



*Lakeville Board of Health Regulations
Pertaining to Subsurface Disposal Systems
And Water*

Adopted 7/17/18, replacing regulations Voted & Adopted on June 10, 2009, Effective June 18, 2009
(Well Analysis Specs Revised 9-18-13, 12-20-13)(Tight Tanks Revised 4/7/17)(SSDS Design & Property
Related Requirements and Restrictions Revised 11/7/18).

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Under the provision of Chapter 111 of the General Laws and any other powers thereto enabling the following regulations are adopted.

All Massachusetts Title V regulations are followed per 310 CMR 15.000, Department of Environmental Protection and the state environmental code Title V. Including Standard requirements for the siting, construction, inspection, upgrade and expansion of on-site sewage treatment and disposal systems and for the transport and disposal of Septage.

1. Subsurface Sewage Disposal Systems (SSDS) including but not limited to all public sewers, septic tanks, cesspools, and vault privies.

- 1.1.** Title V Inspections and Fees – Title V Inspections (performed by a State certified inspector) must be scheduled with the Board of Health. Prior to the inspection the appropriate application and a \$50 applicable review fee must be submitted. Incomplete inspection reports received in the office will not be accepted.
- 1.2.** Cesspools receiving raw sewage (with openings for leaching) are considered failed systems at the time of real estate transfers in the Town of Lakeville. Property transfers, under State regulations, still require an official and complete title V inspection with report, regardless of an automatic town failure regulation, and all wells within 100 feet are to be tested as required.
- 1.3.** Leaching pits shall be evaluated (for the purposes of inspection and leaching capacity failure criteria) similar to cesspools as referenced in title V, whereas they must have at least a half a day's flow calculated capacity and/or at least 6 inches of clearance between the inlet invert and the liquid level below.
- 1.4.** No building permit for an addition to any dwelling or structure shall be issued until the Board of Health has approved the adequacy of the sewage disposal system(s) serving said dwelling, by reviewing an engineered as-built plan and certificate of compliance recently issued and/or by witnessing and reviewing an official title V inspection and report done within 3 years that located all components.
- 1.5.** A system shall be inspected prior to any change in the type of establishment, or change from seasonal use to year round use (which is defined as a facility that is not supplied with a year round approved water source), or after the system has been abandoned, or increase in design flow, or when a condition may impact the functionality of the system, or prior to any expansion of use of the facility served for which a building permit or occupancy permit from the local building inspector is required. Whenever an addition to an existing structure which changes the footprint of a building with no increase in design flow is proposed, the system inspection shall be an assessment to determine the location of all system components, including the reserve area. The proposed construction shall not be placed upon any of the system

components or within any applicable setback distances in 310 CMR 15.211. If official records are available to make a determination regarding location of system components, an inspection is not required for footprint changes. If there is to be on-site reconstruction in the near future and the septic components need to be re-utilized for another structure, a Title V inspection would be required, unless a current Title V inspection is available. Components must be properly located and marked so not to be damaged during construction.

- 1.6. Rental properties in Lakeville MA must demonstrate to the Board of Health an annual well analysis per Board of Health parameters and a Title V inspection (for systems 20 years or older) every 3 years. In addition, upon request a rental housing inspection will be made available through the Board of Health office for a fee of \$100.00. Rental properties are required to comply with CMR 410.000 Minimum Housing Regulations and 310 CMR15 Title V Regulations. All complaints will be investigated.

2. SSDS Design and Property Related Requirements and Restrictions

- 2.0. A lot less than one half acre (rounded down to 20,000 sq. ft. of upland acreage) shall be deemed too small for both a water supply and sewage disposal.
- 2.1. No septic components of any kind shall be constructed or installed in a roadway or a right of way.
- 2.2. Any addition or modification of an existing structure shall include re-assessing the SSDS suitability and upgrading with respect to the most recent state and local minimum requirements especially as pertaining to the latest application rates and including any change in use (upgrade must take place prior to building permit unless occupancy is revoked until such time) for commercial, industrial, and residential (or any combination thereof) applications.
- 2.3. For new code parameters any expansion or change of use (even if no increase in flow is proposed) there must be a documented reserve area.
- 2.4. BOH may vary the application of any provision of these regulations unless superseded by State regulations, when in the opinion of the BOH, that lot size, hydro-geo conditions, or other site restrictive factors make enforcement of the provisions impractical or if the owner can demonstrate an equivalent degree of environmental protection and/or if the BOH decides it would be manifestly unjust.
- 2.5. No structure (like sonotubes, decks, sheds, etc.) shall be within 5 feet of any component.
- 2.6. Lowest floor elevations must be a minimum of 24" higher than the agreed high groundwater elevation as determined at percolation testing/soil evaluation between CSE and town witness or as documented with additional soil/HGW form(s) for additional test holes by CSE at foundation location(s).
- 2.7. Approved Effluent filters are required on all systems at outermost tee
- 2.8. Two compartment tanks are required unless two tanks in series are utilized for all repairs, upgrades, and new construction unless a local variance is sought.

