



Town of Halifax
Board of Health
Supplementary Rules and Regulations to the
State Environmental Code: Title V,
310 CMR 15.00

Adopted November 12, 2004, Revised December 01, 2004 & August 19, 2015



TOWN OF HALIFAX

COMMONWEALTH OF MASSACHUSETTS

Board of Health

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Supplementary Rules and Regulations to the State Environmental Code: Title 5, 310 CMR 15,000

“Standard Requirements for the siting, construction, inspection, upgrade and expansion of on-site sewage treatment and disposal systems.”

Preamble – The most important treatment of the wastewater occurs in the unsaturated zone below the leaching system. The oxygen contained in the soil is important to the microorganisms that breakdown the materials in the wastewater. It is imperative that this zone remains unsaturated and able to recharge itself with free and combined forms of oxygen.

Soils that have a finer texture and a slow percolation rate allow for longer detention of wastewater on soil particles as the effluent migrates through the underlying strata below the leaching facility. “As the wastewater infiltrates and percolates through the soil, it is treated through a variety of physical, chemical and biochemical processes and reactions” (USEPA OWTS Manual Pg. 4-2).

Combining the effects of soils with finer particles and a slow percolation rate with an adequate depth of unsaturated soil beneath an infiltration system provides the most beneficial treatment of wastewater. Septic regulations that utilize and maximize these effects will achieve better protection to the groundwater and aquifers of Halifax.

1.01 Purpose – In order to protect the public health and environment, there is a need to provide special regulations for the design of septic systems in soil with slow to very slow percolation rates. These regulations are established to further protect the ground water, surface waters, drinking water, and wetlands.

1.02 Authority to Promulgate and Other Provisions

- (1) In accordance with the provisions of 310 CMR 11.02 of the State Environmental code and under the authority of M.G.L. c. 111, s. 31, the Board of Health of the Town of Halifax hereby adopts these Supplementary Rules and Regulations to the State Environmental Code: Title 5, 310 CMR 15.000, “Standard Requirements of the siting, construction, inspection, upgrade and expansion of on-site sewage treatment and disposal systems.
- (2) The provisions of these Supplementary Rules and Regulations shall be read together with the provisions of 310 CMR 15.000.

- (3) The purpose is to require precautions to avoid potential danger and to restrict conditions proven to be harmful. The precautionary principle is to protect even the threat of harm to the environment. The precautionary principle says that decision-makers have a general duty to take preventive action to avoid harm before scientific certainty has been established.
- (4) The effective date of these Supplementary Rules and Regulations is November 12, 2003.

1.03 Definitions

- (1) Open Space – area of land consisting of naturally occurring vegetation, free of permanently hardened surfaces such as driveways, roadways or parking areas and restricted in use by a covenant on the deed and recorded with the deed.
- (2) Soils of Special Concern (SSC) - soils with a perc rate of 31 to 60 minutes per inch.
- (3) Naturally Occurring Vegetation – The vegetation which occurs on the land prior to development of that land.
- (4) Mounded System – Any system resulting in a finish grade 18 inches above the plane of the original grade.
- (5) Seasonable High Ground Water Table – as defined in 310 CMR 15.103 (3).
- (6) All other definitions are to be found in 310 CMR 15.0 et. seq.

1.04 System Failure Criteria

- (1) Purpose: To avoid contamination of ground and surface water by substandard onsite sewage disposal systems. Substandard systems present a serious threat to drinking water thus negatively affecting the public health. This contamination also poses a threat to designated wetlands affecting the environment and public health.
- (2) Cesspools
 - (a) Septic systems consisting of one cesspool shall be upgraded to conform to 310 CMR 15.00, the State Environmental Code, Title 5, Minimum Requirements for the Subsurface Disposal of Sanitary sewage and the Town of Halifax requirements.
 - (b) Cesspools with an overflow system within 50 feet of the Monponsett Ponds shall be upgraded to conform to 310 CMR 15.00, State Environmental Code, Title 5, Minimum Requirements for the Subsurface Disposal of Sanitary sewage and the Town of Halifax requirements.
 - (c) Cesspools with an overflow system within 50 feet of Bordering Vegetated Wetlands shall be upgraded to conform to 310 CMR 15.00, State Environmental Code, Title 5, Minimum Requirements for the Subsurface Disposal of Sanitary sewage and the Town of Halifax requirements

