

Town of Hamilton



BOARD OF HEALTH  
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TITLE 5 SUPPLEMENTAL REGULATIONS:  
Regulations for the Subsurface Disposal of Sewage  
April 2017

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1. Purpose and Applicability

- 1.1. The purpose of these regulations is to provide for the protection of public health, safety, welfare and the environment by supplementing Title 5 of the State Environmental Code: Minimum Requirements for the Subsurface Disposal of Sanitary Sewage (310 CMR 15.000).
- 1.2. These regulations are intended to clarify, replace, and supplement all previous Board of Health regulations pertaining to septic systems.
- 1.3. The Hamilton Board of Health adopted these supplements to Title 5 because the state code contains only the “minimum” requirements and the Board has recognized that the following standards will improve either public health or safety, and/or increase the lifespan of septic systems and make enforcement of Title 5 and these regulations easier.

2. Authority

- 2.1. These regulations are adopted under the authority of M.G.L. c. 111, §§ 31 and 127 as well as 310 CMR 11.02, Title 1 and 310 CMR 15.003, Title 5 of the State Environmental Code.

### 3. Definitions

3.1. Unless otherwise defined in these regulations, all definitions shall be those used in 310 CMR 15.000, Title 5 of the State Environmental Code.

Abutter – Direct abutters (i.e. all lots in any way touching the applicant’s lot) and abutters across any street(s) bordering the applicant’s lot (arrived at by extending the applicant’s lot lines across the street(s) and including any lots which are all or in part within that zone).

Board of Health (or Board) – A duly called meeting of the Hamilton Board of Health.

DEP – Massachusetts Department of Environmental Protection.

Perc Test – Percolation Test, as defined in Title 5.

Soil Evaluation – Deep Observation Hole, as defined in Title 5.

Title 5 or T5 – Title 5 of the State Environmental Code: Minimum Requirements for the Subsurface Disposal of Sanitary Sewage, 310 CMR 15.000.

SAS – Soil Absorption System (aka “leach area”)

Light Duty Cover – Designed and constructed for non-vehicular traffic. (24” diameter covers typically weighs less than 50 pounds.)

Medium Duty Cover – Designed and constructed to withstand H-10 load criteria. (24” diameter covers typically weigh approximately 60 pounds; 18” covers typically weigh approximately 30 pounds)

Heavy Duty Cover – Designed and constructed to withstand H-20 load criteria.

### 4. Access Covers

4.1. In order to decrease the risk of a person or animal falling into a septic tank (or similarly dangerous septic component, e.g. pump chamber, holding tank, cesspool, treatment tank, leach pit, dry well) the following regulation is enacted. Light-duty access covers that require bolts or screws (or similar) to secure the cover from unauthorized access, and where the bolts/screws are detachable, are generally not allowed, unless they meet the exceptions described below. The rationale for this regulation is that bolts/screws can be misplaced leaving the cover unsecured.

4.2. Access covers are in compliance with this regulation when they are:

- a) Medium (or Heavy) Duty (typically made of concrete, stone, or cast iron).
- b) Light Duty, under the following conditions:

- i) Light Duty covers that are secured to the frame by means of bolts, screws or similar that cannot be detached from the cover. Cam-Lock or Roto-Lock are acceptable examples of non-detachable means of securing covers.
- ii) Light Duty covers that are secure *without* the use of bolts are allowed. For example, plastic covers in which the entire cover turns and screws into the tank or riser (e.g. certain poly tanks) are allowed.
- iii) Light Duty covers with *detachable* bolts are allowed only if:
  - a) the tank is filled with sand, stone, or other filter media that are capable of supporting a 250 lbs point load, or
  - b) the passage into the tank is blocked by equipment or other structures that would keep a small child from falling into the tank, and is capable of supporting a 250 lbs point load.

4.3. In order to prevent access covers from flipping over when stepped on, cast iron covers shall have the following:

- a) inside horizontal lip shall be smaller than the cover by a minimum of 1.5” diameter (3/4” radius)
- b) vertical lip height shall be a minimum of 50% greater than the thickness of the outside edge of the cover.

*(Note: Sections 4.4 and 4.5 below are almost identical; the difference between them is the type of form used by the Pumper or Inspector, respectively.)*

#### 4.4. Pump Out

- a) At the time of a septic pump-out, the Pumper shall note the status of all covers observed on a “Septic System Pumping Record” form provided by the Board of Health, and submit this form to the Board of Health within 14 days of pumping.
- b) Any safety issues must be noted by the Pumper on the “Septic System Pumping Record” and a copy of which shall be given by the Pumper to the owner.
- c) Covers not in conformance with 4.2 must have:
  - i) a safety grate in place. If there is no safety grate, the Pumper must supply and put one in place (when one can be put in place safely and without making alterations to the riser).
  - ii) all bolts securely fastened. If additional bolts are needed, the Pumper shall supply and attach them.

#### 4.5. Title 5 Inspection

- a) At the time of a Title 5 septic system inspection, the inspector shall note the status of all covers on a form provided by the Board of Health, titled “Addendum to Title 5 Report”, and submit this form to the owner and Board of Health attached to the Title 5 Inspection report.
- b) Any safety issues shall be noted by the Inspector on the “Addendum to Title 5 Report” and a copy of which shall be given by the Inspector to the owner.
- c) Covers not in conformance with 4.2 must have:

- i) a safety grate put in place. If there is no safety grate, the Inspector must supply and put one in place (when one can be put in place safely and without making alterations to the riser).
- ii) all bolts securely fastened. If additional bolts are needed, the Inspector shall supply and attach them.

