

Purpose

The Falmouth Board of Health recognizes that there is a sole source groundwater aquifer on Cape Cod, a portion of which is under the Town of Falmouth. Certain areas of the groundwater aquifer beneath Falmouth have been identified as contaminated by activities associated with the Massachusetts Military Reservation and others, and that not all areas of groundwater contamination have been identified. There are risks associated with exposure to ground water contaminants through direct ingestion, dermal contact, inhalation, irrigation of lawns and food crops, or watering of animals that are later to be consumed.

In order to protect the public from exposure to potentially contaminated groundwater, the Falmouth Board of Health adopts the following regulation for the permitting, installation and use of water wells, under the authority of Massachusetts General Laws Chapter 111, Section 30.

These regulations and the testing requirements, herein, reflect prudent means of minimizing, but not eliminating the risk from exposure to groundwater contamination. Persons withdrawing water for drinking or irrigation are encouraged to stay informed about newly identified contaminant that may be contained in the groundwater they use, and to exercise prudence in all aspects of water withdrawal.

Section 1. Definitions:

- A. Drinking Water Well – Any private source of groundwater for human use, including but not limited to, a source approved for such by the Falmouth Board of Health or Massachusetts Department of Environmental Protection (DEP) in accordance with GL 11 sec 122A or 310 CMR 22.00.
- B. Irrigation Well – Any water supply well not approved as a drinking water supply used for the watering of plants and livestock or for commercial or industrial use.
- C. Monitoring Well – A well installed for the express purpose of monitoring water quality or water level in an area. Excluded from these requirements are wells less than twenty feet deep used for purposes of determining groundwater elevations associated with the installation of a septic system and which are removed at the time of septic system installation or when they are no longer needed.
- D. Contaminant – any compound, including but not limited to volatile organic compounds, pharmaceuticals, pesticides, radionuclides and metals for which a regulatory limit for the maximum allowable contaminant level in drinking water has been established by the Environmental Protection Agency and or the Massachusetts Department of Environmental Protection. Contaminant shall also include any compound for which a recommended health advisory has been promulgated by the Environmental Protection Agency and or the Massachusetts Department of Environmental Protection.
- E. Professionally Prepared Plan – a scaled plan prepared by a surveyor or civil engineer or other qualified professional showing lot lines, location of existing structures, septic systems and proposed location of the well.

- F. Subsurface Irrigation – a network of valves, pipes, tubing, and emitters that applies water directly into the root zones.

Section 2. Permits Required

A permit from the Board of Health shall be required for the installation, abandonment, changes in use, conversion of all wells, including Drinking Water Wells, Irrigation Wells, and Monitoring Wells within the Town of Falmouth. A permit granted under these regulations that is not exercised within one year may be renewed annually for up to two additional years.

- A. Drinking Water Well – A permit application for a Drinking Water Well shall include a professionally prepared plan of the lot on which the Drinking Water Well is to be located showing the location of any septic system within 150 feet of the proposed Drinking Water Well, the location of any house or any permanent structure (existing or proposed), and a description of the proposed well that includes the latitude and longitude of the proposed location, construction material, anticipated screen depth of the well, and the maximum anticipated withdrawal rate in gallons per minute. The application shall also include proof that all abutters within 100 feet of the property have been notified by receipted mail using a form of letter approved by the Board of Health. In the case of new construction, well location and description may be shown on the same plan submitted under the requirements for the Board of Health approval of the septic system. Replacement of a Drinking Water Well within 5 feet of the original location shall not require a new permit under these regulations.
- B. Irrigation Well – a permit application for an Irrigation Well shall include a professionally prepared plan of the lot on which the Irrigation Well is to be located showing the location of any septic system within 150 feet of the proposed Irrigation Well, the location of any house or any permanent structure (existing or proposed), and a description of the proposed well that includes the latitude and longitude of the proposed location, construction material, anticipated screen depth of the well, and the maximum anticipated withdrawal rate in gallons per minute and all proposed faucets and discharge points.
- C. This permit does not relieve the applicant from being required to secure any and all additional permits that may be required by the State under the Water Management Act or any other pertinent regulations.
- D. Monitoring Well – a permit for a Monitoring Well shall include an exact location at which the Monitoring Well is to be located in degrees latitude and longitude, a description of the Monitoring Well that includes the construction material and depth, a statement of purpose for which the Monitoring Well is being installed and its proposed length of service. The name, address, and telephone number of a contact person shall be included in the application. Permits for monitoring wells shall be granted for a period requested or any period deemed appropriate by the Board of Health.