- (d) When the bottom of a cesspools with an overflow system is within 2 feet of seasonal high ground water level, shall be upgraded to conform to 310 CMR 15.00, State Environmental Code, Title 5, Minimum Requirements for the Subsurface Disposal of Sanitary sewage and the Town of Halifax requirements.
- (e) All other Cesspools with overflows or leaching pits require further evaluation by the Board of Health.
- (f) This section shall apply to any septic system inspection conducted in accordance with 310 CMR 15.301 of the State Environmental Code, Title 5. This regulation shall also be strictly enforced during the building permit application process.

1.05 Soil Evaluation and Percolation Testing

- (1) All percolation testing done in accordance with 310 CMR 15.105 (6) shall require a fee and an application with the Board of Health. The percolation testing done under this section shall be witnessed by the Board of Health Agent and/or Board of Health's consultants. The fee for the consultant shall be reimbursed to the Board of Health by the applicant and is in addition to the application fee.
- (2) Any land on which a percolation test results in a perc rate from 31 to 60 minute will be considered "Soils of Special Concern" and will be subject to the design criteria spelled out in section 1.06 (7) Design Criteria for Soils of Special Concern.
- (3) Sieve Analysis in place of percolation test. When designing a septic system using a sieve analysis in place of a percolation test, a perc rate of no less than 30 minutes per inch will be used.
- (4) When a de-watered perc is performed, a perc rate of no less than 30 minutes per inch will be used when designing a system.
- (5) The Engineer will be responsible for determining the number of bedrooms and whether a garbage grinder is currently in use. **(Added 12/1/04)**

1.06 Design Criteria

- (1) If the design of a septic system requires removal and replacement of unsuitable soils, the depth of the removal and replacement, to suitable pervious materials, will be noted on the plan.
- (2) Charcoal filters must be installed on all Soil Absorption System vents.
- (3) Filters, Zabel or equivalent, must be installed in outlets of all systems.
- (4) Electric junction boxes must be installed outside of the wet well of the pump chamber.
- (5) All pump chambers for single pump systems shall be equipped with three floats which operate in the following sequence:
 - i. pump off

- ii. pump on
- iii. alarm on

These floats shall be able to be adjusted individually. **(Added 12/1/04)**

- (6) All new construction of multi-unit buildings, residential, commercial, or industrial, will be required to install a separate septic tank for each unit in the building. **(Added 12/1/04)**
- (7) Monolithic tanks will be required if tank sits in ground water or if tank is within:
 - (a) 200 feet of surface water supply or tributary to a surface water supply,
 - (b) 100 feet of bordering vegetated wetlands or wells.
- (8) Proposed retaining walls will be designed by a Mass. Registered Professional Engineer who will certify the structural integrity of said wall.
- (9) All proposed and As-Built plans shall indicate wells within 100 feet of system.
- (10) Soils of Special Concern
 - (a) Any septic systems designed on “Soils of Special Concern” must have a minimum lot size of 80,000 square feet of contiguous uplands. This information will be indicated on the proposed septic plan and As-built plan.
 - (b) A minimum of 27,000 square feet must remain open space and be protected by a deed restriction. This information will be indicated on the proposed septic plan and As-built plan.
 - (c) The following set back requirements will apply to all septic systems built in “Soil of Special Concern”:

	Septic Tank	Soil Absorption System
Property Line	50	50
Surface Water (except wetlands)	200	200
Bordering Vegetated Wetlands	150	150
Surface Water Supply	400	400
Tributary to Surface Water Supply	200	200
Wetlands bordering Surface Water Supply or Tributary thereto	200	200
Certified Vernal Pools	100	100
Private Water Supply Well or Suction Line	400	400
Irrigation Well	50	100
Open, Surface or Subsurface Drains which Discharge to Surface Water Supplies or Tributaries thereto	200	200
Other Open, Surface or Subsurface Drains (excluding foundation drains) which intercept seasonal high groundwater table	50	100
Other Open, Surface or Subsurface Drains	25	50

