well or distribution system within any residential, educational, office, or health care facility building, or within an establishment that stores, prepares, or sells food or beverages for human consumption. This prohibition shall not apply to geothermal wells.

Section 1.09. Prohibition of Cross Connections to Public Water Supply

Cross connections between the public water supply and any other water source are prohibited.

Section 1.10. Prohibition in Buildings with Public Water Supply

No person shall establish, maintain, or use an industrial or irrigation well or distribution system or a human consumption water well or distribution system in a building supplied with water from a public water supply. This prohibition shall not apply to geothermal wells.

Section 1.11. Labeling of Industrial or Irrigation Water Distribution Systems

Industrial and irrigation distribution systems for water that is not from the public water supply shall be clearly labeled to distinguish such water system piping and fixtures connected to such systems from the piping and fixtures of water sources for human consumption. All industrial and irrigation piping and fixtures shall remain in plain sight or shall be installed behind readily removable access panels to permit inspection.

Section 1.12. Labeling of Industrial or Irrigation Water Distribution Points

Distribution points for industrial and irrigation water systems using water that is not from the public water supply shall be clearly labeled to warn the public that water from that source is not for human consumption uses.

Section 1.13. Water Quality Testing Requirements

After the well has been completed and disinfected, and prior to using it, a water quality test shall be conducted at the expense of the applicant on a sample collected and analyzed by a certified laboratory, in accordance with guidelines issued by the BPHC.

Section 1.14. Well Design and Construction Requirements

A well shall be designed and constructed in accordance with any current Well Design and Construction Guidelines issued by the BPHC.

Section 1.15. Water Quantity Requirements

The applicant for an initial well use permit shall submit to the BPHC for review and approval a Pumping Test Report in accordance with any BPHC Pumping Test Report

guidelines. The BPHC may require subsequent pumping test reports whenever there is reason to believe that a well may no longer be able to yield sufficient water quantity to support daily needs.

Section 1.16. Decommissioning Requirements

- A. 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.
- B. 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 completion of the well;
 - 2) the well owner notifies the BPHC 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 three years;
 - 4) the well is a potential hazard to public health or safety and the situation cannot be corrected;
 - 5) the well is in such a state of disrepair that its continued use is impractical; or
 - 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.
- C. The property owner shall be responsible for ensuring that all abandoned wells and test holes or borings associated with private well installation are properly plugged. Only registered well drillers may plug abandoned wells, test holes, and borings.
- D. In the case of new well construction, all test holes and borings shall be plugged before the well driller completes work at the site.
- E. Within thirty (30) days following the completion of the plugging procedure, the registered well driller who plugged the abandoned well, test hole, or boring must file a completed Decommissioning Report with the BPHC, Inspectional Services Department, and Boston Water and Sewer Commission in accordance with the BPHC's decommissioning Report requirements.

1.17. Closure

If any well fails to meet the standards set forth in this regulation and guidelines issued by the BPHC and cannot be repaired, such well shall be disconnected and decommissioned to prevent its use at the expense of the property owner unless otherwise determined in writing by the BPHC. Wells temporarily closed by their permit holder for the entire year shall not be subject to water quality monitoring, provided written notice of well closure and the reasons for closure have been received by the BPHC. Such temporarily closed wells shall not be restored to service until water quality has been tested as specified in Section 1.13, the analyst's monitoring report has been submitted to the BPHC, and written authorization to reopen the well has been granted by the BPHC.

1.18. Right of Entry

To the extent permitted by law, owners or operators shall authorize BPHC, Inspectional Services Department, and Boston Water and Sewer Commission agents and employees, to enter, examine or survey the premises at any reasonable time for the purpose of compliance inspections, whether or not there is prior evidence of non-compliance. Agents may examine any records related to the installation, maintenance, operation and testing of the water system. Refusal of entry for an agent or refusal of access to records may be grounds for an emergency suspension or order pursuant to section 1.19(B) below.

1.19. General Enforcement

A. Non-Emergency Orders to Show Cause

- 1) These regulations may be enforced by the BPHC, Inspectional Services Department, Fire Department, Police Department, Code Enforcement, and the Boston Water and Sewer Commission, except that only the BPHC may grant, deny, revoke, suspend or modify permits or variances of these regulations.
- 2) The grounds on which the BPHC may deny renewal, revoke, suspend, or modify any permit or certification issued pursuant to these regulations include, but are not limited to:
 - a. Refusal to permit an agent of the BPHC or other government official to inspect the facility and any records pertaining to the operation of the water source and its products;
 - b. Interference with an agent of the BPHC or other government official in the performance of their duty;
 - c. A criminal conviction of the permit holder relating to the operation of the well or sale or use its product;
 - d. Failure of the permit holder to submit water monitoring reports for EPA and MADEP and Primary Drinking Water Standards;
 - e. Failure of the water source to pass EPA and MADEP well siting and Primary Drinking Water Standards;
 - f. Failure to pay the required permit fees or assessed fines or penalties;
 - g. A determination that the water source or its distribution system may present a nuisance or threat to the public health;
 - h. The well owner and/or operator's substantial failure to comply with these regulations;
 - i. Keeping or submitting any misleading or false records or documents related to the operation of the water source or use of its product;
 - j. Providing or pumping water which may not be safe and sanitary for human consumption or which may constitute a nuisance, source of filth, or cause of sickness; and

- k. Otherwise operating a well so as to cause a threat to the public health or safety.
- 3) Such action by the BPHC may include ordering other appropriate relief, including but not limited to ordering submission of a Closure Plan.⁴ The BPHC may initiate an action under this section by issuing an Order to Show Cause.
- 4) The BPHC shall provide notice and an opportunity to be heard in accordance with its Standard Hearing Procedure.
- 5) These regulations may be enforced through appropriate criminal or civil process, including but not limited to that specified at M.G.L .c. 40, section 21D, in any court of competent jurisdiction.

