

Town of Leverett

Massachusetts

Well Regulations

ADOPTED BY

THE BOARD OF HEALTH

MAY 15, 1989

## I. AUTHORITY AND PURPOSE

## A. AUTHORITY

Massachusetts General Laws Chapter 111, Section 31, 122, 122A, 127, 143, 155, 187, 188 Code of Massachusetts Regulations 11.02. "Board of Health may make reasonable health regulations" and Massachusetts General Laws Chapter 40, Section 54, which requires that "no building permit be issued to a property without a potable water supply. Water supply officials are responsible for regulating monitoring public water." "The regulation of private wells is the responsibility of local Boards of Health."

## B. PURPOSE

The purpose of this regulation is to insure an adequate supply of safe water to houses with no access to public water supplies and to insure the safe destruction of abandoned private wells.

## II. GENERAL PROVISIONS

## A. DEFINITIONS

1. **Board of Health.** So used in these regulations shall refer to the Board of Health, or its authorized agent
2. **Health Agent.** An agent of the Board of Health is any person authorized in writing by the Board to act under these regulations. No agent may vary any provisions of these regulations without the approval of the Board. Wherever reference is made in these regulations to "Board of Health" or "Board" it shall mean the Board of Health of the Town of Leverett or its authorized agent.
3. **Private Well.** Any non-public well serving less than 15 houses and less than 25 people as defined in 310 CMR 22.02
4. **Well.** So used in these regulations shall include any dug, driven, or drilled well, or any other source of water, to be used for the purpose of supplying potable drinking water in the Town.
5. **Well Driller.** Any person, association, partnership, company, corporation, or trust that constructs a well and is licensed by the Massachusetts Water Resources Commission.
6. **Water Supply Certificate.** A certificate is issued by the Board of Health which authorized the use of a private well as a supply of drinking water.
7. **Abandoned Well.** A private well that has not been used for a period of one year or more and which the owner declares in writing to be permanently discontinued for supplying water.

B. REQUIREMENTS FOR PERMITS

1. PERMISSION TO CONSTRUCT OR DESTROY A PRIVATE WELL

A private well construction or destruction permit shall be obtained from the Board of Health prior To construction or destruction of any private well.

2. REGISTRATION OF WELL DIGGERS AND DRILLERS

No person shall construct or destroy a private well within the boundaries of the town unless registered with the Water Resources Commission as required by state regulation 313 CMR 3.00 Water Registration as of 8/27/81. A copy of the well driller's license must accompany application for a permit.

III. STANDARDS FOR LOCATION, CONSTRUCTION, DESTRUCTION, WATER QUALITY AND WATER QUANTITY

A. LOCATION OF WELLS

1. Well location criteria shall include the following minimum lateral distances from the well site to the following.<sup>1</sup>

Subsurface sewage disposal systems	100 ft.
Cesspool, seepage pit	100 ft
Septic tank	50 ft.
Sewer line with watertight joints	50 ft.
Defined property line	25 ft.
Public Way (from center line)	-75 ft.
Sub-surface fuel storage tank	150 ft.
Driveways	15 ft.
Dwelling or other structure	25 ft.
Surface or subsurface drains	25 ft.

2. In the aquifer protection district, or where the percolation rate is two minutes per inch or less, the distance from well and subsurface sewage disposal system must be at least 150' and the distance from the septic tank must be at least 75'.

3. Where deemed necessary of appropriate by the Board of Health, the above distances may be increased or other reasonable means of protection may be required, or both. The Board may impose minimum lateral distances requirements from other potential sources of contamination not listed above. All such requirements shall be added by the Board as conditions of the well construction permit.

4. No person shall position, locate, Drill or dig a well or cause the same to be done in such a manner as to limit the use of any neighboring property in any manner whatsoever.

B. WELL CONSTRUCTION STANDARDS

1. No person shall construct a well unless registered with the Water Resources Commission as required by State Regulation 313 CMR 3.000 Water Well Registration as of 8/27/81. A copy of the well drillers' license must accompany application for a permit.
2. All wells shall be constructed in compliance with Department of Environmental Quality Engineering's Minimum Requirements for Construction of Private Wells.

C. WELL DESTRUCTION STANDARDS

1. A well that is abandoned shall be destroyed to protect the groundwater supply and to eliminate potential physical hazards.
2. All abandoned wells shall be destroyed in compliance with Department of Environmental Quality Engineering's Minimum Requirements for Construction of Private Wells.

D. WATER QUALITY STANDARDS

1. No private well shall be used as a drinking water supply and no building permit shall be issued for new construction on the property where the well is located unless the water derived from the well has been tested.
2. Chemical and bacteriological analyses shall be conducted by a laboratory certified by the State of Massachusetts and shall identify the following constituents:

Coliform bacteria	none detected
Sodium (NA)	20 mg/l
Chloride (CL)	250 mg/l
Nitrate Nitrogen (NO3)	10 mg/l
Nitrate Nitrogen	0.001 mg/l
Iron (Fe)	0.3 mg/l
Manganese (Mn)	0.05 mg/l
PH	6.5 - 8.5
Total Hardness	180 mg/l
Turbidity	5 units
Color	15 units

Additional biological or chemical tests may be required by the Board where, the opinion of the Board, it is necessary for the protection of the public health, safety and welfare.

