

Townsend Board of Health
SUB SURFACE SEWAGE DISPOSAL REGULATIONS
Effective January 24, 2011

Preamble

The Town of Townsend is reliant on ground water from our underlying aquifer for all public and private drinking water. There is a prevalence of streams, wetlands and ponds throughout the town. As a result, most areas of the town are critical for protection of the aquifer. Furthermore, over 70% of Townsend is in the Squannassit Area of Critical Environmental Concern. Therefore, to prevent future contamination of ground and surface water resources, and to address the potential threat to the public health that might result from ineffective sewage treatment, the Board of Health of Townsend has hereby revised its Sub Surface Sewage Disposal Regulations.

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A. GENERAL PROVISIONS

1. Authorization

These regulations are adopted pursuant to M.G.L. C111, S31 & 27 and shall be interpreted so as to be consistent with the provisions of Title 5 of the State Environmental Code 310 CMR 15, in effect March 31 1995, as amended. Where these regulations are silent, the provisions of the current Title 5 shall apply.

2. Effective Date

The Townsend Board of Health regulations for sub-surface sewage disposal dated June 7, 2004 are hereby repealed. The regulations herein shall be effect January 24, 2011.

3. Severability

If any part of these regulations shall be judged invalid for any reason, that decision shall not affect any other portion of these regulations, which shall remain in full force and effect.

4. Definitions

All terms used in these regulations conform to the definitions set forth in 310 CMR 15.01 with the following modifications:

Agent: The Nashoba Associated Boards of Health (hereinafter call “Nashoba”) serving as the agent for the Board of health in matters including those pertaining to the implementation and enforcement of the provisions of 310 CMR 15.

Aquifer: Water bearing geologic formation that contains water in sufficient quantities to supply a well.

Aquifer Recharge Area: Area around the aquifer that supplies a recharge of water to the aquifer.

As-Built Plan: A drawing as described in Section 17 of these regulations, prepared, signed and stamped by a registered sanitarian or a registered professional engineer showing the system and its related structures as actually constructed.

Board: The Board of Health of the Town of Townsend.

Building Sewer: Pipe that begins at the foundation wall, carrying effluent to the subsurface sewage disposal system.

Date of Filing Completed Application: The date on which the Board and Nashoba receive a completed application with two (2) copies of the plan. Or if the Board and Nashoba receive a completed application and plan on separate dates, the latter of those dates will be used.

Deep Test Hole: An open pit dug to permit the examination of soil characteristics and obtain data relative to the estimated seasonal high water table.

Field Tests: Soil percolation tests and deep test holes in which soil character and ground water elevation are observed and recorded, and which may serve as a basis for the design of a system.

Leaching Catch Basin: Self-contained drainage leaching system with no outlet.

Maximum Ground Water Elevation: The highest level of ground water observed in the deep test hole during spring testing season or the highest elevation indicated by observation of soil characteristics, whichever is higher.

Open Surface Drain: Man-made or naturally occurring conduit for conveying water on the surface of the ground.

Pervious Material: Soil exhibiting a percolation rate of 60 minutes or less per inch which was deposited on a site by natural causes and not by human action. These soils must be free of impervious materials such as clay, silt subsoil or loam.

Primary Leaching Area: Area that includes the proposed or existing leaches facility.

Private Way: Not an accepted town way, not maintained by the Town. A roadway that is neither a public way nor a common driveway. Not a common way.

Road Side Line: The property line that lies along a public road or private way.

Sewage: Any water-carried putrescible waste resulting from the discharge from dwellings or other facilities, including but not limited to, water closets, laundry tubs, washing machines, sinks, showers or dishwashers. Items not normally associated with residential use and any substance or combination of substances which because of quantity, concentration, physical or chemical characteristics poses, in the judgment of the Board or its Agent, present potential hazard to human health, safety, welfare or to the environment, shall be included.

Subsurface Drain:

- a.) Underground drain including: interceptor and curtain drain, used for lowering or diverting water table. Shall not include foundation drains.
- b.) All other underground drains used for road drainage and surface run off.

Subsurface Sewage Disposal System: Also referred to as “system” and “Septic System” shall include all underground components for the subsurface disposal of sanitary sewage.

