
SECTION VI - LOCAL SEPTIC REGULATIONS TO SUPPLEMENT TITLE 5, STATE ENVIRONMENTAL CODE

Amended February 2, 2010; June 5, 2012; October 2, 2018, December 4, 2018

Article 1 - General Provisions

- 1) **Authority.** In accordance with Massachusetts General Laws, Chapter 111, Sections 31 and 127A, the Truro Board of Health hereby adopts the following regulations to supplement the provisions of the State Environmental Code, Title 5: 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 (hereinafter, "Title 5"), and shall take effect upon passage.
- 2) **Purpose.** The purpose of this article is to provide a greater degree of protection to environmental and public health, prevent the spread of disease, and provide greater clarification of the definitions used by the Board in applying the provisions of Title 5 and the Truro Board of Health Regulations pertaining to on-site sewage treatment and disposal systems. Of specific concern is the need to protect the groundwater, which is the sole source of drinking water for Truro, Wellfleet and Provincetown.
- 3) **Enforcement.** Enforcement of the provisions contained in this Section VI will be carried out in accordance with the provisions of Title 5 of the State Environmental Code set forth at 310 C.M.R. 15.000, et seq. and all enforcement methods outlined in Section I of these Board of Health Regulations.
- 4) **Definitions.** With the exceptions listed below, the definitions provided in the State Building and Sanitary Codes, Title 5 and the Wetland Protection regulations shall apply. All time frames referenced herein shall be counted as calendar days. The following terms used by the Board in applying the provisions of Title 5 and the Truro Board of Health Regulations pertaining to on-site sewage treatment and disposal systems, shall be defined as follows:

<u>Accessory Dwelling Unit (ADU):</u> A complete, separate housekeeping unit containing both a kitchen and sanitary facilities, as defined by the Truro Zoning Bylaws section 40.2.

<u>Alter or Alteration:</u> To make different by changing, adding and/or subtracting components, piping or location.

Bedroom

a) Any room that meets the definition of a bedroom under Title 5 or any room or enclosed addition with at least 70 square feet of floor area and a building code conforming egress window, that provides minimum isolation necessary for use as a sleeping area. Rooms such as a finished basement with building code conforming egress may be considered a bedroom if it meets the definition. The definition does not apply to a bathroom, kitchen, hall, unfinished cellar, unfinished basement, unfinished attic, garage, unfinished area above a garage, unheated porch and open deck.

- b) Notwithstanding the foregoing, any dwelling with six (6) rooms shall be construed to have at least three (3) bedrooms. Any dwelling with seven (7) rooms shall be construed to have at least four (4) bedrooms. Any dwelling with eight (8) or nine (9) rooms shall be construed to have at least five (5) bedrooms. Any dwelling with ten (10) or eleven (11) rooms shall be construed to have at least six (6) bedrooms. Each additional room beyond eleven (11) shall be construed as an additional bedroom and the number of bedrooms for the purpose of sizing a subsurface sewage disposal system (proposed and existing) shall be adjusted accordingly.
- c) All lofts that do not meet the criteria above, finished basements that do not have a building code conforming egress, and rooms and with cased openings at least 60 inches wide shall be considered rooms for the purposes of this definition.
- d) Dwellings built before the 1978 Building Code will have their bedrooms determined on a case- by- case basis.

<u>Buildable Upland</u>: The area of contiguous upland on a lot exclusive of Wetland as defined herein. Riverfront Area may be included in the Buildable Upland, but only if an of I/A treatment for nitrogen reduction is proposed.

Change of Use: With respect to properties with existing systems, a change in use will result when the use of the structure or the land is changed from one use group to another use groups as described in the Table of Uses in the Town's Zoning Bylaws, as may be amended from time-to-time; an alteration of the structure or the land within the same use group that changes the intensity of the use, i.e. a business use changing from retail to office space or a residential use changing from single-family or multi-family; or any change or alteration to the land or structure that results in an increase in actual or design flow to the system.

<u>Design Flow:</u> The quantity of sanitary sewage, expressed in gallons per day (gpd), for which a system shall be designed in accordance with 310 CMR 15.203.

<u>Failed System:</u> Any Septic System which fails to protect the public health, safety and environment as determined by the Truro Board of Health, including but not limited to:

- a) any system which must be pumped in excess of two (2) times in a twelve-month period;
- b) any system which includes a component that the Board of Health determines is structurally unsound;
- c) any system which discharges effluent directly or indirectly to the surface of the ground through ponding, surface breakout or damp soils above the disposal area or to a Wetland;
- d) any system which meets any of the failure criteria itemized on the Title 5 Official Inspection form as described in 310 CMR 15.303 or 310 CMR 15.304;
- e) Any system with a leaching area with less than 4-feet (for 1978-code systems) or 5-feet (for 1995-code systems) of vertical separation to ground water; this distance shall be measured in the field (not "per plan") by the inspector.
- f) Any cesspool as defined in title 5, shall be deemed failed and shall be replaced with a title 5 compliant system no later than December 31, 2023.

g) To the extent such a waiver would be consistent with the provisions of Title 5, the Board of Health may waive a finding that any of the foregoing systems have failed if the Board determines, at its sole discretion, that the system will continue to protect the public health, safety and environment.

<u>Innovative/Alternative (I/A) Technology</u>: Technology that is certified for enhanced nutrient removal that is described in 310 C.M.R. 15.202 and 15.217, and which is approved by the Massachusetts Department of Environmental Protection pursuant to 310 C.M.R. 15.280 through 15.289.