E. WATER QUALITY STANDARDS

1. Yield test pumping shall be conducted at a rate at least equal to the pump rate expected during normal well use and shall be conducted for a minimum of four hours.

2. The required minimum well yield will vary depending on the depth of the well. Overall, a well is required to yield 110 gal/bedroom/day as per title V. Specifically, the minimum well yield shall conform to the following table:

Depths of water in well	Gallons/min. for 4 hrs.
0 - 150 ft.	4
150 - 200 ft.	3
200 - 250 ft.	2
250 - 300 ft.	1
300 - & deeper	0.5

#### IV. APPLICATION PROCEDURE

##### A. APPLICATION FOR WELL CONSTRUCTION / DESTRUCTION PERMIT

1. Application for a well construction or deconstruction permit shall be submitted by the property owner or owner's agent to the Board of Health on the Application for well construction / destruction permit form provided by the Board of Health.
2. A map of the property which accurately shows property lines and major topographic features (such as the assessors' map, or a surveyor's map), and the proposed well location shall be submitted with the well permit application.
3. Application for a well destruction permit shall be accompanied by a plot plan with dimensions identifying the location of the well.
4. Application for a well construction permit shall be accompanied by an extended plot plan which will identify all distances less than 200 feet from the well to any of the following:
  - a. Existing and proposed structures
  - b. Surface waters and surface drainage courses
  - c. Subsurface sewage disposal fields, trenches, or pits, and adjoining septic tanks or cesspools
  - d. Subsurface fuel storage tanks
  - e. Other potential sources of pollution an experienced well driller should reasonably be expected to recognize
  - f. Property lines
  - g. Public ways
  - h. Topographically, the well should be located above the elevation of any proposed septic system or known source of contamination within reason
5. The Board of Health will charge a fee for a well construction permit and for a well destruction permit
6. The Board of Health may require well location and construction modifications where reasonable health threats or when unusual hardships exist, and equivalent water quality protection may be provided.

7. Well construction may proceed upon approval of the application permit.
8. All permits for well construction / destruction shall expire at the end of twenty-four (24) months from the date of issuance.

B. REPORTS TO THE BOARD OF HEALTH REQUIRED FOR A WATER SUPPLY CERTIFICATE

The following shall be required for a water supply certification which shall be required for the operation of a new well and / or the issuance of a building permit in the Town of Leverett

For homes which will be served by private wells, the following must be provided within thirty days of well completion.

1. Completed and approved Application for Well construction/Destruction Permit
2. A copy of the Water well Completion Report, as required by the Massachusetts Water Resources Commission, provided by the well driller.
3. A water Quality Analysis performed by a state certified laboratory, that meets the minimum standards listed in section III.D
4. A certificate of yield from the well driller that water quantity standards have been met as required below

V. ADMINISTRATION AND ENFORCEMENT

- A. General Enforcement. The provisions of Title I of the State Environmental Code (310 CMR 11.00) shall govern the enforcement of these regulations.
- B. Penalty. Whosoever violates any of these rules and regulations shall, upon conviction, be fined not less than \$10 and not more than \$500 except when otherwise provided by law.
- C. Separability. If any paragraph, section, clause, provision, phrase, or work of these regulations shall be adjudged not valid, the adjudication shall apply only to the material so adjudged and the remainder of these regulations shall be deemed to remain valid and effective.
- D. Amendments. 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.
- E. Invalidation by state law. 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 amendments for repeal of such regulations.
- F. Variance
  1. The Board of Health may vary the application of any provision of these regulations with respect to any particular case when, in the Board's opinion, both of the following conditions are fulfilled:
    - a. The enforcement thereof would do manifest injustice.

- b. The application has proven that the same degree of environmental protection, and protection of the public health, safety and welfare can be achieved without strict application of the particular provision. The alternative means of protection shall be detailed and documented by the applicant to the satisfaction of the Board.
2. Every request for a variance shall be made in writing and shall state the specific variance sought and the reasons therefore
3. Any variance granted by the Board shall be in writing. Any denial of a variance shall also be in writing and shall contain a brief statement of the reasons for denial. A copy of each variance shall be conspicuously posted for thirty (30) days following its issuance, unless the Board certifies in writing that an emergency exists.
4. 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 in the conformity with the requirements of Title I of the State Environmental Code ( 310 CMR 11.00) for orders and hearings.
5. No variance may be granted for: A new well installed in a new building lot; the distance between leech field and well as specified in III.A. 1; and for water quality standards as specified under III.D.2.