

**TOWN OF LEVERETT
BOARD OF HEALTH**

APPLICATION FOR WELL CONSTRUCTION/DESTRUCTION PERMIT

Application Fee: \$75

I, (Please Print) _____, hereby request a permit to (circle appropriate)
(print your name here and sign at bottom of page)
construct / destroy a well located at _____.

The Well Driller is _____
Certificate No. _____
Date of Application _____
BOH Fee Paid \$ _____ Rec'd by _____
Assessor's Map & Lot No. (required) _____

TOWN OF LEVERETT
BOARD OF HEALTH
PO BOX 300
LEVERETT, MA 01054

Is **Conservation Commission** Approval required? _____

Sketch of Property Below (not to scale):

- Show well location, measurements and landmarks.
- For well construction, show all septic systems (including neighbor's) within 150 feet of the proposed well location.
- Show required setbacks from roads, property lines, etc.

- Deliver or mail a copy of this permit to the Board of Health within two weeks of well completion.
- Note any changes from the proposed well location sketched above. Show actual distances.

Additional Permit Conditions:

✓ Applicant Signature _____ Date _____

Approved by _____ Date _____

Board of Health Member or Agent

Note: This permit expires **one year** from the approval date. **Do not drill with an expired permit!**

WELL LOCATION

GENERAL CONSIDERATIONS

Any person intending to have a private well constructed should identify all potential sources of contamination which exist within 200 feet of the site. Where possible, a well should be located up-gradient of all potential sources of contamination and should be as far removed from potential sources of contamination as the general layout of the premises and surroundings permit. Additionally, every well should be located so that it will be reasonably accessible with proper equipment for repair, maintenance, testing, and inspection. The well should be completed in a water bearing formation that will produce the required quantity of water under normal operating conditions without adversely impacting adjacent wells.

RELATION TO SURFACE WATER AND WETLANDS

Private water supply wells should be located at least 25 feet, laterally, from the normal highwater mark of any lake, pond, river, stream, ditch, or slough. Additionally, it should be noted that land use within 100 feet of a wetland or within the 100-year floodplain of any river or stream is regulated under Chapter 131, Section 40, of the Massachusetts General Laws and 310 CMR10.00, "Wetlands Protection." Prior to constructing a private water supply in these areas, approval must be obtained from the local Conservation Commission. Where possible, private water systems should be located in areas above the 100-year floodplain. When a well must be located in an area subject to flooding, special protection should be provided.

LEVERETT SANITARY CODE REGULATIONS – WHERE LEVERETT REGULATIONS ARE STRICTER THAN STATE WELL AND SANITARY REGULATIONS, LEVERETT REGULATIONS APPLY.

The Town of Leverett derives 100% of its water supply from ground water, which supplies both the public water systems and individual on-site wells. A significant portion of the Town of Leverett is within the recharge areas for public water supply wells of the Town of Sunderland and other important potential groundwater supply areas. Sections listed below refer to the Leverett Sanitary Code.

218-6.1 Well setbacks in highly permeable soils: In the Aquifer Protection District, or where the percolation rate is two (2) minutes per inch or less, the distance between a soil absorption system and a potable water supply well shall be 150 feet or greater.

218-9.2 High Groundwater Elevation less than 48 inches from the surface

3 (c). Horizontal separation distance from the soil absorption system to any potable water supply well shall be increased by 50% from the separation distances required by 310 CMR 15 and section 218-6.

ADDITIONAL CONSIDERATIONS BASED ON THE LEVERETT WELL REGULATIONS – WHERE LEVERETT REGULATIONS ARE STRICTER THAN STATE WELL AND SANITARY REGULATIONS,, LEVERETT REGULATIONS APPLY.

III A (1) Well location criteria shall include the following minimum lateral distances from the well site to the following:

Subsurface sewerage disposal systems	100 ft.
Cesspools, seepage pit	100 ft
Septic tank	50 ft
Sewer line with watertight joints	50 ft
Defined property line	25 ft
Public way (from centerline)	75 ft
Sub-surface fuel storage tank	150ft
Driveways	15 ft
Dwelling or other structure	25 ft
Surface and 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 disposal system must be at least 150' and the distance from the septic tank must be at least 75'.