Wetlands: Any water course, including streams, brooks, ponds, swamps, or any other wetlands as defined by MGL C131, S40, or as defined in the General Wetlands By-law in the Town of Townsend.

5. Variances

5.1 The applicant shall send a written request for variance(s) to the Board of Health specifying section(s) of the rules and regulations from which the applicant is seeking a variance(s) and the reason why said variance(s) are requested.

5.2 The Board will conduct a hearing at a regularly scheduled meeting and make its decision.

5.3 If approved, the variance(s) to the local regulations will take effect immediately.

5.4 If denied, the Board of Health will state its reason(s) for denial.

5.5 Where variances are approved, the Board may require pumping and/or inspection at lesser intervals than those listed under Section 19. The board may also modify other requirements in these regulations to offset any potential negative effect of the granting of the variance.

6. Appeals

6.1 Any person affected by a decision of the Board of Health shall be entitled to a hearing before the Board of Health. Such person shall file with the Board of Health, within 14 days of such decision, a written petition requesting such a hearing.

6.2 An appeal hearing will be granted only under the following conditions:

6.2.1 That there is new data to present.

6.2.2 That there are additional professional consultant's opinions submitted; or that circumstances have changed since the Board of Health's decision.

7. Revocation

The Board of Health reserves the right to revoke any approval, permit or Certificate of Compliance which is found to be based on incorrect, incomplete or misleading information.

8. Enforcement

8.1 Enforcement authority: The Board may enforce the provisions of these Regulations and 310 CMR 15 under applicable provisions of MGL C21 and any other applicable law.

8.2 Fines: Any person who shall violate any portion of these regulations shall be fined not more than \$500.00. Each day's failure to comply shall constitute a separate violation.

9. Professional Licenses

9.1 Licenses required: Septic system installers and septic haulers doing business in the Town of Townsend shall be required to have license numbers issued by the Board of Health. Such licenses shall be issued to individuals only.

9.2 License suspension or revocation: After a license is issued, the Board of Health, at its sole discretion, upon receipt of complaints regarding competence or business practices and after a hearing during a public meeting, may suspend temporarily or permanently revoke such professional license in the Town of Townsend. The Board may generate its own complaints, based on information brought to its attention or through review of plans or documents presented to the Board. The professional licensee whose license is in question, shall be given at least five (5) business days notice of any hearing which might result in a loss of professional license. Such notice shall be by certified mail, delivered to the licensee's usual place of business.

9.3 Installers License: A Townsend installer's license number will be issued to any installer qualified under Nashoba regulations, provided there are no outstanding complaints against the installer in the Nashoba or Townsend Board of Health records.

B. DESIGN AND SITING OF SYSTEMS

10. Permits and Applications

10.1 Required Permits: No construction under a building permit shall proceed until the appropriate Board of Health permits have been issued. All installers shall have copies of the signed and approved plan in their possession on the site during the installation of the system and shall make them available for the Board or its Agent at the time of inspection.

10.2 Application for Subsurface Sewage Disposal Permit

10.2.1 An application and two (2) sets of complete engineered plans conforming to the State Environmental code, Title 5 and the Townsend Board of Health regulations shall be submitted for all sewage disposal systems with a design flow of 15,000 gpd or less, including alternative systems.

10.2.2 No sewage disposal system shall be constructed/installed without first obtaining a sewage disposal works construction permit issued by the Townsend Board of Health.

10.2.3 In addition to the disposal works permit issued by the Townsend Board of Health the applicant shall obtain all necessary permits from the Department of Environmental Protection as needed for sewage disposal systems in excess of 10,000 gpd.

10.2.4 All permits are required to have an assigned house number prior to release.

10.3 Application for Lot Inspection: An application for lot inspection shall be made by Nashoba. Our agent must witness all field testing. Inspections required during construction of a system shall be made by Nashoba. All application fees shall be paid to Nashoba at the time of submittal.

10.4 Alterations: No alteration to septic tanks, seepage pits, leaching trenches, or other components of subsurface sewage disposal systems shall be made until a permit has first been obtained from the Board of Health.

10.5 Existing Structures/Conversions/Additions

10.5.1 No construction shall commence on a permit for alteration until the Board of Health has approved the adequacy of the subsurface sewage disposal system.