3. Additional requirements for designs, installations & inspections when noted.

3.0. Registered Land Surveyor's Stamp

A registered land surveyor's (hereafter referred to as RLS) stamp is required for any plan with a lot that is less than 70,000 SF, if any local divergences and/or state variances exist, or if any minimum setbacks are proposed (horizontal or vertical). For new construction and/or lots 70,000 SF or greater, a RLS plan reference (plan referred to must show existing structure(s) footprint(s) as related to defined (bearings and distances) property lines) must be shown somewhere on all site plans unless stamped by a RLS.

3.1. Build-out Capacity

A RE-CALCULATION for leaching capacity using the latest application rates in 310 CMR 15.242. If the existing system can be successfully shown to have adequate leaching capacity through current application rates and calculations and pass an official title V inspection, no upgrade would be required for the increase in flow. If calculations cannot demonstrate compliance with latest application rates, no build out or increase in flow would be allowable without upgrade per latest title V and local regulations. If system cannot pass an official title V inspection, a repair or upgrade would be necessary prior to build out or within the BOH specified time frame but not > 2 years without build out.

3.2 Innovative & Alternative Checklist (completed form must include the following)

I/A System Name _____

DEP Permit Type: _____

(Remedial/Pilot/General/ Provisional)

MANUFACTURER: _____

(Name, Address & Phone)

MODEL # _____

DE-NITRIFICATION _____ Yes _____ NO

DISTRIBUTOR: _____

(Name, Address & Phone)

MANHOLE(s) AT GRADE _____ Yes _____ NO

MANHOLE MATERIAL _____

WATERTIGHT & SECURED _____ Yes _____ NO

SAMPLING PORT(s) LOCATION: _____

AERATION (required) _____ Yes _____ NO

VENTING (required) _____ Yes _____ NO

PUMPING CONTRACT (required) _____ Yes _____ NO

If so, Name of Pumper: _____

CONTRACT IN PLACE _____ Yes _____ NO

DATE OF DEP APPROVAL (If required) _____

O & M CONTRACT TERM (years) _____

CONTRACT COMPANY _____

(Name, Address & Phone)

INFLUENT TESTING (required) _____ Yes _____ NO _____ Frequency

ADDRESS: _____

MAP/ BLK/ LOT: _____

DATE OF APPROVED PLAN: _____

EFFLUENT TESTING (required) _____ Yes _____ NO

TYPE OF EFFLUENT TESTING & FREQUENCY _____

ELECTRICAL PERMIT# _____ Insp. date _____

(If required)

PLUMBING PERMIT# _____ Insp. date _____

(If required)

OPERATOR'S NAME: _____ GRADE: _____

INSPECTOR'S NAME, TITLE & CERTIFICATION: _____

I CERTIFY THIS SYSTEM WAS INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND
IN COMPLIANCE WITH DEP's (Department of Environmental Protection) APPROVAL.

(Inspector's Signature)

3.3. Title V Inspections requirements

- .0.1. Field Verifications of "Critical Components" when an adequate as-built plan is not on file for official inspections.
- .0.2. Critical components shall be defined as the leaching facility (actual horizontal and vertical location including bottom of SAS) and any wells within 100 feet, as pertains to official inspections.
- .0.3. "Adequate" as-built plan shall be defined as another specific plan made after installation (and not a copy of proposed plan that still shows proposed distances or wording that implies work that is not done or not verified) with field confirmations by designer or other engineer that specifically gives the elevation of verified leaching facility bottom in addition to a specific location of all wells within 100 feet.
- .0.4. Swing ties must be performed and documented on all septic inspections to verify component locations as found in field unless the engineered as-built on file clearly shows all components locations (as found in field by inspector) and is stamped by a registered land surveyor.
- .0.5. Comparison of the actual bottom of leaching facility elevation to high groundwater elevation is critical for the title V official inspection therefore, it would be required to be determined in the field (as least intrusively as possible) when this information is not clearly available on an adequate as-built plan.
- .0.6. Field location of all wells within 100 feet of the leaching facility is absolutely necessary as they all would need to be tested in accordance with official title V inspection parameters. Inspectors should keep in mind that new and replacement wells may have been installed after engineered reference plans on file and that some wells have no location plans on file. Most properties in Lakeville are serviced by one or more wells and it is the inspector's responsibility to account for each property's water source(s) within 100 feet of the septic system being inspected.
- .0.7. Any D box greater than 24 inches below grade requires a riser 9 to 12 inches below grade with watertight covers for both inspections and installs.
- .0.8. Tank inlet covers, greater than 24 inches below grade require a riser 9 to 12 inches below grade for both inspections and installs.
- .0.9. Tank outlet covers, require risers with covers at grade that are watertight and securable for both inspections and installs.
- .0.10. Pump chambers require watertight securable covers at grade for both inspections and installs.
- .0.11. Any system that has not received normal flow in the previous two weeks prior to Title V inspection will be considered "needs further evaluation". The inspector will explain on the report the determined reason for such conditions for example: no power, no water, or house vacant. If actual time of non-use is known by inspector it will also be noted on report. This system will still require further action and additional assessment means must be employed (1/2 of day's flow of the current system design, restore power, water and plumbing). The dwelling served by the

system will remain unoccupied until the BOH is satisfied the Title V report is complete including the water analysis.