Remedial Use: Use of I/A systems for the upgrade of a Failed or Nonconforming Septic System and there shall be no increase in the design flow served by the proposed I/A systems and no increase in habitable space or change use that, in the Board's judgement has the potential to increase sewage flow. The Board may consider a variance to this provision to allow the increase in flow from an "accessory dwelling unit" as defined herein and compliant with the Town of Truro conditions for the unit.

Nitrogen Credit is the use of I/A technology for development of a property beyond the standard of 110 gpd of wastewater flow per 10,000 sf of area. Nitrogen credit shall not be allowed for new construction, <u>unless an ADU is being created.</u>

<u>Nitrogen Loading limitations:</u> The 440 gpd per acre of land requirement for septic system design as described in title 5.

Non-conforming Septic System: Any system which, when installed did not comply with provisions of either the 1978 or 1995 iterations of Title 5, including cesspools and all similar systems in use prior to the adoption of the 1978 Code.

<u>Title 5</u>: Refers to Title 5 of the Massachusetts State Environmental Code, 310 CMR 15.000, et seq.

<u>Title 5 Septic System</u>: Includes any system installed in compliance with the 1978 or 1995 iterations of Title 5 but shall not mean cesspools or any similar system in use prior to the adoption of the 1978 Code.

TN: Means Total Nitrogen

<u>Watersheds of Special Concern:</u> Mapped watersheds designated by the Truro Board of Health and the Zone 1 and Zone II of public water supplies.

Wetlands: Any area that contains swamp, bog, dry bog, fresh or salt marsh, areas of exposed groundwater, embayment's, rivers, ponds, lakes, streams, inland banks, coastal banks, and coastal dunes, or any other area subject to the jurisdiction of the Conservation Commission as defined in G.L. c. 131, §40, 310 CMR 10.00, the Town of Truro Conservation Bylaw and/or

regulations of the Conservation Commission, but not including buffer zones abutting such resources.

Article 2 - Variances

- 1) In addition to the variance criteria set forth in Section I of the Board of Health Regulations, an applicant may apply, and the Board of Health may grant a variance from this Section VI provided the following minimum criteria for said variance are also met:
 - a) A satisfactory inspection by a licensed system inspector of all system components if the variance sought pertains to an existing system.
 - b) The proposed or existing leaching facility has a minimum of five (5) feet of separation between the bottom of the leaching facility and the highest groundwater level as determined in 310 CMR 15.103(3); and,
 - c) The proposed or existing leaching facility meets the minimum Title 5 requirements regarding setback distances for Soil Absorption Systems (SAS) as set forth in 310 C.M.R. 15.211; and,
 - d) The existing system is not allowing surface breakout of the wastewater; and,
 - e) The existing system is not requiring pump-outs in excess of two (2) times in a twelvemonth period; and,
 - f) The Board of Health determines that the grant of the variance will not pose a risk to the public health, safety or the environment and, further, meets all the variance requirements contained in Section I of the Truro Board of Health Regulations.
- 2) All applications for variance must be accompanied by plans prepared by a qualified Professional Engineer or Registered Sanitarian and include all information required under 310 C.M.R. 15.220.
- 3) Expiration of variances shall occur after 24 months if the approved septic design has not been installed, or, at such time as determined by the Board of Health.

Article 4 - Upgrading Septic Systems

1) Required Upgrades: In order to improve the quality of water for the Town of Truro by elimination of septic systems which do not comply with Title 5 and the more protective regulations adopted by the Truro Board of Health, persons who own property with non-conforming septic systems shall bring those systems into compliance by upgrading them to meet the standards of this Section VI and/or Title 5 in the following situations:

- a) Prior to any sale or transfer of title to the facility served by the system in all circumstances described in 310 CMR 15.301. Notwithstanding any exceptions set forth in 310 CMR 15.301(2), upgrade of Nonconforming Systems shall occur prior to transfers by inheritance, between parents and their children, between full siblings, and where the grantor transfers the real property to be held in a revocable or irrevocable trust, where at least one of the designated beneficiaries is of the first degree of relationship to the grantor; and including creation of an LLC;
- b) **Prior to any change of use or increase in design** flow of the facility served by a system; Prior to the subdivision or partitioning of a parcel on which a nonconforming septic system is located;
- c) If the system demonstrates any of the characteristics of a **failed system** as defined in this Section VI;
- d) If the septic system was not constructed according to the approved plan; or if the soil absorption system is not designed to meet the design flow of the facility it serves; or,
- e) If a facility that is served by a nonconforming system is replaced, relocated or demolished, except when the building was destroyed by fire. A nonconforming system serving a facility destroyed by fire does not need to be upgraded to serve a new facility if the new facility is built in the same footprint as the original and provided that there is no change in use or increase in design flow of the facility and the system is not a failed system; or
- f) The **liquid depth** in a leach pit is less than six inches from the inlet pipe invert or the remaining available volume within a leach pit above the liquid depth is less than ½ of one day's design flow.
- g) All non-conforming septic systems in the Beach Point and Pamet River Protection District or located within two hundred (200') feet of any Wetland or within the floodplain as mapped by FEMA shall be considered failing to protect public health, safety, welfare and the environment and shall be upgraded to meet the requirements of this Section VI and/or Title 5.