(3) Where deemed necessary or 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 from other potential sources of contamination not listed above. All such requirement 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.

(5) Sewer lines shall be installed at least 10 feet from and 18 inches below water supply lines. Wherever sewer lines must cross water supply lines, both pipes shall be constructed of class 150 pressure pipe and should be pressure tested to assure water tightness.

REQUIRED WATER QUALITY REPORT

The Leverett Board of Health requires the well owner to submit to the Board a Water Quality Report anytime a private water supply is tested. The report should include:

- (1) Name, address and phone number or other contact information for the individual who performed the sampling (i.e., BOH member, BOH agent, lab personnel, well owner, well owner's agent);
- (2) where in the system the sample was obtained (point-of-use or point-of-entry) and, if sampled, at the point-of-use, whether or not the system was flushed prior to sampling;
- (3) type of water treatment used (chemical or special device e.g., disinfection, reverse osmosis unit, filter, etc.), if applicable;
- (4) date and time of sample collection;
- (5) date and time sample received by the laboratory;
- (6) a copy of the laboratory's test results; and,
- (7) a copy of the Chain of Custody.

Results that indicate no contamination are as important as those that indicate water quality problems because these results provide background data in case of future contamination.

REQUIRED WATER QUALITY STANDARDS (Water Quality Report)

- (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 analysis shall be conducted by a laboratory certified by the State of Massachusetts and shall identify the following constituents:

See the Leverett Board of Health website for information on the test parameters below.

Required Test Parameters	Recommended concentration limit
Total Coliform Bacteria	None detected
Enterococci	None detected
Sodium (NA)	20 mg/l
Chloride (CL)	250 mg/l
Nitrate Nitrogen (NO3)	10 mg/l
Nitrite Nitrogen (NO2)	1.0 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	1 NTU
Color	15 Color Units
TDS	500 mg/l
Suggested Additional Tests	Recommended concentration limit
Cryptosporidium	None detected – Test if water source is a surface water spring, within 100' of a surface water or prone to flooding
Giardia lamblia	None detected – Test if water source is a surface water spring, within 100' of a surface water or prone to flooding
Sulfate	250 mg/l
Gross Alpha Activity	15 pCi/l – if result is greater than 15 pCi/l, test for uranium. If results are greater than 5 pCi/l, then test for Radium-226 and Radium-228.
Radon-222	10,000 pCi/l in water - indoor air to be tested
Uranium	0.03 mg/l
VOC and SOC Compound Testing	As required by the Board of Health. See attached Recommended Concentration Limits and sampling frequency.
Arsenic	0.010 mg/l
Lead	0.015 ml/l
Copper	1.0 mg/l
Fluoride	2.0 mg/l

WATER SUPPLY CERTIFICATE REQUIREMENTS

The issuance of a Water Supply Certificate by the Board of Health certifies 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.

The following should be submitted to the Board of Health in order to obtain a Water Supply Certificate:

- (1) a copy of the Well Completion Report (which should include pumping test results) as required by the Department of Environmental Protection, Office of Water Resources, Well Driller Program; and,
- (2) a copy of the Water Quality Report.

Upon the receipt and review of the above documents, the Board of Health may:

- (1) issue a Water Supply Certificate;
- (2) deny the applicant a Water Supply Certificate and specify the reasons for the denial; or,
- (3) issue a conditional Water Supply Certificate with those conditions that the Board deems necessary to ensure fitness, purity, and quantity of the water derived from that private well. The conditions may include, but are not be limited to requiring treatment or additional testing of the water.

WATER SUPPLY CERTIFICATE

The issuance of this Water Supply Certificate by the Leverett Board of Health certifies that the submitted test results meet the required "Recommended Concentration Limits" for a private well may be used as a drinking water supply.

Leverett Board of Health

Date

The Leverett Board of Health denies the issuance of a Water Supply Certificate. The following are the reasons for the denial.

Leverett Board of Health

Date

Reason for denial of Water Supply Certificate

The Leverett Board of Health issues a conditional Water Supply Certificate with those conditions that the Board deems necessary to ensure fitness, purity, and quantity of the water derived from that private well. The conditions of approval are listed below and are not limited to requiring treatment or additional testing of the water.

Leverett Board of Health

Date

Reason for issuance of a Conditional Water Supply Certificate