(excluding foundation drains)		
Leaching Catch Basins and Drywells	25	50
Downhill Slopes	N/A	30
(as described in 310 CMR 15.211 (1)[4])		

- (d) The setbacks on a Mounded Septic Systems on “Soils of Special Concern” will be measured from the toe of the slope.
 - (e) A 50 foot buffer strip of naturally occurring vegetation must be left between the edge of any septic system on “Soils of Special Concern” and the property line if the system is within 100 feet of the property line. This buffer should not be altered in any way by such activities as but not limited to mowing, cutting or trimming. This buffer zone can be included in the 27,000 of open space required.
 - (f) All pressure dose and pump systems must be dosed at a rate of one application per day.
 - (g) All new construction and upgrade systems shall have at least a 5 foot separation from the bottom of the system and the seasonal high ground water level.
 - (h) All septic tanks shall be monolithic.
 - (i) All systems shall be vented.
 - (j) All systems shall have a minimum of 2 inspection ports installed in the leaching area.
 - (k) No leaching fields will be allowed.
- (11) Repairs – Maximum Feasible Compliance on all proposed septic system repairs.**
- (a) Goal of full compliance. Wherever feasible, a failed or nonconforming system shall be brought into full compliance with 310 CMR 15, Title V and the Halifax Supplementary Rules and Regulations to the State Environmental Code: Title 5, 310 CMR 15.000.
 - (b) When full compliance with the Halifax Supplementary Rules and Regulations to the State Environmental Code: Title 5, 310 CMR 15.000 is not feasible, the Halifax Board of Health can issue variances which allow the system to be repaired but still requiring the maximum feasible compliance possible at that site.
- (12) New Construction – Maximum Feasible Compliance on all proposed septic systems.**
- (a) Goal is full compliance. Wherever feasible, a proposed system shall be in full compliance with the Halifax Supplementary Rules and Regulations to the State Environmental Code: Title 5, 310CMR 15.000.
 - (b) When full compliance with the Halifax Supplementary Rules and Regulations is not feasible, and when, in its opinion, the strict enforcement would do manifest injustice and does not jeopardize public health or environment, the Halifax Board of Health can issue a variances which allows the system to be installed.
 - i. When variances from the Halifax Supplementary Rules are issued, the maximum feasible compliance with the State Environmental Code: Title 5, 310CMR 15.000 must be met at that site.

1.07 Septic Installations

- (1) An approved copy of the proposed plan and the disposal works permit will be on-site at all times during construction.
- (2) There will be a 24 hour water test for tight tanks.
- (3) All As-Built plans will be on site on the day of the final inspection. The installer is expected to be at the site at the time of the final inspection for signing the As-Built and assisting the agent. Please have five gallons of water available to test the flow from the “D” box.
- (4) If at the time of any inspection, the system does not comply with the design plans, there will be an additional charge for every re-inspection.
- (5) Pump Chambers will have risers with cover at grade above the pump. Duplex Pump Chambers will have a hatch that will provide access to both pumps. The cover shall have a gasket and the unit will be vented. **(Added 12/1/04)**

1.08 As-Built Drawings and Certificates of Compliance

- (1) The As-Built plan will be considered as part of the Certificate of Compliance and will include all data as shown on proposed plan and all As-Built data.
- (2) The As-Built plan will also incorporate the following paragraph:

The undersigned hereby declare that the sewage disposal system located at:

<i>Street</i>	<i>Town</i>
<i>has been installed in compliance with the provisions of 310 CMR 15.0 (Title V) and the design plans approved by the Halifax Board of Health relating to the application for the Disposal Works Construction Permit.</i>	
<i>Designer</i> _____	<i>Date</i> _____
<i>Installer</i> _____	<i>Date</i> _____
<i>Inspector</i> _____	<i>Date</i> _____