Cesspools in Truro are herein defined as failed systems and shall be upgraded to meet the requirements of Title 5 prior to December 31, 2023. All new systems replacing cesspools shall be installed and certified by that date.

2) Multiple Systems on One Lot.

In the event of the failure of one septic system on a lot that has more than one non-conforming septic system, the failing system shall be immediately upgraded and the remaining non-conforming septic systems shall be inspected by a Department of Environmental Protection system Inspector pursuant to Section 15.340 of Title 5 (hereinafter, "DEP System Inspector"), except where the total cumulative flow is over 2000 gallons per day, then all systems shall be upgraded with pressure distribution in accordance with Title 5. If any of the remaining non-conforming septic systems shall fail inspection as defined in the Title 5 Official Inspection Form, or if the inspection shall reveal that the system is a "Failed System" as defined in Article (3) set forth above, the non-conforming septic system shall be immediately upgraded to a fully conforming Title 5 septic system.

<u>Article 5 – Required Septic System Inspections</u>

- 1) A current Inspection Report completed by a MA licensed Septic System Inspector shall be filed in the following circumstances:
 - a) At or within two years prior to the time of <u>sale or transfer of title to the facility</u> as defined in Article 4 of this Section VI and title 5, 310 CMR 15.301;
 - b) With an application for a building permit that proposes an increase in living space as determined by the Truro Health Agent; if an applicant or a direct abutter is aggrieved by the determination of "increase of living space" by the Health Agent, the applicant may appeal this determination to the Truro Board of Health;
 - c) With an application for a *special permit* that allows uses not otherwise permitted by the Truro Zoning Bylaw; and Application for a new license or transfer of an existing license, or renewal of the annual operating permit for the operation of a motel, cottage colony, cabin, campgrounds, lodging house or restaurant. (see also 2.h in this article)
 - d) Prior to renewal of permits for a facility served by a shared system. Inspections for all shared systems are required once every 3 years. Shared systems include condominiums, motels and camps and cabins.
 - e) Prior to any Change in Use as defined in these regulations.
 - f) At such time as a property owner/business owner is so ordered by the Board of Health.

2) Inspection Criteria:

All system inspections shall be documented in an official Title 5 inspection form <u>AND on a Town of Truro Septic Inspection Form</u>. An inspection shall not be considered complete unless all information required on both forms is provided.

In addition to the inspection criteria set forth in Title 5, the following criteria shall be observed in conducting system inspections.

- a) An open inspection of all components of the system is required. If a component cannot be found or uncovered after a reasonable search, the inspector must provide evidence for the system's success or failure. Replacement or installation of the component is required in this instance.
- b) The septic tank shall be pumped at the time of inspection if it has not been pumped within the past 3 years.
- c) Leach pits must have 6 inches of leaching capacity below the outlet invert, or present in order to pass the inspection. The 6 inches of leaching capacity is determined by clean sidewall absent of staining or evidence of high water. The Inspector must clearly indicate on the inspection form the height of standing liquid in any leaching component, the level of staining in any leaching component, and the description of both sanitary tees in any inspected tank. In the case of missing sanitary tees, no passing report shall be issued unless there is proof (copy of permit) of the correction of the deficiency.
- d) Any work for the correction of component failures, such as, but not limited to, eroded distribution-boxes, new piping, or new tees will require a valid disposal works construction permit, inspection and issuance a certificate of compliance.
- e) If the inspector finds that the access port covers of the septic tank inlet and outlet, distribution box and soil absorption system are not within 6 inches to grade, risers shall be provided as needed and the installation of risers shall be indicated in the septic system report.
- f) Failed systems shall include: cesspools; non-conforming systems as defined in section 1; systems without adequate separation to groundwater; systems with leaching areas/pits that are essentially at capacity, as defined herein; systems that were not designed to accommodate the use; any system deemed as failing to protect public health, safety and the environment.
- g) All Inspections shall be conducted by a MA licensed Title 5 inspector, using both the local and state inspection forms; the local form and required water test results shall be attached to the State form when filed in accordance with, and addition to, the requirements of Title 5 for septic inspection reporting.
- h) The septic inspector must verify that the use of the facility (ie; # of bedrooms) matches the design flow of the system (ie; a 4 bedroom dwelling should have at least 550 gpd design flow). The inspector shall provide a floor plan sketch with their reporting form. Design flow shall be based on the records on file at the office of the Board of Health and use of the facility, including the number of bedrooms, shall be based on a visual inspection at the time of inspection.

3) Difficulty in Locating Components:

- a) If a complete inspection cannot be performed, the inspector must provide adequate documentation of the specific conditions which prevented a complete inspection and should indicate on the inspection form how the inspector attempted to locate components; in this instance the report shall indicate that the system "Needs Further Evaluation from the Local Approving Authority."
- b) The Local Approving Authority shall evaluate all "Needs Further Evaluation" entries on the inspection form and determine whether further investigation is required to adequately evaluate the system.

Article 6 - Subdivision Plans

All new subdivision plans shall have the proposed well location and septic system on each lot. These locations shall meet all sideline and other setback and distance requirements. The Plan shall be on file with the Building Commissioner and Health Agent. Applications for septic and well permits shall adhere to the plan, unless sufficient data is presented to the Board of Health to justify the change.

