

# **Town of Harwich**

## **Board of Health Regulations**

### **SEWAGE DISPOSAL REGULATIONS**

These Regulations are adopted pursuant to 310 CMR 11.02 and 310 CMR 15.000 of the Massachusetts Environmental Code and supplements thereto.

#### **PART 1 - PERMITS**

The following Regulations are adopted by the Board of Health to supplement the provisions of Title 5 of the State Sanitary Code and shall be applicable to all subsurface sewage disposal systems installed in the Town of Harwich in addition to the provisions of said Title 5.

#### **REGULATION**

- 1.101 As provided by Title 5 Regulations 2.2, no person or firm shall engage in the construction, alteration, installation or repair of any individual sewage disposal system without first obtaining a Disposal Works Installers Permit from the Board of Health.
- 1.102 As provided by Regulations 2.1 and 2.4 of Title 5, no individual sewage disposal system shall be located, constructed, altered or installed without first obtaining a Disposal Works Construction Permit from the Board of Health.
- 1.103 As provided by Regulation 2.4 of Title 5, all applications for Disposal Works Construction Permits shall be accompanied by a plan of the proposed sewage disposal facilities and, if the applied for permit is issued, a copy of the approved plan shall be posted or available at the site of installation and a copy shall also be kept in the possession of the installer.
- 1.104 All work pursuant to a duly issued construction permit shall be performed in strict compliance with the provisions of Title 5 and these Regulations and in strict compliance with the approved plan.
- 1.105 No deviation from the approved plan will be permitted unless prior approval therefore is obtained from the Board. Deviation from the plan without such prior approval will be grounds for revocation of

said permit, and may result in the suspension or revocation of the installer's permit, as well as the removal of the installation. Other penalties may be imposed as provided by law.

## **PART 2 - DISPOSAL WORKS REGULATIONS**

### **REGULATION**

- 1.201 All single family dwellings shall be provided with a separate sewage disposal system and no sharing of a single family system by two or more dwelling units located on separate parcels of land will be allowed.
- 1.202 All two-family dwellings shall be provided with separate sewage disposal and plumbing systems for each of the two units. <sup>1</sup> This section will not apply where sole ownership of the two-family dwelling exists.
- 1.203 In areas not zoned for multi-family dwellings, hotels or motels, in any case where such use may be authorized by variance or extension of a non-conforming use, the projected daily sewage flow for such use as computed by reference to the flow rate projections of this code shall not exceed the daily sewage flow which would be projected should the same parcel of land be developed for single family use to the extent allowed by applicable provisions of the Zoning Bylaw.
- 1.204 Multi-family dwellings located on land located in whole or in part in a water resource protection district as established by the Zoning Bylaw shall be provided with a tertiary sewage treatment plant, which plant complies with the following requirements:
  - a. The plant will be designed to remove sufficient nitrogen from the raw sewage so that the nitrogen loading rate from the total project will not exceed 24 pounds of nitrogen per 40,000 square feet of land area per year.
  - b. The plant must be approved by the Board of Health and by the Massachusetts Department of Environmental Quality Engineering, along with any other state or federal regulatory agency having concurrent jurisdiction over such facilities.
  - c. The system will be located on site based upon the findings resulting from a detailed hydro-geological study so as to prevent degradation of the aquifer at any public drinking water supply well to levels below standards established by the Environmental Protection Agency or its successors or

standards established by state agencies having jurisdiction of such systems, whichever standards are higher. In designing and locating discharge areas, special emphasis will be given to avoiding the possibility of creating a concentrated anaerobic plume which may mobilize other contaminants present in the soil.

- 1.205 Sewage treatment plants for multi-family dwellings as required by Regulation 1.204 above shall be subject to periodic maintenance and monitoring schedules as established by the Board of Health. In establishing such schedules, the Board will consider state, federal and industry guidelines when available.
- 1.206 In order to effectively prevent nitrogen overloading of the aquifer by multi-family dwellings in the water resource protection districts, no fertilizer shall be used on site at a rate exceeding 3 pounds (nitrogen) per 1,000 square feet of lot area per year and the total area of land under cultivation shall not exceed 8 percent of the total lot area.
- 1.207 In flood plain zoning districts as established by applicable law, the Board of Health shall require that new and replacement sanitary sewage systems be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters.
- 1.208 The Board of Health shall require that all new or replacement private water supply facilities located in flood plain districts be designed to minimize or eliminate infiltration of flood waters into the systems as well as assuring that effluent from sewer facilities does not infiltrate the water supply.
- 1.209 <sup>2</sup> Design Flow Rates: Rescinded by the Board of Health 7/12/1995.
- 1.210 <sup>3</sup> All sewage disposal systems shall comply with the following distance requirements. The distance requirements for components not listed herein shall be governed by applicable provisions of Title 5 of the State Sanitary Code. The Board of Health may grant a variance from the distance requirements hereof if site conditions warrant, but in no case shall the Board allow a set-back variance to less than seventy-five (75) feet to the leaching facility.