- .0.12. Title V states the system passes if the well water analysis, performed at a DEP certified laboratory, for fecal coliform bacteria indicates absent and the presence of ammonia nitrogen and nitrate nitrogen is equal to or less than 5 ppm, provided that no other failure criteria are triggered. Retests will be required for fecal coliform bacteria and ammonia nitrogen and nitrate nitrogen over 5ppm. In the event of a system upgrade/repair, nitrate nitrogen over 5 ppm but less than 10mg/L will require annual testing to verify it does not exceed 10.0mg/L, the recommended limit.

3.4. Title V Inspection of Existing Manholes

Upgrade requirement for existing non-conforming manhole covers found at Title V inspections. If an official Title V inspection reveals non-conforming and unsafe conditions, conditional pass or further evaluation is warranted to insure unsafe issues are corrected, and as required in 3.5.0.7 through 3.5.0.10. Any non-conforming and/or unsafe covers at grade need to be replaced with watertight (gasketed) and securable (bolt down or screw down) covers as required by 310 CMR 15.228(2), 15.227(7), 15.231(5), 15.227(1), 15.226(3), 15.222(8), 15.221(3) and 15.260(f), or lowered if applicable, to meet 15.221(13) when not otherwise required to be at grade by aforementioned state regulations.

3.5. Title V Inspection of Greywater

For buildings found to have a separate leaching system for laundry and/or any greywater not in accordance with 310 CMR 15.262. Title V official inspection reports require an inspector to infer whether the existing laundry system(s) is/are on a separate (from a main title V septic system) sewage system. Additionally, the report states in follow-up, if yes, a separate inspection is required, and then asks if a separate inspection was performed. Unfortunately many of these greywater systems are found to exist but there is no further DEP guidance given or spaces for additional information provided on the inspection report. The Lakeville BOH has adopted a supplemental form that includes the following information to be attached to the report when this condition exists.

*Separate laundry/greywater system found but inaccessible and owner opts to reroute laundry/greywater flow into main sewer pipe and re-inspect main system after at least two weeks of normal flow and therefore will be considered a "Further evaluation by BOH" at this time and checked as such on initial report page. Owner will insure licensed plumber reroutes laundry with plumbing permit and contact title V inspector and BOH after at least 2 weeks of normal flow after rerouting for re-inspection.

*Separate laundry/greywater system found & system components & sizes are documented below from excavation and measurements.

Discharge (laundry sewer) pipe _____ inches below grade.

Tank present ____ dimensions ____ material of construction ____ Liquid Level ____

Leaching pit ____ dimensions ____ material of construction ____ Liquid Level ____

Other leaching facility ____ dimensions ____ material of construction ____

Distance from bottom of leaching to estimated high ground water ____
____ Pass (system passes if tank present & liquid level greater than 6" below invert
& leaching facility bottom is above HGW)
____ Conditional Pass (liquid level and HGW separation adequate but tank
installation needed prior to leach facility.
____ Fail (liquid level < 6" to leaching inlet invert or leaching bottom in HGW.

3.6. Water Treatment System & Water Softeners

Mass DEP states: many homes or small businesses may decide to install water softeners to address "hard water" and the resulting mineral deposits that build up from it. The Title V regulations prohibit water softener backwash or reject wastes from going into a septic system (conventional septic system, I/A system, or cesspool), in any amount. However, the backwash **from water softeners or from other water purification or filtration devices can be** discharged into a drywell that has been properly designed or as approved by the local Board of Health. Backwash is wastewater generated from the cleaning of water and wastewater treatment filters. A drywell is a pit with open-jointed lining or holes that allow infiltration to the surrounding soil.

3.7. Existing 1000 gallon septic tank

Existing properties with existing 1000 gallon septic tanks can ask for a waiver (local variance request) during the repair or upgrade process, to retrofit and continue using the existing tank, provided that the tank is documented to be less than 20 years old, is certified structurally sound in writing by the designer, is constructed of DEP approved materials and can be made to conform to State water tightness parameters and manhole area requirements. Otherwise, compliance with 310 CMR 15.223 in every respect shall be incorporated into the design process requiring a new (1500 gallon minimum or 200%) tank be installed and compartmentalized with outlet filter as required per 2.8 & 2.9.

3.8. Local Cesspool/Privies Upgrade

All existing cesspools, privies and "overflow cesspools" in the Town of Lakeville are considered non-conforming systems in Lakeville and shall be upgraded to meet the standards set forth in the new Title V regulations at the time of or before a real estate transfer.

3.9. Plan Permit Approval Deadline

Existing properties with plan/application permit approvals for repairs and/or upgrades must be completed (allowing COC to be issued within one year) within one year of the Agent's or Board's approval. After the deadline, if the COC has not been issued, the applicant may be required to submit a whole new package (including fees and revised plans), the intent being that the plan and existing conditions have to be re-affirmed as current by the certified engineer, sanitarian and/or land surveyor, and/or any changes shown or noted on revised proposed plans, to be re-reviewed as necessary by the Health Agent and/or the Board. New construction (vacant lot) approved septic plans and permits are good for 3 years (everything complete to allow COC to be issued within the 3 years) although the wells must go in within 1 year.

4. Percolation Testing and Soil Evaluation

- 4.0. All test holes and observation holes must be at least 20' apart.
- 4.1. De-watered percolation testing is not allowed in Lakeville, and therefore the observed groundwater elevation cannot be altered to perform a percolation test.