Section 3 Requirements for use

- A. Drinking Water Wells – All Drinking Water Wells shall be located: 1) to maintain a minimum lateral distance from the well to the nearest septic system of 100 feet; 2) to provide minimum risk of exposure to contamination from any known or suspected source; and 3) so that they do not infringe upon the ability of adjacent property owners to locate septic systems. No Drinking Water Well shall be physically connected with a public water supply line. A Drinking Water Well must be tested for coliform, nitrate-nitrogen, and volatile organic compounds and found to be within potable water limits as defined in 310 CMR 22.00 Drinking Water Regulations and must not exceed the Commonwealth of Massachusetts' Maximum Contaminant Levels. The Board of Health by this regulation reserves the right to require more extensive testing in areas of known or suspected contamination. A Drinking Water Well shall not be used until an as-build plan and the results of all required testing have been submitted and approved by the Board of Health.
- B. Irrigation Wells – Irrigation Wells shall be located: 1) to maintain a minimum lateral distance from the well to the nearest septic system of 50 feet; 2) a minimum of 50 feet from a lot line in un-sewered areas; 3) to provide minimum risk of exposure to contamination from any known or suspected sources and; 4) for a lot served by Town sewer irrigation wells may be located 10 feet from a lot line, provided that only subsurface irrigation is used. No irrigation well shall be physically cross-connected with the plumbing of either a drinking water well or a public water supply line. All irrigation well spigots shall be placarded with a notice that reads "Irrigation well – not for drinking water purposes". Spigots for Irrigation Wells shall not be attached to a residence. An Irrigation Well shall not be used until: 1) an as-built plan and the results of all required testing have been submitted and approved by the Board of Health, and 2) a notice of the existence and location of the irrigation well shall be recorded with the Barnstable County Registry of Deeds. In areas of known or suspected contamination, such as exist in certain areas near the Massachusetts Military Reservation, initial testing of Irrigation Wells for contaminants shall be required prior to use. Irrigation Wells must not exceed the Maximum Contaminant Levels as set forth in 310 CMR 22.00 for contaminants referred to in section 1D.
- C. Monitoring Wells – All Monitoring Wells shall have a locking cap or other device or structure to prevent unlawful use or entry. Caps shall be secure at all times when the well is not in use.
- D. Compliance with water use restrictions. Private drinking water wells and irrigation wells shall be subject to water use restrictions to the same degree and extent that any such water use restrictions are placed upon the users of the Town's public water supply by the Commonwealth of Massachusetts.

Section 4. Conversion of Irrigation Wells:

Water from an Irrigation Well shall not be used as a drinking water well until it is demonstrated that: 1) the water meets all requirements of notability (Section 3A); 2) the well meets all the requirements of a Drinking Water Well relative to setbacks from septic systems and other potential sources of contamination; 3) the use of a well for such purpose shall not infringe upon the rights of adjacent property owners to construct or replace their septic systems, and; 4) the well is permitted as a Drinking Water Well.

Section 5. Abandonment of Wells

- A. Drinking Water Wells – a Drinking Water Well may be abandoned by: 1) downgrading it to the classification of an Irrigation Well, or 2) permanently taking it out of service by disconnecting it from the residential drinking water system and sealing it with concrete followed by permitting and inspection by the Falmouth Board of Health. Downgrading a Drinking Water Well to an Irrigation Well requires that the well meet all the requirements for Irrigation Wells as denoted in Section 3 B.
- B. Irrigation Well – An Irrigation Well may be abandoned by filling in the entire pipe volume with concrete, followed by a notice and inspection by the Falmouth Board of Health and recording said abandonment with the Registry of Deeds.
- C. Monitoring Well – A Monitoring Well may be abandoned by filling the entire pipe volume with concrete, followed by a notice and inspection by the Falmouth Board of Health, or removal of the entire length of pipe from the ground.

Section 6. Variance

The Board of Health may vary the application of any provision of these water well regulations with respect to any particular case when, in its opinion, the enforcement thereof would do manifest injustice: provided, that the decision of the Board of Health shall not conflict with the spirit of these regulations. Requests for variances shall be submitted in writing to the Board of Health and shall enumerate the variance requested.

Section 7. Enforcement

This regulation will be enforced by the Board of Health or its designated agent(s) under the authority granted it under MGL Chapter 11, Section 30. Any citizen who desires to register a complaint pursuant to the regulation may do so by contacting the Board of Health of Falmouth or its designated agent(s) and the Board shall investigate.

Section 8. Severability

If any provision of these regulations is declared invalid or unenforceable, the other provisions shall not be affected thereby but shall continue in full force and effect.

These regulations are adopted on _____, 2017 and become effective on the date of publication.

Jared Goldstone, Chairman

George Heufelder

Diana Molloy

Stephen Rafferty

John Waterbury