Article 7 - Bedroom Count

- 15.002 of Chapter 310 of the Code of Massachusetts Regulations, there shall be no presumption that single-family dwellings have at least three bedrooms in the Town of Truro. In each instance, a specific determination relative to bedroom count must be made without reliance upon any presumptions. The Health Agent shall have the authority to make the initial bedroom count determination. If the Health Agent feels the determination in a specific instance should be made by the Board of Health, the Agent may, in their sole discretion, refer the matter to the Board of Health for a final determination. The Agent may also, in their sole discretion, refer the bedroom count determination to the Board of Health upon request of the applicant.
- 2) **Deed Restriction.** A deed restriction may be required by the Board of Health to ensure that use of the septic system as proposed will not negatively impact the public health, safety, welfare or the environment.
- 3) Building Permits. No building permit, foundation permit, plumbing permit, special permit or variance shall be issued until a Disposal Works Construction Permit has been issued for installation of a subsurface sewage disposal system designed to accommodate the bedroom count or the Board of Health has issued a written determination that the existing system is adequate for what is proposed.

- 4) Floor Plans and Inspections. For existing facilities, in order to determine compliance with any provision of the foregoing regulation, a floor plan must be filed with the Truro Board of Health at the time of submission of an inspection report for the Health Agent to make a determination as to bedroom count. If the Health Agent deems it necessary, they may refer the determination of the bedroom count to the Board of Health for a vote. If the Board of Health, by a majority vote of its members, deems that an inspection of an existing residence is necessary to confirm the bedroom count, the Health Agent, with the applicant's permission, shall inspect the premises and report their findings to the Board.
- 5) Assessors' records, old plans and the like will not be considered as sufficient evidence of the size of the facility for purposes of determining design flow. In the event of a discrepancy between the results of the visual inspection and existing records, an in-person inspection by the Health Agent will be required and the Health Agent's determination of the size of the facility will be final.
- 6) A floor plan sketch is required as part of the septic inspection process. The local inspection form includes area for the sketch by the inspector.

Article 8 - Regulation of Separate Site Systems

- 1) Septic systems shall be constructed on the same lot as the facility to be served.
- 2) Variances from this Article may be granted by the Truro Board of Health for structures in existence prior to March 31, 1995, provided all of the following conditions are met:
 - a) The system can be installed on a contiguous property owned by the same person and title to the lots is merged by virtue of a deed recorded at the Barnstable County Registry of Deeds;
 - b) The system is not being installed for the purpose of increasing the size or use of the existing structure; and,
 - c) The system will replace or repair a pre-existing, non-conforming septic system or components.
- 3) Any grant of variance pursuant to this Article must also be made in accordance with Article 2 of this Section VI and Section I of the Truro Board of Health Regulations.

Article 9- Innovative/Alternative Technology

<u>Preamble:</u> In considering the permitting and use of various alternative septic treatment technologies in the Town of Truro, the Board of Health of the Town of Truro recognizes that there may be specific local circumstances which warrant the Board to require more stringent conditions for the installation and monitoring of these alternative systems than may be required by the Massachusetts Department of Environmental Protection. As allowed under Massachusetts General Laws Chapter 111, Section 31 and as required by the revised 310 CMR Section 15.285 (2d), 15.286 (5) and 15.288 (4), the Board of Health of the Town of Truro hereby reserves the right to impose any additional conditions or monitoring requirements it views as necessary to ensure the safe performance of any alternative onsite septic system which the Board agrees to permit in the Town of Truro.

"as defined herein and compliant with the Town of Truro conditions for the unit."

Applicability the use of I/A technology is required in the following circumstances: for flows greater than 600 GPD; for nitrogen credit applications (these are only allowed by request in limited circumstances in Truro); for upgrade of certain non-conforming systems as determined by the Board of Health; for upgrades of previously approved systems that exceed current nitrogen loading standards of 110 gpd/10,000sf of lot area; in certain cases where a variance is required and circumstances support the use of I/A to mitigate the environmental impact of the proposed system, as determined by the Board of Health

2) Standards

In the circumstances described above, the I/A System shall be designed to achieve/produce no greater than 19 mg/l total nitrogen (TN) concentration in the effluent by using the secondary treatment achieved with an approved innovative/alternative (I/A) septic system. At least 1 lab test showing TN shall be submitted annually to the Health department.

- a) In the event of any circumstance requiring upgrade of a system as set forth in Article 4 of this Section VI, any existing facility with a design flow greater than 600 gpd shall be designed to achieve/produce no greater than 19 mg/l total nitrogen concentration in the effluent by using the secondary treatment achieved with an approved innovative/alternative (I/A) septic system that complies with the requirements of Article 9 of this Section VI. At least 1 lab test showing TN shall be submitted annually to the Health department.
- b) I/A Systems shall be tested and reported on a quarterly basis in accordance with general use O &M requirements, by means of obtaining an effluent sample from the distribution box or pump chamber to determine if the system meets the post-treatment standard of less than 19 mg/l total nitrogen. The results of such evaluations shall be submitted to the Board of Health within forty-eight hours of receipt thereof.

3) Non-Performance.