5. Disposal Workers Installers

- 5.0. The person, business or agent licensed in the Town of Lakeville to install subsurface sewage disposal systems in accordance with the provisions of Title V of the State Sanitary Code, shall sign the application for Disposal Works Construction License, pick up the license and the approved copy of the septic plan to ensure that the system be installed is one that has been approved and that the installer is properly licensed.
- 5.1. First Time Installer in Lakeville
The applicant will pay a \$150.00 fee
- 5.2. Annual License Renewals
Disposal works installer license shall be available only on an annual basis. No license shall be issued on the basis of one installation only.
- 5.3. Expiration of License
Such license shall expire at the end of the year in which they are issued unless earlier revoked for cause by said Board.

6. Septic Installation Inspection

- 6.0. Agents of the Lakeville Board of Health will perform 3 inspections; an open hole, and a final and finish inspection. The fee will be \$300.00 due at the time of plan submittal which covers plan review and the 3 required inspections.
- 6.1. As with the other inspections, 48 hours' notice is recommended although not required, since availability cannot always be guaranteed due to public health priorities, which vary on a day to day basis.
- 6.2. Any re-inspections for any Title V shall be a \$50.00 fee.

7. Certificate of Compliance Deadline Enforcement

Effective April 21, 2006, the State Environmental Code was revised to include a 30 day deadline from the date of the final inspection of subsurface sewage disposal system construction. Within 30 days of the final required inspection by the town inspector, the as-built plan and any associated paperwork must be submitted by the engineer, and both the designer and the installer must certify in writing that the system was constructed in compliance with 310 CMR 15.000, and the approved design plans, and all local requirements, and that any changes from the design plans have been reflected on the as-built plans.

a. Any installer, who fails to certify/sign the compliance within the State deadline, will not be allowed to undertake any additional work requiring review/approval of the Town of Lakeville Board of Health, until the paper trail can be completed, and compliance issued, on any outstanding projects.

b. Any engineering company that fails to submit the as-built plan or sign/certify any/all documents required for the certificate of compliance (i.e. retaining wall certifications, pump chamber as-builts, site plan as-builts, etc.) to be issued by the above mentioned deadline, will not be able to submit any additional plans for review/approval to the Lakeville Board of Health until the paper trail can be completed and compliance issued, on any outstanding projects.

c. Adequate business contracts, proposals, scopes of work and all associated compensation between property owners and who they hire, is not the Town's responsibility nor is it reason for delays or deviation from this policy to insure all projects are completed in a timely manner per 310 CMR 15.021.

8. Tight Tanks

An inspection with a certified Title V inspector must be done once per year in the months of March, April or May. This report shall be in a form documenting the time and date of the visit, the person doing the inspection, the existing volume present in the tank prior to pumping, confirmation that the hard-wired dedicated circuit alarm is working and that the tank is still effectively watertight, and the cover is to grade.

8.1 Tight Tank Inspection Checklist

Yearly Inspection Report (March-May)

Address: _____

Map/Block/Lot: _____

Alarm working: ☐ Yes ☐ No Owner's Name: _____

Tank Volume _____ Gallons

Inspection Date: _____

Monolithic: ☐ Yes ☐ No

Access Covers at Grade: ☐ Yes ☐ No

Cast Iron Access Cover(s): ☐ Yes ☐ No

Tank Material: _____

Watertight and Secured: ☐ Yes ☐ No
floor): _____

Liquid Level (measured from chamber

Infiltration or Exfiltration: ☐ Yes ☐ No
time: ☐ Yes ☐ No

Pumping required (recommended) at this

Comments:

****Lakeville Board of Health must be notified at least 24hrs prior to date and time of Tight Tank Inspection**

****Inspections must be done by a Title V inspector or Engineer**

Company: _____ Inspector's Name & Title: _____

Date: _____

Inspector's Signature: _____

Contact Number: _____

8.2 Tight Tank Checklist As-built Certification

(form available in office, information must include)

MAP/BLK/LOT: _____

ADDRESS: _____

ALARM WORKING: ____ YES ____ NO

TANK VOLUME: _____

MONOLITHIC: ____ YES ____ NO

ACCESS COVER(S) AT GRADE: ____ YES ____ NO

CAST IRON ACCESS COVER: ____ YES ____ NO

TANK MATERIAL: _____

WATER TIGHT AND SECURED: ____ YES ____ NO

LIQUID LEVEL (MEASURED FROM CHAMBER FLOOR) _____

INFILTRATION OR EXFILTRATION: ____ YES ____ NO

PUMPING REQUIRED (RECOMMENDED) AT THIS TIME: ____ YES ____ NO

The undersigned certifies that the Tight Tank has been made Watertight & All Associated Equipment have been installed according to the approved design plan & specifications, & meets all State & Local Regulations ____ yes ____ no

The undersigned certifies that the Tight Tank & all associated equipment have been installed with *changes* to the approved design plan &/or specifications, but according to all State & local regulations ____ yes ____ no (Note: All location changes shall be reflected on the certified as-built plan & all engineer approved specification changes shall be listed on the reverse side of this form.

Date: _____

Engineer/Inspector's Name, Title, & Company _____

Engineer/Inspector Contact Number _____

Engineer/Inspector's Signature: _____

9. Connection to Municipal Water

Prior to connection to a municipal water main, the Lakeville Board of Health will require a proposed water supply plan submitted.