10.5.2 No person shall add to or alter a structure in order to increase bedroom space as defined in 310 CMR 15.002 in any building without prior approval of the Board of Health.

10.5.3 No existing homes shall be subdivided into multiple apartments without prior approval of the Board of Health.

10.6 Permit Conditions: Every permit issued shall be subject to the condition that all facilities shall be constructed in the location approved by the Board of Health, and to such further conditions as the State shall prescribe.

10.7 Permit Fee: The Board of Health shall establish fees for the issuances of permits.

10.8 Approval of Plan: No permit shall be issued until an approved plan has been signed by not less than two (2) members of the board of Health at a properly posted scheduled meeting.

10.9 Permit Expiration: All subsurface Sewage Disposal Permits shall expire at the end of three (3) years from the date of issuance. Permits may be extended for a period of not more than twelve (12) months upon written request to the Board and its Agent prior to the expiration date. No additional fee shall be charged for an extension of the permit provided there is no change in the plans for the water supply or subsurface sewage disposal system proposed. After a permit has expired, submission of a new application and fee may be required.

11.0 Field Tests: Agent inspection and witnessing:

11.1 Before issuing any of the permits required, the Agent shall inspect the property as shown on the submitted plan.

11.2 Nashoba and/or a Board of Health member shall witness all testing.

11.3 No field test data shall be used as a design basis unless Nashoba has witnessed the field tests.

11.4 The Board of Health or its Agent may require such further plans and tests, as it considers necessary.

11.5 Inspection Limitations: Inspections shall not be made when snow covers the ground.

11.6 Recording and marking of field tests

11.6.1 The results of all field tests performed in the vicinity of a proposed or existing system, including the reserve area, shall be provided to Nashoba and the Board on the plan or on sheets referenced on and attached to the plan and certified by the engineer.

11.6.2 The location of test holes in the field shall be clearly marked with their associated numbers immediately during testing.

11.7 All deep test holes shall be backfilled to existing grade prior to darkness.

11.8 Maximum Groundwater Elevation

11.8.1 Observation holes for the determination of maximum groundwater elevation may be required by the Board of Health or its agent to be performed during April and May, at their discretion, on all sites.

11.8.2 The minimum vertical separation distance of the bottom of the stone underlying the soil absorption system above the high ground-water elevation shall be:

- a.) Four (4) feet outside the aquifer overlay district;
- b.) Five (5) feet inside the aquifer overlay district

11.9 Percolation Tests: Minimum lateral distance between a failing percolation test (in the excess of 60 minutes per inch) and subsurface sewage disposal system shall be a 25 foot radius around the perimeter of the subsurface sewage disposal system.

11.10 Test Changes: Changes requiring repercolation, new tests or other substantial changes from the original approved plan may require a new application fee as determined by Nashoba.

12.0 System Design Criteria

Prohibited or limited facilities:

12.1 Garbage Grinders: The use of garbage grinders is prohibited.

12.2 Privies: No permanent privies shall be allowed without specific approval of the Board of Health.

12.3 Holding or Tight Tanks: Holding or Tight Tanks shall not be used for sewage disposal in new buildings.

12.4 Chemical Toilets: Permanently installed humus or self-contained toilets must receive prior approval from the Board in compliance with 310 CMR 15.289(3). To receive such approval, the dwelling or facility must have a system in full compliance with Title 5, or an approved plan showing a compliant system could be installed on the site.

12.5. Location: The sewage disposal system must be located on the same lot as the facility it is intended to serve; for the purpose of this regulation, a lot shall not be interconnected by an easement or right-of-way.

12.6 Trench Design

12.6.1 Minimum trench construction shall consist of two (2) foot wide trenches with six (6) inches of stone below the invert and six (6) feet between sidewalls.

12.6.2 Only schedule 40 or better pipe shall be used in construction of entire septic system.

12.7 Square Footage Requirements for Leaching Area: The minimum dimensions shall conform to Title 5. The Board reserves the right to require a larger system where specific site or system conditions warrant.

12.8 Future Expansion/Reserve: The expansion/reserve area shall meet all requirements of these regulations and Title 5 of the State Environmental Code.