- a) Non-performance includes any I/A system that has been determined to be failing to protect public health and safety, and the environment, or an I/A system with equipment failure or an unresolved alarm event, or components that are not functioning as designed, or components that are not functioning in accordance with the manufacturers specifications, or a system that is in violation of the terms of its approval by the Truro Board of Health
- b) Non-performance requires written notification to the Truro Health Department within 48 hours receipt of lab test, along with a statement describing what corrective actions will be taken.
- c) Corrective actions must be taken immediately (within 48 hours of a lab report or field test) to address performance that does not meet the standards as defined herein, or specific to the approval by the Truro Board of Health.
- d) Lab tests showing exceedance of TN triggers a re-test immediately following corrective actions taken to address the exceedance, until the corrective measures are shown to have improved performance to meet the standards.
- e) Failure to comply with the process as described may result in a written warning from the Truro Health Department, followed by possible fines and a hearing with the Truro Board of Health that must be attended by the property owner and the licensed inspector.

4) **Applications and Hearings.**

Any application for a system proposing the use of I/A technology shall be submitted to the Truro Board of Health which shall hold a public hearing to consider its approval. All applications shall include a copy of the Massachusetts Department of Environmental Protection approval letter appropriate to the I/A technology being used and the level of approval (i.e., General Use, Provisional Use, Remedial Use, Piloting Use, or site-specific Pilot Approval). All applications for Pilot Approval shall include all performance data from all piloting sites where the I/A technology has been similarly configured and utilized. Notice of the public hearing of the Board of Health for the consideration of applications for I/A approval shall be in accordance with the provisions of the Open Meeting Laws in Massachusetts. Abutter notification will not be required unless mandated by Title 5.

5) Monitoring and Reporting.

a) If an I/A system is approved, the applicant will be required to submit a proposed monitoring and reporting plan to evaluate the performance of the system to the Board of Health for approval; this plan shall include a description of any long-term operational or maintenance requirements needed to keep the system operational, and any educational, financial assurance or other mechanism proposed to ensure effective long-term operation and maintenance.

- b) Owners and operators of all I/A systems shall report the results of all operation, maintenance, and monitoring activities required by the foregoing provision or by the Department of Environmental Protection to the Truro Board of Health and to the Barnstable County Department of Health and Environment. Such reporting must be performed in the manner specified by the Board of Health or in the form approved by the Barnstable County Department of Health and Environment and must occur within forty-eight hours after each maintenance or monitoring event.
- c) The Board of Health hereby further requires that when a system operator performs a system inspection and finds that a sewage treatment technology has malfunctioning components which have compromised the system's ability to treat sewage as designed, the operator shall report on the system's status and any planned corrective action, including a proposed deadline for said corrective action, to the Truro Board of Health and the Barnstable County Department of Health and Environment within 48 hours of inspection.
- d) If at any time a monitoring or maintenance report indicates that an I/A system needs corrective action, the Truro Board of Health may hold a hearing to inquire as to whether corrective action is needed. If at such hearing, the Truro Board of Health determines that such system needs corrective action, it may take enforcement action, including but not limited to, an order to cease operation of said system or any other action otherwise necessary to protect public health, safety, welfare, and the environment.
 - i. I/A Systems that do not perform are required to be immediately and evaluated by the licensed operator for the purpose of the inspector forming a diagnostic opinion of what corrective actions would address the non-performance.
 - ii. Non-performance includes any I/A system that has been determined to be failing to protect public health and safety, and the environment, or an I/A system with equipment failure or an unresolved alarm event, or components that are not functioning as designed, or components that are not functioning in accordance with the manufacturers specifications, or a system that is in violation of the terms of its approval by the Truro Board of Health; or a system that is not achieving the total nitrogen standard in these regulations.
- iii. Non-performance requires written notification to the Truro Health Department within 48 hours receipt of lab test, along with a statement describing what corrective actions will be taken.

- iv. Corrective actions must be taken immediately (within 48 hours of a lab report or field test) to address performance that does not meet the standards as defined herein.
- v. Lab tests showing exceedance of TN standard triggers a re-test immediately following corrective actions taken to address the exceedance, until the corrective measures are shown to have improved performance to meet the standards.
- vi. Failure to comply with the process as described may result in a written warning from the Truro Health Department, followed by possible fines, and a hearing with the Truro Board of Health that must be attended by the property owner and the licensed inspector.

5) Record Notice at Barnstable Registry of Deeds.

All applicants gaining Board of Health approval for the installation of any I/A systems shall be required to record at the Barnstable County Registry of Deeds a Notice that the property is served by an I/A system together with an explanation of the Inspection, Monitoring and Reporting requirements, including the requirement of a service contract for the life of the system. **No Certificate of Compliance** for the installation of an I/A system will be issued until proof of recording in accordance with Article 9(5) is filed with the Health Department.

Article 10 - Required Setbacks for System Components

Notwithstanding the provisions of Title 5, 310 C.M.R. 2.11, all systems shall conform to the following minimum setback distances for septic tanks and soil absorption systems (SAS), including reserve areas, as measured in feet and set forth below:

	Septic Tank or Pump Chamber	SAS
Surface Water (except Wetlands)	50'	100'
Wetlands	100'	150'

<u>Article 11 - Existing Systems Serving New Construction</u>

For systems designed and approved prior to March 31, 1995, the size of the existing system shall not be considered in determining whether a change in use or new construction in the facility served by the system will result in an increase in design flow, i.e. an increase in the number of bedrooms, restaurant seats, retail space, office space etc. for facilities listed in 310 CMR 15.203(2) through (5), rather review of the existing use of the facility (i.e., existing bedroom count; existing restaurant seats; existing retail space, etc.) at the time of the change, as determined by the Truro Health Agent, will be used to make such determination.