9.1. The plan shall include any pertinent features and basic lot identification information including the structure being connected to (but not limited to) and all pertinent easements. The plan shall specify the location (from street shutoff to building), depth, and type (material specification including pressure rating) of supply line and distances to all septic components and reserve areas within 50'.

9.2. If there is no engineered as-built plan on file, a Title V inspection (unless a valid title V inspection has been done within 3 years and accurately shows all

components including the leaching facilities) shall be required prior to plan submittal in order that all of the septic components can be located, including the leaching area, and shown accurately on the appropriate report page with the proper swing ties to permanent reference points. This will allow the engineer to properly show the required setbacks to the proposed water supply line for proper plan review. On the plan there should be a note to specify proper abandonment of any existing well(s).

- 9.3. The plan should also specify magnetic marking tape to be attached to the water supply line unless the specified line already has metallic components or if the engineer is going to be locating the line prior to backfilling in order to accurately show the location on the As-built plan which should be submitted within 30 days of the completed connection. If there is an engineered plan on record, it may behoove the applicant to have the same engineering company provide the above mentioned plans since they would probably have most of the required information on file.
- 9.4. If any onsite wells are desired to be kept as non-potable and/or irrigation wells, all plumbing connections to the dwelling are required to be disconnected (with the appropriate plumbing permits through the building department), the as-built plan shall properly identify the well as irrigation or specified other, and distances shown to all septic components and reserve areas within 50' of the converted non-potable well.

10. Wells

10.0. Article I. Authority

These regulations are adopted and, from time to time, amended by the Board of Health pursuant to Chapter 111, Section 31 of the Massachusetts General Laws.

10.1. Article II. Definitions

"Board": The Board of Health of the Town of Lakeville.

"Leaching Facility": Is an approved structure used for the dispersion of sewage effluent into the soil. These include leaching pits, galleries, chambers, trenches, and fields.

"Lot": An area of land; in one ownership, with definite boundaries.

"Reserve Area": An additional area of at least equal capacity as the original sewage disposal area, suitable for subsurface sewage disposal, and upon which no permanent structures will be constructed.

"Town": The Town of Lakeville.

10.2. Article III. Severability

Each article shall be construed as separate to the end that if any regulation or sentence, clause, or phrase thereof shall be held invalid for any reason, the remainder of that regulation and all other regulations shall continue in full force.

- 10.3. Drawing from a surface water supply is not a grandfathered pre-existing condition for a seasonal conversion to year round.

11. Well Installers

- 11.0. Every person, business or association engaged in well construction or well installation in the Town of Lakeville for the purpose of obtaining water shall have a permit therefore to be issued by the State and listed on the Annual List of Registered Well Drillers under the Commonwealth of Massachusetts Department of Conservation and Recreation Well Driller Registration Program. This list includes individual who are qualified to engage in the business of well digging and drilling in all cities and towns throughout the Commonwealth of Massachusetts.
- 11.1. Permits for wells
- 11.2. Every person, business or association who installs a well for the purpose of obtaining water shall have a permit issued by the Board prior to the commencement of installation.
- 11.3. Permits for individual wells may be obtained by filing an application for same on a form supplied by the Board.
- 11.4. Applications for well permits shall be accompanied by a plot plan showing, at a minimum, property lines; location of any structures on the lot; proposed well location, location of any animal pens on the lot; and distances between proposed well and street line, property lines, sewage disposal systems and reserve areas on the lot, and if within 200 feet of proposed site, on adjoining lots.
- 11.5. The plan accompanying the well permit application need not be prepared by a registered professional engineer, although the Board reserves the right to request certification of the plan, including distance measurements, from a registered professional engineer.
- 11.6. A permit issued pursuant to Section 11.2 shall be valid for a period on one (1) year following the date of issuance. Upon written request, the Board may extend the permit, without charge, for additional periods of one year.

12. Siting of well

- 12.0. The Board reserves the right to require greater distances between proposed wells and leaching facilities and reserve leaching facilities if geologic and topographic conditions warrant it.
- 12.1. No well shall be permitted within 20 feet of a street layout line or 10 feet of a side or rear line.
- 12.2. The Board may grant a variance indicating a lesser distance than that required in Sections 12.0, although not less than 100 feet from a leaching facility and reserve area, or of Section 12.1 if the Board determines that the installation of the well will not endanger the health of any potential user.
- 12.3. To minimize the hardship created by inadequate quality and quantity of water supply to dwellings used for year-round purposes as of the effective date of this regulation, the Board may grant a variance indicating a lesser distance than 100' from leaching and reserve area. Before said variance may be granted, though, the applicant shall

certify in writing that he/she is aware that the minimum standards are designed to prevent contamination of wells and that he/she is aware of the request for variance.

- 12.4. In making a determination of the proper distances the Board may require the applicant to submit information relating to the character of local geology, nature of the soil, depth and slope of the water table and an assessment of the present and projected future density of subsurface disposal systems in the adjacent area.
- 12.5. There shall be no new shared wells allowed in the Town of Lakeville. Replacement of an existing well shall not be considered a new well, and no shallow wells will be permitted.
- 12.6. It is the home owner's responsibility to have an as-built plan submitted to BOH within 30 days of installation.
- 12.7. Drawing from a surface water supply is not a grandfathered pre-existing condition for a seasonal conversion to year round.

