

Terri A. Guarino
Health Agent

TOWN OF BOURNE BOARD OF HEALTH

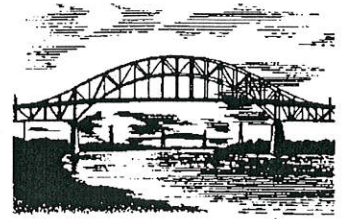
24 Perry Avenue

Buzzards Bay, MA 02532

www.townofbourne.com/health

Phone (508) 759-0600 ext. 1513

Fax (508) 759-0679



May 18, 2017

Elizabeth Warden
34 Marisol
Newport Coast, CA 92657

Dear Ms. Warden:

At the duly posted public hearing on May 17, 2017, the Bourne Board of Health discussed and unanimously voted to approve a modified site layout, final floor plans, and a revised drinking water well location for your property at 10 Harbor Way, Bourne, MA (map 45.0, parcel 19). As you are aware, the Board previously approved a Nitrogen Loading Facility Aggregation Plan and a 45 foot variance from the Board of Health 150 Foot Setback Regulation for the proposed septic system on April 13, 2016.

According to the November 30, 2015 Proposed Site Plan, revised on April 25, 2017, the Board granted a 17.5 foot variance from the well to the property line, and also a 8 foot variance from a private way/ common drive. The modified floor plans received by the Board of Health on May 3, 2017 indicate that the proposed dwelling will remain a two-floor, three-bedroom, single-family home. Pursuant to the Board of Health's decision in on April 13, 2016, the maximum allowable daily design flow for the lot shall be restricted to 330 gallons per day with the use of a nitrogen reducing innovative/ alternative treatment system.

This office is in receipt of the MassDEP well completion report, pumping test report, and water quality results from the Barnstable County Health Laboratory for this installed well. Enclosed is a copy of the Water Supply Certificate issued for this address. It is understood that an Aqua-Pure Reverse Osmosis Drinking Water System will be installed to rectify the elevated sodium concentration in the water supply.

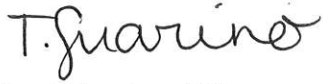
Please be advised that these approvals are valid for two years and any modification to the approved Plans will require another hearing before the Board of Health. The following documents and their exhibits have been previously endorsed and the issuance of a disposal works construction permit shall be contingent upon their recordation at the Barnstable County Registry of Deeds and copies submitted to this office:

- 10 Harbor Way- Notice of Alternative Sewage Disposal System and Grant of Title 5 Nitrogen Loading Restriction and Easement on Facility Land;
- 0 Lighthouse Lane- Grant of Title 5 Nitrogen Loading Restriction and Easement on Nitrogen Credit Land and a Septic Easement for the benefit of 10 Harbor Way; and
- 1 Lighthouse Lane- 10' Wide Septic Force Main Easement for the benefit of 10 Harbor Way

Additionally, it is understood that the owner/ operator has read and agrees to the Bourne Board of Health Alternative Testing and Fine Regulations as a condition of this approval and will maintain a valid Operation

and Maintenance Agreement with a licensed wastewater operator in perpetuity. A copy of this Operation and Maintenance Agreement must be submitted to this office prior to issuance of a Certificate of Compliance for the sewage disposal system. Should you have any questions, please do not hesitate to contact the Board of Health office at 508-759-0600 ext. 1513. Thank you.

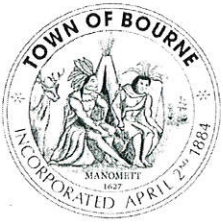
Sincerely,

A handwritten signature in cursive script that reads "T. Guarino".

Terri Guarino, RS
Health Agent

C.C. Zachary L. Baskinski, P.E.

Enclosed: Water Supply Certificate, Bourne Board of Health I/A Septic Alternative Testing Regulation



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WATER SUPPLY CERTIFICATE

Date: May 18, 2017

As required by the Department of Conservation and Recreation, Office of Water Resources, Well Driller Program, and the Bourne Board of Health, this office is in receipt of a satisfactory Well Completion Report including Pumping Test results for the property located at 10 Harbor Way, Bourne, MA. The Water Quality Report dated March 31, 2017 indicates that the water sample meets EPA standards for the parameters tested and is suitable for human consumption.

This Water Supply Certificate is hereby issued to the owner of record, Ms. Elizabeth Warden. This certifies that the private well, permit #1-16, drilled on November 29, 2016 by All Cape Well Drilling may be used as a drinking water supply. Please be advised that the issuance of this certificate is required prior to obtaining an occupancy permit for the structure which is to be served by the well.

MassDEP recommends that homeowners test their private water supply for contaminants such as Coliform Bacteria and Nitrate/ Nitrite annually. Please be advised that the Sodium results in your well exceed the guidance level by 8 mg/L. This health advisory value of 20 mg/L was developed for those individuals restricted to a total sodium intake of 500 mg/day and should also be tested annually. Other contaminants may be tested less frequently taking into consideration nearby land-uses and potential sources of contamination. Samples should be taken after heavy rainfall events to highlight potential conditions. Please visit www.townofbourne.com/health for more information on private well water supplies. Should you have any questions, please do not hesitate to contact the office of the Board of Health at 508-759-0600 ext. 1513.