No increase in design flow to any system shall be allowed unless the lot meets the requirements of 15.214, Nitrogen Loading Limitations, and Article 11 and Article 13 below. Should an increase in design flow be allowed, the system shall be upgraded in full compliance with Title 5 for new construction.

Article 12 - Buildable Upland Calculations for Nitrogen Loading Limitations

When applying the nitrogen loading limitations set forth in Title 5 and this Section VI of the Truro Board of Health Regulations (see Article 14), only Buildable Uplands shall be included in the lot area calculations. Riverfront Area may be included in the Buildable Upland, but only if I/A treatment for nitrogen reduction is proposed

Article 13 - Deed Restrictions

- 1) Any deed restrictions required under this Section VI or under Title 5 shall be submitted to the Health Agent for review before they are finalized and executed.
- 2) Each deed restriction shall adequately describe the property and all restrictions placed thereon (i.e., bedroom count limitations shall include the number and location of approved bedrooms; monitoring agreements shall describe the specific monitoring and maintenance requirements, etc.).
- 3) All deed restrictions shall contain a provision permitting the Truro Health Agent to inspect the premises to ensure compliance with the provisions of the deed restriction at reasonable intervals and upon reasonable prior notice.
- 4) All deed restrictions shall be recorded at the Barnstable County Registry of Deeds and proof of recording shall be submitted to the Health Department prior to the issuance of the Certificate of Compliance for the system.
- 5) A deed restriction required by the Board of Health or its Agent shall be recorded prior to the issuance of the Disposal Works Construction permit, or any building permit, as determined to be required for compliance with these local regulations and Title 5 by the Board of Health or its Agent.

Article 14 - Nitrogen Loading Limitations

1) The Truro Board of Health hereby requires that all properties within the Town of Truro meet the loading restrictions set forth in 310 CMR 15.214 and contain at least ten thousand (10,000) square feet of Buildable Upland (as defined in Article 1 hereunder) for every 110 gallons per day of design flow and that all systems designed to serve said facilities meet the same restrictions and requirements contained in Title 5 as the "Nitrogen Sensitive Areas" defined in 310 CMR 15.215 irrespective of whether the properties are located within "Nitrogen Sensitive Areas" as so defined.

2) Upgrades for systems that exceed current nitrogen loading shall include the use of I/A technology (with pressure distribution.)

Article 15 - Septage Haulers and Septic Installers Licenses

- 1) A **Septic Installers license** is required in the Town of Truro for any work done to alter a septic system or its components.
- 2) **Septage Haulers License Application:** The Board of Health will issue Septage Haulers Licenses only upon written application that includes the following information:
 - a) Name and address of applicant and business name under which applicant will operate.
 - b) A written description of all equipment utilized in the business, including the capacity of any tanks; and an emergency contact name and number of a person available for contact 24 hours a day in cases of emergency.
- 3) **Inspection.** Prior to the issuance of the Septage Haulers License and annually thereafter, all equipment of the business must be inspected by the Health Agent. All equipment must be clearly marked and identified with markings indicating the capacity of the tank. Truck tanks must be cleaned and made free of sand and sludge for every inspection. Gauges must be cleaned and calibrated so that exact volume is easily determined.
- 4) **Septage Coupons.** Septage coupons must be completely and properly filled out. The name, date, location and volume for each system serviced must be provided. The signature of the hauler and the customer must be executed on each coupon in order to validate the origin of the waste in the Town of Truro.
- 5) Chemicals and Acids. Use of chemicals and acids for cleaning cesspools and septic systems is prohibited.
- 6) **Failing Systems.** As a condition of their License, all Licensees shall accurately report all malfunctioning systems to the Board of Health, including but not limited to, the address of the malfunctioning system, the nature of the problem and the repairs,
- 7) Septage haulers are required to supply **accurate/legible** information to the Board of Health as a condition of their License.
- 8) **Licenses.** Licenses go into effect January 1st of each year. The annual fee for Licenses shall be determined by the Board of Health each year.
- 9) **Violations.** Failure to comply with any of these regulations shall constitute a violation which may result in a show cause hearing before the Board of Health to determine whether the License should be revoked. Violations may also result in the imposition of fines and/or any necessary legal action to be undertaken by the Board.

Article 16- Miscellaneous Provisions

- 1) **As-Built Cards.** The measured location of all components of each septic system shall be recorded on a septic "As Built" card and filed with the Health Agent prior to the issuance of a Certificate of Compliance. The installer shall verify on said "As Built" card that the components are installed in accordance with the locations shown on the approved septic plan.
- 2) **Severability.** If any Article, section, paragraph, sentence, clause or phrase of these regulations should be declared invalid for any reason, such declaration shall not affect the remainder of these regulations which shall remain in full force and effect.

SECTION VIII WATER WELLS

Article 1 Purpose and Authority

Under the authority of Massachusetts General Laws, Chapter 111, Section 31 and Chapter 21, Section 16, to better protect the public health of the inhabitants of the Town of Truro by ensuring that private wells are constructed in a manner that will protect the quality of the groundwater, the Truro Board of Health hereby adopts the following regulations.

Article 2 Definitions

Certified Laboratory: any laboratory which has full certification by the Department of Environmental Protection and is included in the most recent edition of "Certification Status of Commercial Environmental Laboratories."

Potable Well: Wells to be used as drinking water source.