13. Non-potable wells

- 13.0. The Board may issue permits pursuant to Section 11.2 for wells designed for non-potable purposes.
- 13.1. Non-potable wells may be installed notwithstanding the siting requirements only if the applicant has a year-round source of potable water of quality and quantity satisfactory to the Board.

14. Well standards

- 14.0. The submergence setting of a foot valve or ejector in any well installed in unconsolidated material shall be a minimum of 10 feet below the static water level. The submergence setting of the uppermost inlet of a well point installed in unconsolidated material shall be a minimum of 10 feet below the static water level.
- 14.1. A well installed in an aquifer consisting of unconsolidated material for the purpose of providing potable water for a new dwelling shall provide no less than a minimum continuous yield of five (5) gallons per minute.
- 14.2. A drilled well installed for the purpose of providing potable water for a new dwelling shall have as a minimum the following capacities:
- | <u>Depth of Well</u> | <u>Required Volume</u> |
|----------------------|------------------------|
| Less than 150 feet | 5 gallons/minute |
| 150 feet to 300 feet | 3 gallons/minute |
| More than 300 feet | 2 gallons/minute |
- 14.3. The well casing of a drilled well shall extend a minimum of twelve (12) inches above finish grade and/or flood elevation.
- 14.4. Water distribution piping shall be connected to a drilled well with steel casings by means of a pitless adapter installed below the frost line.
- 14.5. Any well installation failing to meet the criteria of Sections 14.0, 14.1 or 14.2, shall be deemed inadequate to meet the ordinary needs of a dwelling.
- 14.6. The Board may grant a variance from Section 14.6 following examination of the request for variance. In making its determination the Board may request that the applicant provide additional storage capacity.

15. Well analysis standards

- 15.0. Chemical and bacteriological analysis (including VOC's) must be made of water from each well intended for drinking purposes prior to its connection to the plumbing system of the dwelling or structure where the water will be consumed.
- 15.1. Water analysis shall be performed by a Laboratory approved by the Massachusetts Department of Environmental Protection for microbiological and chemical analysis of drinking water.
- 15.2. Prior to the water sample collection, the well should be developed by sustained pumping over a period of not less than four (4) hours per State guidelines.
- 15.3. The analysis pursuant to Section 15.1 shall contain, as a minimum, the following: Total Coliform Bacteria, pH, Ammonia Nitrogen, Nitrate Nitrogen, Iron, Hardness, Manganese, Sodium, Chloride, Magnesium, Copper, Arsenic, & Volatile Organic Compounds
- 15.4. A copy of the laboratory analysis shall be submitted to the Board. The copy shall include the property plot plan number as stated on the permit and well installer's report to Board.
- 15.5. Following examination of the analysis, the Board reserves the right to require a suitable water conditioner or filter be installed, if necessary.
- 15.6. In the case of a new dwelling, no building permit shall be issued prior to the installation of the well and the submission of the well analysis to the Board, and approval of the analysis by the Board.

16. Responsibility of the well installer

- 16.0. The person, business or association that drills the well must pick up the individual well permit and driller's permit. This would provide assurance to the registered driller that a well permit has been issued by the Board.
- 16.1. The driller shall promptly submit to the Board a report of the well installation, on a form approved by the Board, stating the location of the well, the type well, its yield and depth, as well as any other similar information as may be required by the Board.
- 16.2. There shall be no deviation from the well location as shown on the plot plan prepared for the Board as part of the application for a well permit without prior approval of the Board or its designee.

17. Previous well permits

All permits to install wells issued prior to the effective date of this regulation shall be valid for one full year following the effective date of this regulation.

18. Water Analysis Requirements

- 18.0 Any Well Only Permit must have a Current Title V Inspection or Certificates of Compliance (up to 2 years old) can be submitted to show sewage disposal facility adequacy.
- 18.1 Any Septic Repair or Upgrade Permit must have a Current Water Analysis (*up to two years old*) can be submitted to show water adequacy, provided they include all potability parameters including Nitrates and Volatile Organic Compounds and Arsenic provided they have been collected objectively by a DEP Certified Lab Employee or Certified Water Operator.
- 18.2 No building permit for an addition to any dwelling or structure shall be issued until the Board of Health has approved the adequacy of the water supply and sewage disposal facilities for the proposed use.
- 18.3 No permit required by the Town of Lakeville shall be issued in circumstances which indicate a substantial change in use or a significant expansion in use of any structure or dwelling within the town, unless the applicant can demonstrate that all regulations and requirements of the State Sanitary Code, Chapter 111 of the General Laws of Massachusetts, the State Building Code, and the regulations and by-laws of the Town of Lakeville have been met.

19. Water Analysis Specifications

This section will define what the Lakeville Board of Health (hereafter referred to as BOH) defines as acceptable analytical parameters for well water to determine suitability for human consumption (which includes hand washing according to the MA Department of Environmental Protection (hereafter referred to as DEP)).