12.9 Tanks

12.9.1 All new construction shall have two (2) tanks in series, conforming to 310 CMR 15.225, except that the first tank shall be a minimum of 1500 gallons and the second a minimum of 1000 gallons.

12.9.2 A pump chamber may be substituted for the second 1,000 gallon tank provided the first tank is a dual chamber.

12.9.3 In a replacement, two tanks as in 12.5.1. will be required unless they cannot fit into the space available. In that case, a two (2) compartment tank, conforming to 310 CMR 15.224, may be used.

12.9.4 All systems shall be equipped with an effluent filter on the outlet pipe in the second tank in the series or the second compartment of a two-compartment tank.

13.0 Distance Requirements

The following distances must be maintained between listed components. All distances are in feet. Any distances not listed are specified under Title 5 of the State Environmental Code. All distances, whether or not this table may be increased where, in the opinion of the Board, an increase is required by virtue of conditions peculiar to the site or where other Town Regulations or Bylaws require.

Element	Septic Tank	Leaching Facility
Wetland	-	100
Subsurface drain	50	50
Leaching Catch Basin and dry wells	25	25
Flood Plain	100	100
Open Surface Drain	50*	50*

*Open surface drains that discharge to a watercourse, the minimum offset distance shall be 100 feet.

14.0 Plans

14.1 The following information in addition to that required by 310 CMR 15 shall be provided on the plans and as-built plans.

14.1.1 Identification of lot by street number or assessors map, block and parcel number.

14.1.2 Locus, lot lines, well and public water lines, street(s), driveway, dimensions of lot and locations and dimensions of proposed and existing buildings.

14.1.3 Municipal water supply at a distance of 500 feet.

14.1.4 Date of plan and of each revision thereto.

14.1.5 Date(s) of ground water evaluation observations and percolation tests.

14.1.6 Original stamp, signature and date by the professional engineer or sanitarian of record.

14.1.7 Existing topography and proposed grading changes shown by contours at two (2) foot intervals or less.

14.1.8 Elevation of abutters' property line to subject property.

14.1.9 Reserved

14.1.10 Materials to be used for building sewer and distribution piping, and types of joints.

14.1.11 Location and elevations of all system components, culvert elevations of pipes at both ends and at each change in slope.

14.2 Wetlands and Buffer Zones

14.2.1 Location of all wetlands whether on or off the property, if within 125 of any components of the proposed system.

14.2.2 100 foot buffer zone (or 200 foot riverfront area) clearly designated.

14.2.3 It is the responsibility of the applicant to be in compliance with Conservation Commission requirements.

15.0 Consultants

15.1 For any application under these Regulations, the Board may employ an outside consultant at the expense of the applicant. Fields for which the Board may require a consultant include but are not limited to: any relevant engineering field, soil scientists, hydrologists, environmental scientists, registered sanitarians, biochemists.

15.2 The Board will normally require the fees to cover the costs of outside consultants to be deposited in advance with the Town, in accordance with the provisions of MGL C 44, Section 53G. Such fees will be deposited in a separate account. Any amounts remaining after the completion of the associated project will be refunded to the applicant or successor, in accordance with these Regulations and said State law. When the expense of such consultants exceeds the currently available funds in the 53G account, the applicant is required to provide such additional and appropriate funds within 14 days of notification by the Board of the required amount.

15.3 To the extent that services are provided by Town Counsel under a flat-rate retainer, such services will not be charged directly to the applicant. However, should circumstances require employment of outside counsel or otherwise be billed to the town for a specific service related to an application, then such fees will be paid out of the 53G account by the applicant. This section does not preclude the charging of supplemental fees for specific legal services performed by Town Counsel, with such fees paid to the town to offset the cost of the Town's retainer with Town Counsel.

C. CONSTRUCTION AND COMPLETION OF SYSTEMS

16. Construction Requirements

A Disposal System Installer's Permit conforming to Section 15.019 of Title 5 and a Townsend Installer's License as required in Section 9 shall be required prior to the start of any construction in which sewage will be generated.

16.1 Construction of disposal areas in clean granular fill shall be permissible under the following conditions:

16.1.1 Where the impervious material can be excavated to pervious material below and replaced with clean gravel fill, and the underlying naturally occurring pervious strata is at least four (4) feet thick outside the aquifer and aquifer recharge area and five (5) feet thick inside the aquifer and aquifer recharge areas below the bottom of the proposed leaching area.