Registered Well Driller: an individual authorized by registration with the Department of Environmental Protection to engage in the business and supervise the drilling, altering, or decommissioning of wells in Massachusetts, and who signs and submits the well completion report to the Department and the Truro Board of Health.

Replacement Well: any well which is being constructed to replace or repair a well currently existing and in use.

Well or Water Well: any hole or shaft constructed into the ground for the purpose of injecting or extracting water and other fluids, or to monitor groundwater levels and water quality.

Article 3 Registered Well Drillers

- 1. Water wells may only be constructed and/or replaced by a Registered Well Driller.
- 2. Before a water well is drilled within the Town of Truro, the well driller shall furnish to the Board of Health the well driller's name, trade name (if different), and address, shall furnish a copy of the driller's current State Registration Certificate, and shall comply with the regulations listed below.
- 3. The well driller shall submit to the Board of Health a copy of each driller's report submitted to the State containing the well owner's name, well 's location and depth, drilling log, description of casing and screen, static water level, method used to test well yield, length of time well was pumped, draw down, and well yield.

Article 4 Well Construction Permit

- 1. No well shall be installed, altered, replaced or repaired until a Well Construction Permit has been obtained from the Board of Health.
 - a. A fee (subject to change) per well installed shall accompany the application for

permit.

- b. An application for a Well Construction permit shall be submitted by the well driller or his agent on forms furnished by the Board. The well driller is responsible for obtaining said permit prior to well construction and for informing the Health Agent at the time of installation and covering. c. For new construction, application for a Well Construction Permit shall be made prior to the application for a building permit.
- d. For new construction the well shall be drilled prior to the installation of the septic system.

2. Water Quality Testing

- a. The well driller shall have a water sample tested by a Certified Laboratory for:
 - Coliform
 - pH
 - Conductivity
 - Iron
 - Nitrates
 - Sodium
 - Volatile Organic Compounds (VOCs)
 - Or any other parameters the Board of Health deems necessary.
- b. The results of this test shall be provided to the well owner and the Truro Board of Health.
- c. No building permit shall be issued until the report of this test has been returned to the Truro Town Hall and the Health Agent has determined the well water is potable.
- d. An acceptable sample of well water shall be of raw (untreated) water from the facility, using the approved water sampling bottles provided by a certified lab. The sample must be taken in accordance with standard methods and the protocol of a certified lab relative to chain-of-custody.



3. Plans

- a. For new construction: Site and Sewage Plans, stamped by a Professional Engineer and/or Registered Land Surveyor and/or a Registered Sanitarian, showing the location of the proposed well and septic system must be submitted to ensure that adequate setbacks between well and septic are being provided.
- b. For all other construction: the well driller must submit a plan of the land, accurately depicting the location of all septic system components and the location of the proposed well. The well driller must also sign a statement on the well permit application attesting to the fact that the well as installed will meet the required setbacks to the septic tank and soil absorption system defined in 310 CMR 15.211.

Article 5 Well Completion Report

New wells shall not be placed into use for human consumption until the Health Agent has approved the potability and quantity of the water provided and the well driller has filed a Well Completion Report with the Truro Health Department.

Article 6 - Required Water Quality Testing

Water quality testing conducted in accordance with the procedures set forth in Section 4 of this Regulation is required in the following circumstances

1. Upon Transfer of Real Estate

Prior to selling, conveying, or transferring title to real property (a "transfer" of real property is defined in these Board of Health regulations section 6.5)in the Town of Truro, the owner thereof shall:

- a.. Test the water of every private potable well serving that property. A water sample from each well shall be submitted to a certified laboratory for testing for the parameters outlined above in Article 4. This water quality test shall be performed not more than one year prior to transfer of the property. Results of the water test shall be submitted to the Board of Health prior to property transfer on a form provided by the Board of Health on which the owner will certify that the sample was taken from the well serving the property being transferred; and
- b. the owner shall provide copies of all water test results of which they have knowledge (regardless of age of results) for the private potable well in question to any buyer and/or broker identified with the transfer. In the event that there is no buyer at the time the water is tested, a copy of all water test results must be given by the owner to the buyer before the property is put under agreement.

2. Upon applying for a building permit, other than an express permit, including any change in use made without a building permit;

- a. A water quality analysis result from sampling completed within one calendar year of the date of submitted application for a building permit or from the date of occupancy of the un-permitted change in use shall be provided with the application.
 The analysis must be of a water sample taken from the private well serving the facility and shall be submitted to a certified laboratory to analyze the following parameters: Sodium, Nitrate N, pH, iron, conductivity, coliform bacteria), and sampled as described in Article 4.2.d.
- b. For purposes of this regulation, change in use shall be deemed to have occurred when the use of the structure or the land is changed from one use group to another use groups as described in the Table of Uses in the Town's Zoning Bylaws, as may be amended from time-to-time; an alteration of the structure or the land within the same use group that changes the intensity of the use, i.e. a business use changing from retail to office space or a residential use changing from single-family or multi-family; or any change or alteration to the land or structure that results in an increase in actual or design flow to the septic system or well serving the property.
- 3. Upon applying for a disposal works construction permit;