B. Emergency Suspensions and Orders

- 1) The BPHC may, without prior notice or hearing, suspend any permit or certification, or otherwise issue a cease and desist order, if any person or entity proposes to or is providing or pumping water in a manner which constitutes an immediate and substantial threat to public health or safety.
- 2) The person or entity named in the suspension or order may appeal the issuance of such order to the Executive Director or his designee. If such appeal is to a designee, then the designee shall make a recommended decision to the Executive Director within ten (10) days of the receipt of all evidence. The Executive Director shall make a final determination in such appeal within ten (10) days of receipt of the recommended decision.
- 3) Upon the Executive Director's affirmation of all or part of a suspension or order, the person or entity named therein may appeal further to any court of competent jurisdiction.
- 4) Pendency of any appeal shall not stay the emergency suspension or order unless otherwise determined by a court of competent jurisdiction.

C. Fines for Violations of Orders and Suspensions

Any person or entity violating any term or condition of these regulations, or any BPHC suspension or order enforcing these regulations, shall be subject to a fine for each violation of not less than five hundred dollars (\$500) nor more than one thousand dollars (\$1000) for each day that such violation continues.

Section 1.20. Examination and Embargo of Products

- A. The BPHC, Inspectional Services Department or Boston Water and Sewer Commission may place an embargo on any water source or on a water source and water source product which it knows or has probable cause to believe is a nuisance, source of filth, cause of sickness, impure, adulterated, or misbranded provided that:

- 1) written notice is issued to the permit holder or person in charge; and
 - 2) the notice specifies in detail the reason(s) for the embargo order.
- B. The BPHC shall label or otherwise identify any water source or product subject to the embargo order. The label shall state that the water source or product:
- 1) is from an embargoed source or believed to be a nuisance, source of filth, cause of sickness, impure, adulterated, or misbranded;
 - 2) has been embargoed; and
 - 3) cannot be used, removed, disposed, or sold without permission of the BPHC.
- C. The BPHC may permit non-permanent means for removal of the embargoed water source from service pending further review and appeal and temporary storage of the embargoed product unless temporary removal from service or product storage is not possible without risk to the public health, in which case immediate product destruction and well decommissioning shall be ordered and accomplished. Wells which cannot comply with these standards may be ordered by the BPHC to be decommissioned.

1.21. Application and Permit Fees

Application and permit fees shall be determined by the Executive Director of the Boston Public Health Commission and shall be set forth in guidelines as may be amended from time to time.

Section 1.22. Variance

- A. The BPHC may, after a hearing pursuant to its Standard Hearing Procedure, grant a variance as to these regulations or related guidelines if the enforcement thereof would do manifest injustice; provided, however, the variance shall be granted only if there is no substantial detriment to the public health and safety and without nullifying or substantially derogating from the intent or purpose of these regulations. Any variance granted shall be in writing. Any variance may be subject to such qualification, revocation, suspension, or expiration as the BPHC expresses in its grant. No variance granted shall be construed to authorize non-compliance with any other law, ordinance, or regulation. Unless otherwise provided by the BPHC, facility closure or failure to maintain any necessary permit for six (6) months shall extinguish the variance.
- B. A variance application shall be in writing and shall state the specific variance sought and the reasons therefore, and it shall include the requisite fee. The applicant shall submit evidence that copies of the request for a variance have been submitted to the Inspectional services Department and the Boston Water and Sewer Commission. The request shall contain all the information needed to assure the BPHC that, despite the issuance of a variance, the public health and environment will be protected. Notice of the hearing shall be given by the BPHC, at the applicant's expense (prepaid), 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. The notice shall include a statement of the variance sought and the reasons therefore. Any grant or denial of a variance shall be in writing and shall contain a brief statement of the reasons for approving or denying the variance. No work shall be done under any variance until thirty (30) days elapse after its issuance, unless the BPHC certifies in writing that an emergency exists.

- C. 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 (except for an emergency order or suspension), pursuant to these regulations.

Section 1.23. Permit or Certificate Denial - Administrative Appeal

Any appeal of denial of a permit or certificate, or appeal of conditions attached thereto, shall be in writing and filed within thirty (30) days of the date of the BPHC action appealed. The BPHC shall adjudicate such appeal through its Standard Hearing Procedure.

Section 1.24. Severability

If any chapter, section, paragraph, sentence, clause, phrase, or word of these regulations shall be declared invalid for any reason whatsoever, that decision shall not affect any other portion of these regulations, which shall remain in full force and effect; and to this end the provisions of these regulations are hereby declared severable.

Section 1.25. Disclaimer

The issuance of a well permit shall not be construed as a guarantee by the BPHC 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.

Section 1.26. Transitional Rules

Existing wells providing water for human consumption shall be monitored as specified by Section 1.15 for all EPA and MADEP Primary Drinking Water Standards and the analyst's test report submitted to the BPHC within thirty (30) days of the effective date of these regulations. Existing industrial, irrigation, geothermal, and human consumption water wells shall come into full compliance with these regulations within (90) days of the effective date of these regulations.

Section 1.27. Effective Date

These regulations shall take effect upon passage.

Authority: These regulations are promulgated pursuant to M.G.L. c. 111, §§ 31, 122-127, and App. §§ 2-6(b), 2-7(a)(1) and 2-7(a)(15).