***After January 1, 2014, well analyses are considered current or suitable for 2 Years for any permitting or compliance process or evaluation therefor.** The BOH also acknowledges that the State DEP recommends further testing initially for new wells. Recommended testing parameters are outlined from the Department Environmental Protection Private Well Section which can be found at:

<http://www.mass.gov/eea/agencies/massdep/water/drinking/>

Certain areas can have additional contaminants that are not normally checked for with a standard well analysis (nor these BOH specified parameters) and therefore it may behoove the property owner to do their own additional testing to insure safe drinking water with respect to all possible contaminants not necessarily listed below.

Lakeville BOH "Potability" parameters include:

Total Coliform Bacteria, pH, Ammonia Nitrogen, Nitrate Nitrogen, Iron, Hardness, Manganese, Sodium, Chloride, Magnesium, Copper, Arsenic & Volatile Organic Compounds (*hereafter referred to as VOC's*).

FOR NEW WELLS ONLY:

INCLUDE: Gross Alpha (added 9/18/13 – **Effective 10/15/13**)

Sampling should take place by the certified lab performing the analysis as referenced in our Local BOH Regulation (6.2), although sampling by an objective third party is accepted providing a copy of the chain of custody is attached to the report for legal purposes.

In addition, sampling for new wells, replacement wells and well repairs should be preceded by 6 hours of sustained pumping per Local BOH Regulation (6.3) a report for which documenting said pumping should be provided to the BOH by the licensed driller.

***Please note:** Onsite wells need to be tested prior to any septic permit being released or upon any property transfer inspection, unless there is a current analytical report on file.

Also note: Any onsite and/or abutters well(s) within 100 feet of a proposed septic leaching component must be tested and the results submitted for review, to the Health Department, at least one week prior to the public meeting at which the setback divergence(s) will be discussed.

Well Water Analyses for Title V, Septic Repairs & Upgrades, Property Transfers

- Water analyses are valid for two years. (voted 1/1/14)
- Water analysis must be attached to the Title V Report and submitted to the Board of Health within 30 days for the inspection to be considered valid. **Incomplete reports will NOT be accepted.**
- Title V inspections shall have a water analysis done on onsite wells for Lakeville potability parameters **regardless of the distance to the septic system.**
- Abutting wells within 100' of said system shall have a water analysis (Nitrate Nitrogen, Ammonia Nitrogen, Fecal Coliform Bacteria) as required by the State Regulations. (voted 7/21/16 to revert to State Requirements)
- **Property transfers must have water samples taken by an objective third party and the Title V Report and water analysis must be accompanied by the chain of custody form unless the sample was taken by a certified lab.**
- **Septic repairs and upgrades** require a water analysis for Lakeville potability parameters

Lakeville Potability Parameters include: Total Coliform Bacteria, pH, Ammonia Nitrogen, Nitrate Nitrogen, Iron, Hardness, Manganese, Sodium, Chloride, Magnesium, Copper, Arsenic, & Volatile Organic Compounds (voted to remove "Sediment" 7/20/16)

Revised 2/2018

Gross Alpha Policy

(Applicable to new wells for new construction)

Please be advised if the water sample is not taken by the engineer or certified lab, the BOH office must be notified at least 30 minutes prior to allow the Health Agent the opportunity to witness the sampling. The BOH will not delay the sampling but does require notification prior to.

Water analyses on **new wells for new construction only shall include Gross Alpha in addition to Lakeville Potability Parameters.** If initial well analysis indicates that Gross Alpha is higher than 5, follow-up sampling/testing is required under the direction of a professional engineer. (voted 9/17/14-clarified 12/6/16)

| Gross Alpha Results | Action Required |
|---------------------|--|
| ≤4.9 pCi/L | No further action required / LBOH Agent can sign off |
| >5 but ≤14.9 pCi/L | <ul style="list-style-type: none"> Requires testing for Ra-226 and Ra-228 If combined test results is <5 for Ra-226 and Ra-228 Health Agent sign-off is required If combined test result is >5, a MA PE is required to evaluate and supervise further action Prior to the Building Permit sign-off by the LBOH the MA PE is required to submit a letter to the LBOH stating that a treatment system can be designed Prior to the Occupancy Permit sign-off by the LBOH and after treatment system is installed a retest and a letter by same engineer is required |
| ≥15 pCi/L | <ul style="list-style-type: none"> Requires follow-up testing for Ra-226, Ra-228 & Uranium, by a MA PE who is required to evaluate and supervise further action Prior to a Building Permit sign-off by the LBOH the MA PE is required to submit a letter to the LBOH stating that a treatment system can be designed Prior to the Occupancy Permit sign-off by the LBOH and after treatment system is installed a retest and a letter by same engineer is required |

Note: Water sampling reports submitted to the Board of Health must have a Chain of Custody attached as stated in the Lakeville Board of Health Well Regulations, unless the water sample collection is taken by a DEP certified laboratory employee or a MA PE who is hired to supervise and certify all water sampling, testing, treatment system design and follow-up sampling and testing.

| | |
|---|----------------------------------|
| DEP = Department of Environmental Protection | LBOH = Lakeville Board of Health |
| MA = Massachusetts (license in good standing) | pCi/L = pico curies per liter |
| PE = Professional Engineer | Ra-226 = Radium 226 |
| Ra-228 = Radium 228 | Ur = Uranium |

(voted and effective 5/20/15)

20. Waiver for Title V Mandated Well Analysis

Page 3 of the Commonwealth of Massachusetts "Official Inspection Form" mandates a water analysis when a Soil Absorption System (SAS) is found to lie within 100 feet of a private water supply well. In some instances, homeowners abutting the inspected property have been reluctant to allow access to measure their private well locations and/or to obtain samples for analysis. When an abutter's well is concerned, the owner of the property being inspected hires a State Certified Laboratory to collect the samples to avoid any conflicts. If an abutter refuses to cooperate, the Inspector shall obtain the signature (**See ****) of the abutter refusing access to legally document the reason why all the appropriate analyses are not attached to the inspection report as required by 310 CMR 15.303(2)c.