<u>Component</u>	<u>Septic Tank (feet)</u>	<u>Leaching Facility (feet)</u>	<u>Building Sewer (feet)</u>	<u>Privy (feet)</u>
Surface water supplies (reservoirs) or tributaries to reservoirs, including open and subsurface drains; foundation drains and roof drains if final disposal is into tributaries	50*	100	50	100
Watercourses (as defined In Title 5), wetland as Recognized by Harwich Conservation Commission	50*	100	50	100

\* All tanks less than 100 feet shall be of monopour or plastic construction

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HARWICH BOARD OF HEALTH

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1.211 <sup>4</sup> Any development, (including residential subdivisions, re-subdivision or ANR) with a septic system or systems, new or upgraded, designed to accommodate sewage flow of 2,000 gallons or more per day shall require a hearing before the Board of Health before a permit for construction of either the system or systems of any buildings or facilities which would use the system or systems can be used.

In applying for a permit, the applicant shall submit data which shall include but not be limited to the following: Hydro-geologic data in sufficient detail to determine direction of the groundwater flow, elevation of the groundwater, soil conditions, the environmental impact the disposal system will have on public or

private water resources, salt water estuaries, rivers, streams, fresh water ponds or wetlands.

Nitrogen loading calculations shall be submitted for development within the watersheds of salt water estuaries or Drinking Water Zone II and phosphorus impact evaluations for those within the watersheds for fresh water ponds including demonstration of the use of vertical separation and horizontal setbacks to maximize the attenuation of phosphorus in the soil; a written evaluation of the potential for the generation or use of toxic or hazardous waste on the site with a description of all such waste, which may reasonably be expected to be disposed of on the site and any such additional information deemed necessary by the Board of Health. Said data shall be prepared by a professional engineer, registered in Massachusetts whose qualifications to prepare such data shall be accepted by the Board of Health, and shall be submitted at the time of application.

The final report by the Massachusetts Estuaries Project (MEP) for the Pleasant Bay Alliance issued May, 2006, concludes that there is an excess of nitrogen from existing development. The report indicates that significant percentages of nitrogen must be removed from both existing and future development to restore and protect water quality. This report forms the scientific basis for Total Maximum Daily Limits (TMDL) imposed by DEP/EPA.

Therefore, as an interim measure and prior to the development and implementation of a Comprehensive Wastewater (nitrogen) Management Plan (CWMP) for Pleasant Bay, any development of a subdivision, re-subdivision or ANR, five lots or greater which is in whole or in part within the watershed of Pleasant Bay as defined in said report shall be served by a shared septic system that provides nitrogen removal technology. Removal limits shall be those approved by DEP for the technology proposed. The system may be located anywhere within the subdivision, including open space, if any, subject to all applicable rules, Regulations and laws.

If, after the hearing, the Board determines that the system or systems as designed would continue to create a negative environmental impact, the Board shall require the system or systems be redesigned so as to eliminate or mitigate said impact.

Nothing within this Regulation shall prohibit approval, by the Board of Health for any applications involving the maintenance and/or repair of an existing subsurface sewage disposal system, providing said application does not involve a change of use or expansion. Where a change of use or expansion is involved, the applicant must demonstrate compliance with this Regulation.

Variations from this Regulation may be granted by the Board of Health only if the applicant: a. demonstrates to the satisfaction of the Board that a literal enforcement of this Regulation would involve substantial hardship, financial or otherwise to the petitioners (i.e., would deprive the landowner of all reasonable use of the lot in question); or b. proves to the Board that the project would not have a measurable environmental impact to any water resource.

The Board of Health will consider, but not be limited to, the following factors when reviewing a request for a variance:

- \* That the applicant can demonstrate that he has taken every effort to protect environmental resources potentially affected by the proposed development
- \* The implementation schedule for a Comprehensive Wastewater/Nitrogen Management Plan (CWMP)
- \* The recommendations of the Water Quality Task Force (WQTF)

## **PENALTIES AND ENFORCEMENT**

The Health Director is authorized to issue Notices of Violation, Cease and Desist Orders, or other administrative enforcement orders to compel compliance with the terms of these Regulations.

### **(A) NON-CRIMINAL DISPOSITION**

Whoever violates any provision of these rules and Regulations may be penalized by a non-criminal method in the District Court pursuant to the provisions of M.G.L. c.40 §21D. for the purposes of this Regulation the following fine schedule will be imposed:

- \* First offense – written warning
- \* Second and subsequent offenses - \$100

Each day on which a violation exists shall be deemed to be a separate offense. The third offense at a single facility shall result in a hearing before the Board of Health to determine whether the Board shall consider revocation of the permit if applicable and/or file a criminal complaint.

### **(B) CRIMINAL COMPLAINT – as provided for in M.G.L. c.111 §31**

Whoever violates any provision of these rules and Regulations may be penalized by indictment or complaint brought in the District Court. Except as otherwise be provided by law, and as the District Court may see fit to impose, the maximum penalty for any violation of these provisions shall be \$1,000 for each offense.

**SEVERABILITY**

If any section, paragraph, sentence, clause or phrase of the Regulations shall be decided invalid for any reason whatsoever, such decision shall not affect the remaining portion of these Regulations which shall remain in full force and effect and to this end the provision of these Regulations are hereby declared severable.

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HARWICH BOARD OF HEALTH

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