- (3) As-builts for new or mounded systems shall include a final grading as-built. The Board of Health must have received the final grading as-built before the certificate of compliance will be given out.
- (4) Retaining walls used in septic systems shall be certified by a Mass. Registered Professional Engineer that the wall was constructed as originally designed and approved. This certification statement shall appear on the as-built plan.
- (5) Pressure Dosing Systems, Tight Tanks and Alternative Systems will have signed contracts which provides quarterly monitoring or other monitoring schedule, as required by law of the system by a Board of Health approved inspector before the Certificate of Compliance will be issued. **(Added 12/01/04 and revised 08/19/15)**

1.09 Septic System Title V Inspections

- (1) At the time of a Title 5 inspection risers will be added to bring the inlet and outlet covers to within 6" of grade.
 - (a) The addition of riser(s) will be noted on the state approved Title V Inspection Form.
- (2) At the time of a Title 5 Inspection a riser will be added to the D-Box to bring it within 6" of grade.
 - (a) The addition of riser(s) will be noted on the state approved Title V Inspection Form.
- (3) At the time of a Title 5 inspection a filter (Zabel 1800 or equivalent) will be added to the tank's outlet tee.
 - (a) The addition of a filter will be noted on the state approved Title V Inspection Form.
- (4) The Inspection reports for systems with in 100 feet of the Monponsett Ponds or 200 feet of Silver Lake need to be further evaluated by the Board of Health or its Agent.
- (5) The inspector shall make reasonable professional efforts to locate and inspect all of the system components.
- (6) All seepage pits shall be located and inspected. Pits will fail an inspection when the liquid depth in a seepage pit is less than six inches from the inlet pipe invert or the remaining volume within the leaching system above the liquid depth is less than ½ of one day's design flow.
 - (a) Risers will be added to the seepage pits at the time of the Title 5 inspection to bring them within 6" of grade.
 - (b) The addition of riser(s) will be noted on the state approved Title V Inspection Form.

1.10 Septage Hauling, as defined in 15.002

- (1) The application of and/or sale of septic system additives by septage hauling companies is prohibited in the Town of Halifax.
- (2) Any and all Septage pumping, including from the D-box or leaching area and including water if added, will be reflected in gallons on the Septage hauling report.
- (3) All systems with in 50 feet of the Monponsett Ponds are included in the Wastewater Management District Regulations and, as such, must have a function report filled out any time the system is pumped. These function reports must be filed with the Board of Health along with the pumping record.

1.11 Variances

- (1) When full compliance with the Halifax Supplementary Rules is not feasible, and when, in its opinion, the strict enforcement would do manifest injustice and does not jeopardize public health or the environment, the Halifax Board of Health can issue variances.
 - (a) When variances from the Halifax Supplementary Rules are issued, the maximum feasible compliance with the State Environmental Code: Title 5, 310 CMR 15.000 must be met at that site.
- (2) Process for Seeking a Variance from Halifax Supplemental
 - (a.) Every request for a variance shall be in writing, shall make reference to the specific provision of the Halifax Supplementary Rules to Title V, for which a variance is sought, and shall include a statement demonstrating compliance with 310 CMR 15.000.

(b.) No application for a variance shall be complete until the applicant has notified all affected abutters by certified mail, or first class mail with receipt, at his/her own expense at least ten days before the Board of Health meeting at which the variance request will be on the agenda. The notification shall reference the specific provisions of the Halifax Supplementary Rules to Title V from which a variance is sought, a statement demonstrating compliance with 310 CMR 15.000, and the date, time and place where the application will be discussed.

1.12 Penalties

(1) Failure to comply with the provisions of this regulation will result in levy of fines of not less than \$100.00, but no more than \$1,000.00 for each violation. Each day's failure to comply with the provisions of this regulation shall constitute a separate violation.

a. Note: Effective 1992, under Chapter 111: Section 31 (violation of health regulation) maximum fines increased from \$100 to \$1,000.

1.13 Severability - Each provision of this regulation shall be construed as separate to the end that, if any provision, or sentence, clause or phrase thereof, shall be held invalid for any reason, the remainder of that section and all other sections shall continue in full force and effect.

Adopted November 12, 2004 by the Town of Halifax Board of Health, revised on **December 01, 2004 and August 19, 2015.**

Signed on August 19, 2015

**John DeLano – Chairman
John Weber – Co-Chairman
Alan Dias – Clerk**

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