Address/Lot # of abutting well that may be within 100' & may be required to have an analysis _____

Printed name of owner of said property containing private well _____

Address/Lot# of septic system currently being inspected _____

Name and Company of Septic Inspector for system currently being inspected _____

Owner of Septic System currently being inspected _____

The undersigned acknowledges that a Well Location and Analysis is required under the State Environmental Code but for whatever reason wishes to deny access to the State Certified Inspector and hereby waives the right to have their well water tested and/or access to locate said well. The undersigned also acknowledges by doing so may fail to identify a water quality issue that may be caused by the septic system currently being inspected, and could enable further and increased contamination of said water supply.

Signature of Well Owner or Representative of Requesting Waiver _____

Printed Name of Well Owner: _____

Date _____

****A Certified Mail Receipt can be attached in lieu of a signature if abutter is unavailable or out of town**

21. Nitrogen Loading and Advanced treatment septic systems Protection

If a site is served by a subsurface sewage disposal system, and three or more abutting wells are within 100 feet, an advanced I/A treatment system (approved for denitrification by the DEP) may be required depending on the following criteria which would allow the board to make an informed decision and risk assessment:

- 21.0 All wells have to be accurately located (RLS) and evaluated and labeled appropriately per type (i.e. deep vs. shallow, bedrock vs gravel packed) on plan.
- 21.1 Topography clearly shown between wells and proposed septic system to allow evaluation of the system components shown to be up gradient or down gradient.
- 21.2 Lot size as well as abutting lot sizes with said wells.
- 21.3 Groundwater flow should be shown (especially if arguing against advanced treatment).
- 21.4 Soils should be identified with sufficient soil logs throughout area for a hydrogeological assessment (especially if arguing against advanced treatment)
- 21.5 Nitrogen loading (structures flow vs. acreage) of locus lot and abutting lots should also be discernible from the proposed plan and will be taken into consideration.
- 21.6 Number of animals and locations of pens (i.e. paddocks, kennels, etc.) and manure piles should also be provided for consideration, if applicable.
- 21.7 recent (less than one year old) water analyses (including nitrates) should be provided on all wells if available for consideration.

Any proposed plan without sufficient information (as requested above) for assessment will mostly likely require an advanced treatment system approved for de-nitrification although each situation is under the discretion of the Board of Health.

22. Demolition

- 22.0 The Board of Health does not need to sign off on a demolition permit, however, if the property has any public or private wells or an onsite septic system that need(s) to be abandoned; it would be the applicant's responsibility to apply for the appropriate permits to decommission the well(s) and/or septic components through the Health Department.
- 22.1 Any hazardous materials/waste that require removal per State regulations (i.e. asbestos, fuel oil, fuel oil tanks, etc.) need also to be properly dealt with and permits applied for through the appropriate department (fire, building, and/or the Department of Environmental Protection) and all work performed by certified or licensed professionals in that field.
- 22.2 If the site is served by a Subsurface Sewage Disposal System, the system components need to be properly abandoned per 310 CMR 15.354 and with the proper permit from a licensed installer through the Health Department. If there is to be on-site reconstruction in the near future and the septic components need to be re-utilized for another structure, a Title V Inspection would be required to determine adequacy for the expansion/change in use, or to determine if an upgrade

or expansion of the system would be required. If the septic system passes an inspection and will be re-utilized after demolition, the proper marking of all components with suitable flagging for protection, must be completed prior to issuance of the demolition permit. If the septic system does not pass an inspection and/or a new system is to be designed for a reconstructed building, the old system can be properly abandoned under the permit for the new system to be reconstructed after the demolition, provided there are no public health and/or safety issues. It is the owner's and site contractor's responsibility to maintain site safety during all operations and in order to insure that, it may be necessary to obtain an abandonment permit prior to demolition.

- 22.3 If the property is serviced by existing **Public or Private Well(s)**, the well(s) would need to be properly abandoned and sealed as necessary to prevent a public health danger per State private well guidelines and any local board of health regulations or policies. If there is to be on-site reconstruction in the near future and the well(s) need to be re-utilized for another structure, a well analysis (for private wells per local specified parameters) would be required to be submitted to determine adequacy for expansion/change in use. If the well passes the analytical requirements and will be re-utilized after demolition, the proper marking of any wells with suitable flagging for protection, must be completed prior to issuance of the demolition permit. If the property has a public well, the DEP and the certified water operator would need to be contacted for the appropriate conditions for decommissioning, and any documentation forwarded to this office for our records. If a private well is to be properly abandoned, it must be done so through the Health department with the appropriate permit, by a licensed well driller per State guidelines.

Derek Maguire
Chris Smith
[Signature]