## 5. Sand Fill and Backfill Material

- 5.1 Sand used as fill (in accordance with 310 CMR 15.255: Construction in fill) shall be ASTM C-33 sand to improve oxygenation and decrease premature failure.
- 5.2 Clay soils or other class III soils shall not be used as backfill material over the SAS unless the SAS is designed with a loading rate for a class III soil, and in that case the backfill material shall not be more restrictive (slower percolation rate) than the native soils that the SAS is sized for.

## 6. Vents for Pumped Systems

- 6.1. In an effort to continue to provide oxygenation to leach areas, adequate venting should be a requirement. Title 5, section 15.241 controls the use of auxiliary venting of leach areas. However, this section is deficient in providing venting when pumps are used (either in a pressure distribution system or a pump to d-box for gravity distribution system). Since the pump is usually located in a wet well, there is no transfer of air from the SAS back through the house stack vent. There is a short circuit in venting due to the pumps location in a wet well or below the water level. Therefore, venting of the SAS must be self-contained.
- 6.2. New or upgraded septic systems consisting of pumps shall be required to install two vents. One vent at the distribution box and one manifold vent at the distal end of the SAS, to allow for adequate cross circulation by convection within the septic laterals.
- 6.3. Manifold vent can be used with
  - a.) half-pipes over the pressure distributed laterals
  - b.) check valves at the distal end of each pressure distributed lateral
  - c.) other options as proposed by septic designer and approved by Health Agent

## 7. Abandonment of tanks, pits, cesspools, chambers

- 7.1. Whenever the use of a septic tank, leach pit, leach chamber, pump chamber, dry well, cesspool, etc. has been discontinued,
  - a.) the component must be pumped clean,
  - b.) the bottom of septic tanks and pump chambers shall be broken for ground water to flow in and out, and
  - c.) the component must be filled with flow-able, clean fill.

## 8. Operation and Maintenance (O&M) Providers

- 8.1 Pressure Distribution leach areas must have annual O&M inspections by a Licensed O&M Provider who is also a licensed septic installer, or Class II Wastewater Treatment Plant Operator.

8.2 Systems incorporating treatment devices (innovative/alternative systems) must have annual O&M inspections by a Licensed O&M Provider who is a licensed Class II Wastewater Treatment Operator.

8.3 O&M Providers servicing septic systems in Hamilton must apply annually for a license. Applications are due December 1 for the following calendar year. Application shall include a list of septic systems in Hamilton that are under a maintenance contract.

8.4 Reporting of O& M Inspections. Within 30 days of an O&M inspection, Provider must submit report to BOH and owner on a form approved by the Health Agent.

## 9. Title 5 Inspectors

9.1 Title 5 system inspectors certified by DEP shall obtain a license by the Board of Health to work in Hamilton. Inspections performed by inspectors not licensed by the Board of Health will not be accepted.

9.2 Application for licensing shall include a copy of DEP's Title 5 Inspector certification and proof of possession of at least \$100,000 of general liability insurance. Applications are due December 1 for the following calendar year.

## 10. License or Permit Suspension, Revocation, and Fines

10.1 If a septic professional fails to comply with an order of the board of health, issued under the authority of this regulation, Title 5, or other related law or regulation, the Board of Health may hold a public hearing to discuss the order. Fines may be issued by a vote of the Board. Suspension or revocation of a license or permit may occur by a vote of the Board.

10.2 Fines for failure to comply with an order shall be not less than \$10 nor more than \$500. Each day's failure to comply with an order shall constitute a separate violation.

## 11. Variance - Standard of Review

11.1. Variances shall be granted only when, in the opinion of the Board of Health:

- (a) The person requesting a variance has established that enforcement of the provision of these regulations from which a variance is sought would be manifestly unjust, considering all the relevant facts and circumstances of the individual case; and
- (b) The person requesting a variance has established that a level of public health and environmental protection that is at least equivalent to that provided under these regulations can be achieved without strict application of the provision of the regulation from which a variance is sought.

11.2. With regard to variances for new construction, enforcement of the provision from which a variance is sought must be shown to deprive the applicant of substantially all beneficial use of the subject property in order to be manifestly unjust.

## 12. Process for Seeking a Variance

12.1. The Board of Health shall review requests for variances as follows.

- (a) Every request for a variance shall be made in writing (at the time of original plan submittal, when applicable) and shall make reference to the specific provision of these regulations for which a variance is sought and must demonstrate how the applicant meets the criteria of 310 CMR 15.410.
- (b) Abutter notification is not necessary to obtain a variance from these regulations.

12.2. When Title 5 requires abutter notification, (e.g. variance requests from Title 5 and local upgrade approval requests pertaining to setbacks to drinking water wells or property lines) the following standards shall be added to Title 5: 310 CMR 15.411, and the definition of abutter shall be as defined in these regulations.

- (a) The notice to abutters shall indicate specifically which parcel(s) contain the well or property line affected by the request.
- (b) The notice to abutters shall state the Board of Health's regular business hours.
- (c) Cancellation of a public meeting shall require re-notification of abutters.

### 13. Penalties and Appeals

Refer to MGL c.111 s. 31, and 310 CMR 11.000 Title 1, 310 CMR 11.10, and 310 CMR 15.000: Title 5 of the State Environmental Code.

### 14. Severability

If any provision of these regulations is declared invalid or not enforceable, the other provisions shall not be affected thereby, but shall continue in full force and effect.

Notices of Public Hearing: April 11, 2017 & April 18, 2017

Public Hearing: April 26, 2017

Adopted: April 26, 2017

Summary Published: May 25, 2017

Copy sent to DEP: May 26, 2017

These regulations are adopted after majority vote at a duly publicized public hearing where the local conditions and reasons for these regulations were stated.

Chairman: \_\_\_\_\_  
David Smith

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Giselle Perez