16.1.2 In no case shall excavations be allowed into impervious material without penetrating into pervious material as in (16.1.1) above. Penetration must be made beyond any soil that is organic, such as peat, loam or subsoil.

16.1.3 Clean granular fill shall be free of all silt and fines as defined in Title 5 of the State Environmental Code and shall have a percolation rate of not more than two (2) minutes per inch in its natural state and after placement.

16.2 Inlet and Outlet Covers: Both inlet and outlet covers shall be equipped with risers, so that the cover is at the grade level.

16.3 Temporary Facilities

16.3.1 When no approved sanitary facilities exist on the site, builders and contractors shall provide approved sanitary facilities at their work site.

16.3.2 These facilities shall remain on the site from the first day of operation and until a Certificate of Occupancy has been issued.

16.3.3 Each day of non-compliance shall constitute a separate fine or not more than \$50 per day.

17.0 As-Built Plans

17.1 An as-built plan shall be required within 30 days of completion of installation of a system, showing the exact location of all components of the subsurface sewage disposal system, well or water supply.

17.2 The as-built plan shall be submitted on an overlay plot plan showing proposed and as-built plan.

17.3 The plan shall bear the original signature, license number and stamp of a registered civil or sanitary engineer or registered sanitarian, attesting that the well and the subsurface sewage disposal system were actually constructed as shown on the Board of Health approved plan.

17.4 The Disposal System Installer's Permit number and the Townsend Installer's License number shall appear on all as-built plans submitted to the Board of Health.

18.0 Certificate of Compliance

18.1 New Construction: No new dwelling or place of business shall be occupied until the Board of Health has issued a Certificate of Compliance.

18.2 Conversions, Alterations or Additions: No occupancy of any such construction shall take place until the Board of Health has issued a Certificate of Compliance on any system modifications required, pursuant to Section 10.5.

D. MAINTENANCE, FAILURES AND TITLE 5 INSPECTIONS

19.0 Maintenance

19.1 Pumping Requirements: All operating residential septic tanks, cesspools or other septage storage structures shall have their contents pumped out every thirty-six (36) months, at a minimum, by a licensed septage hauler.

19.2 The Board may vary the pumping schedule on any given property provided that a report is submitted for that property by a Board of Health licensed inspector or Nashoba indicating that the prescribed pumping schedule for that

property is a manifest injustice and equal environmental protection can be provided by an alternative pumping schedule. This variance will expire in five (5) years or at such time as the property is sold or there is a substantial change of usage or volume.

20.0 Failures

All systems or components of systems, deemed to be in failure, whether through Title 5 inspection or observation and reporting to the Board by Nashoba shall be replaced as soon as feasible.

20.1 The Board may impose tight tank, pumping or other requirements as interim protective measures.

21.0 Title 5 Inspections:

The Board of Health will review all Title 5 inspections.

21.1 No inspection will be deemed complete or correct until approved by the Board.

21.2 All Title 5 Inspections must have a copy of the paid pumping receipts attached to it to be considered complete.

21.3 Failure to correct technical or actual deficiencies in an inspection report within 30 days of the Board sending notice of the deficiencies, may require re-inspection. The Board may require that such re-inspection be in the presence of the Board or its Agent.

22.0 Inspection Criteria

22.1 Pumping of the tank, d-box or leach pit(s) are required for all Title 5 inspections.

22.2 All effluent must be removed and not placed back in the tank after inspection.

22.3 Any drain hole in the tank must be inspected and sealed.

22.4 All effluent T-filters must be removed, cleaned, inspected and reinstalled.

Effective Date: A public hearing was conducted 9/27/2010, continued to 10/12/2010 and 1/10/2011. These regulations were approved and adopted by the Townsend Board of Health, and will become effective as of January 24, 2011.

James E. Le'Cuyer, Chairman

Michelle Dold, Vice-Chairman

Christopher Genoter, Clerk

A True Copy, Attest

CC: Nashoba Board of Health

Town Clerk

DEP, 1 Winter Street, Boston, MA 02108 Attn: Mary Chubb

DEP, 627 Main Street, Worcester, MA 01608 Attn: Dave Boyer