Terri A. Guarino
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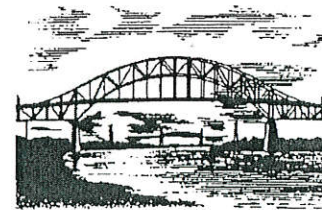
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TOWN CLERK BOURNE

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INNOVATIVE/ALTERNATIVE SEPTIC SYSTEM REGULATION

Effective Date: November 4, 2016

Pursuant to Chapter 111, Section 31 of the Massachusetts General Laws, the Bourne Board of Health, at its regular meeting on October 26, 2016, voted to amend their existing Alternative Technology System Regulation from May 10, 2006 with the following:

Whereas, the Bourne Board of Health may require any property within the Town of Bourne to install an innovative/alternative sewage disposal system (I/A system) in order to protect the public health and environment. These enhanced treatment systems may be in conjunction with waivers or variances from the Bourne Board of Health Septic Regulations and/or Title 5 of the State Environmental Code, 310 CMR 15.000, or to accommodate new construction, additions, renovations, or reconstruction of the referenced property.

Whereas, the Bourne Board of Health may impose additional conditions to I/A systems approved for General Use which may be more stringent than MassDEP's requirements. Now, therefore, this Regulation is intended to ensure that the selected I/A system will perform at least as well as, if not better than, a conventional septic system; and that the design and installation is done in accordance with the requirements of 310 CMR 15.287, MassDEP's Standard Conditions, any Special Conditions contained in the Technology Approval, Designer or Company specific requirements, and all local requirements herein.

Upon application for a Disposal System Construction Permit (DSCP or septic permit), the applicant shall provide to the Bourne Board of Health, among other things:

- A certification, signed by the Owner of record for the property, stating that the Owner acknowledges their responsibilities and agrees to comply with all requirements applicable to the selected I/A system;
- Whether the system will be used year-round (facility occupied for more than 6 months per year) or seasonally (occupied less than 6 months per calendar year) and;
- Their contact information in case any issues arise with the system or its operation.

To ensure proper operation and maintenance (O&M) of the I/A system, the system Owner shall enter into an O&M Agreement with a qualified Service Contractor who has been certified by the Board of Registration of Operators of Wastewater Treatment Facilities in accordance with 257 CMR 2.00. The owner shall be responsible for maintaining a valid O&M Agreement in perpetuity and providing a copy of this signed O&M Agreement to the Bourne Board of Health prior to the start of construction. All O&M must be reported to the Board of Health and the Barnstable County Department of Health and Environment. If required, a Disclosure Notice and Bedroom Restriction will need to be recorded in the Deed of the Property prior to the start of construction. In no instance will a Certificate of Compliance be issued until the Design Engineer, Board of Health, and Wastewater Operator have inspected the installation of this system and the successful start-up of the system has been documented in writing by the Wastewater Operator. Additionally, all other paperwork as a condition of the approval shall be in the possession of the Board of Health prior to the issuance of a Certificate of Compliance.

TESTING AND SAMPLING REQUIREMENTS:

Both year-round and seasonal residential systems with design flows less than 2,000 gpd (excluding those within Nitrogen Sensitive Areas), shall be required to have a field test and effluent sample conducted twice per year for the first two years as follows:

- Year-round residential systems shall be tested and sampled every six months, once between January and March and once between July and October
- Seasonal systems shall be required to have a field test and effluent sample conducted within 45 days of the system startup and again 30-60 days thereafter unless otherwise indicated. Example: I/A system started up for seasonal occupancy around Memorial Day Holiday → Field test & effluent sample conducted after Independence Day → Second field test & effluent sample conducted around Labor Day

Please note that the above inspection and sampling requirements excludes service visits that may be necessary for the start up and shut down of systems, alarm responses, or other maintenance visits specified by the Service Contractor and/ or technology supplier. Inspections and field tests shall include the following:

1. Document visual examination of the effluent for color, turbidity, and effluent solids;
2. Measure effluent pH to determine if the wastewater is between 6 and 9 standard units;
3. Measure dissolved oxygen, 2mg/L or more to ensure that the system is operating and;
4. Record turbidity, less than or equal to 40 NTU.

Effluent sampling and laboratory tests should also include BOD₅ and TSS, less than or equal to 30 mg/L, pH and Total Nitrogen measured as the total of TKN, NO₂-N, and NO₃-N ≤19mg/L. It is the designer's responsibility to indicate on the septic plan where the sampling ports are located and ensure that the design includes risers at finished grade.

After two years of good performance and compliance with these requirements, the O&M Agreement may be modified at the recommendation of the Service Contractor and Bourne Board of Health, resulting in a reduction in testing and sampling requirements. The I/A system must still comply with 310 CMR 15.287, MassDEP's Standard Conditions, any Special Conditions contained in the Technology Approval, Designer or Company specific requirements, and any other local regulations. At a minimum, all I/A systems shall be inspected with a field test once per year. Effluent samples and laboratory tests will only be required for General Use systems which do not pass field tests, and follow-up inspections must be conducted within no more than 30 days. All findings must be reported to the Bourne Board of Health and BCDHE in a report which details the problems and includes recommendation for repairing the system.

Any I/A system located in a designated Nitrogen Sensitive Area (Zone I, II, or IWPA of a public water supply, or subject to nitrogen loading restrictions due to the proximity to private drinking water supply wells) shall be subject to more stringent testing and sampling requirements established by MassDEP specific to the approved Technology.

EFFECTIVE DATE:

This regulation shall take effect immediately upon publication of a summary in a newspaper of general circulation in the Town of Bourne, which date shall be posted on the front page of this regulation.

Adopted: October 26, 2016

Effective: November 4, 2016

-The Bourne Board of Health