- a. A water quality analysis result from sampling completed within one calendar year of the date of submitted application for a disposal works construction permit shall be provided with the application. The analysis must be of a water sample taken from the private well serving the facility and shall be submitted to a certified laboratory to analyze the following parameters: Sodium, Nitrate N, pH, iron, conductivity, coliform bacteria), and sampled as described in Article 4.2.d.
- b. This applies to construction, upgrade and replacement of tanks, pump-chambers and leaching facilities. The replacement of the building sewer, tees, pumps, and distribution boxes, and the sealing of tanks are exempt from this requirement;
- 4. Upon applying for or renewing a rental registration certificate, or a Camp Cabin and Motel License from the Town of Truro.
 - a. A water quality analysis result from sampling completed within 4 months of the application shall be submitted with the application for a rental registration or camp, cabin and motel license application or renewal. The analysis must be of a water sample taken from the private well serving the facility and shall be submitted to a certified laboratory to analyze the following parameters: Sodium, Nitrate N, pH, iron, conductivity, coliform bacteria), and sampled as described in Article 4.2.d.
 - b. This analysis result must be provided prior to issuance of an annual rental registration certificate (as described in the Truro general bylaws Chapter 2 section 1) or applicable camp, cabin or motel license;
- 5. Upon submitting a septic Inspection report to the Town of Truro for a facility served by a private well.

Article 7: Water Potability Standards

No person shall use any well as a source of water for any property in the Town of Truro unless the water from the well meets current safe-drinking water standards as established by the Massachusetts Department of Environmental Protection and/or the United States Environmental Protection Agency, as may be amended from time-to-time.

If any water quality test reveals that a well does not meet the applicable standards, the owner of the facility shall take immediate action to treat the water to bring it into compliance or shall cease use of the well until such time as compliance can be achieved.

No Well Construction Permit will be issued unless and until the well driller demonstrates that the applicable standard is met.

Article 8 Decommissioning of Water Wells

1. Abandoned wells, test holes and borings shall be decommissioned so as to prevent the well, including the annular space outside the casing, from being a channel allowing

- the vertical movement of water. Test holes to be filled and packed prior to completion of a finished well and done during location search do not require a "decommissioning."
- 2. The property owner shall be responsible for ensuring that all abandoned wells and test holes or borings associated with private well installation are properly plugged. Only registered well drillers may plug abandoned wells, test holes and borings.
- 3. In the case of new well construction, all test holes and borings shall be plugged before the well driller completes work at the site.
- 4. The owner of a private well shall decommission the well if the well meets any of the following criteria:
 - a. construction of the well is terminated prior to completion of the well;
 - b. the well owner notifies the Board that the use of the well is to be permanently discontinued;
 - c. the well is a potential hazard to the public health or safety and the situation cannot be corrected:
 - d. the well is in such a state of disrepair that its continued use is impractical.
- 5. The Department of Environmental Protection Private Well Guidelines for Decommissioning Abandoned Wells, Test Holes and Dry or Inadequate Borings shall be followed by registered well drillers.
- 6. A well decommissioning report shall be submitted to the Board of Health by the registered well driller within thirty (30) days of the completion of the decommissioning.

Article 9 Enforcement and Penalties

The Board shall have the authority to enforce these regulations and permits issued thereunder via all procedure set forth in Section I of these regulations.

ADDENDUM TO MASSACHUSETTS TITLE 5 INSPECTION FORM



Truro Board of Health Requirements for Title 5 Inspections (This form shall be submitted in addition to the MA title inspection form)

ADDRESS:		
	PASSING NEEDS FURTHER EVALUATION FAILED	
	System has been pumped within the last three years (Section 6.5.2.b)	
	If not, System was pumped as a part of the inspection OR System does not need to be pumped at this time. *	
	*Statement supporting determination (please include last date of pumping)	
	All system components have been inspected. If a component cannot be found or uncovered, the inspector must provide evidence for the system's success or failure. (Section 6.5.2.a)	
	Replacement or installation of a component is required; a septic permit is required (Section 6.5.2.d)	
	Sanitary tees are present. (The replacement of sanitary tees requires a septic permit)	
	Leach pit has > 6" of leaching capacity and half of one day of design flow. (<i>Determined by clean sidewall absent of staining/solids or evidence of high water</i>) PLEASE NOTE : If the liquid depth in a leach pit is less than 6" from the inlet pipe invert or the remaining available volume within a leach pit above the liquid depth to the invert of the outlet pipe is less than ½ of one day's design flow, THE SYSTEM IS CONSIDERED FAILED . (<i>Section 6.5.2.c</i>)	
	Leaching area has more than 4' vertical separation to groundwater. This needs to be measured in the field; "per plan" is not acceptable. PLEASE NOTE : If the leaching area has less than 4' vertical separation to observed groundwater, THE SYSTEM IS FAILED (6.1.4 definition of "failed system" and Section 6.5.2.f)	
	Access ports for: septic tank inlet & outlet, d-box, and SAS are within 6" of grade (Section 6.5.2.e)	
	If not, risers have been installed.	
	Existing bedroom count matches the GPD on design plan. PLEASE NOTE: If the bedroom count inside the building does not match the basis for the approved design flow THE SYSTEM IS CONSIDERED FAILED. (Section 6.5.2.h)	
	Please attach the lab results of private well water sample analysis. For Real Estate Transfers BOTH the routine and VOC are required. Results must be from no more than 1 year from date of submission of this report. (section 8.6.5)	
Comm	ents and observations:	

If there is a deficiency in any of these items, please submit this form as "NFE" (needs further examination) (with the exception of a failure).

Last update: April 30, 2021