[Adopted as indicated in text]

# § 130-16. Authority. [3-11-1992]

These regulations are enacted by the Pelham Board of Health under the authority of MGL c. 111, §§ 31 and 122.

## § 130-17. Purpose. [3-11-1992]

These regulations are enacted for the protection of the public's health, safety and welfare. The intent of these regulations is to protect, preserve and maintain the surface and ground water resources by addressing environmental conditions specific to the Town of Pelham.

The purpose of the 2011 amendments are to provide a mechanism within the existing Board of Health regulations for the use of DEP approved innovative/alternative technologies in onsite sewage disposal system for new construction in Pelham. The use of innovative/alternative technologies which are approved for nitrogen reduction, in addition to other pollutants, can achieve the same level of public health and environmental protection as intended by the 1986 regulations.

These amendments also provide on-site storm water management for individual lots which utilize innovative/alternative systems. The intent of this provision is to minimize any negative impacts to wetlands and other resources, town roads and drainage systems and abutting property from storm water runoff from construction and changes in topography due to the use of these innovative systems for new construction.

# § 130-18. Definitions. [3-11-1992]

As used in this article, the following terms shall have the meanings indicated:

AQUIFER -- Geologic formation composed of rock or sand and gravel that contains significant amounts of potentially recoverable potable water.

GROUNDWATER -- All water found beneath the surface of the ground.

IMPERVIOUS MATERIALS -- Geologic substances having a percolation rate greater than 30 minutes per inch.

INNOVATIVE/ALTERNATE TECHNOLOGIES WITH NITROGEN REDUCTION CREDIT-- Technologies having received nitrogen reduction credit as part of their technology approvals from the Massachusetts Department of Environmental Protection for General Use Certification or Provisional Use Approvals. [3-8-2011]

LEACHING PITS -- Leaching facilities constructed of brick, perforated concrete or interlocking concrete blocks which allow for the dispersion of effluent into surrounding stone and soil.

LEDGE -- The solid rock exposed at the ground surface or under unconsolidated layers of sand, gravel or clays.

MAXIMUM GROUNDWATER ELEVATION -- The height of the groundwater, or evidence of groundwater, at its maximum level which is usually, but not always, reached during December through April.

PRIMARY AQUIFER RECHARGE AREAS -- Areas which are underlain by surficial geologic deposits, including glaciofluvial or lacustrine stratified drift deposits or alluvium or swamp deposit, and in which the prevailing direction of groundwater flow is toward the area of influence of public water supply wells.

RAISED LEACH FACILITIES -- Subsurface sewage disposal systems constructed wholly or partially in fill, where such fill is necessary in order to achieve the required six feet of soil suitable for subsurface sewage disposal.

SECONDARY AQUIFER RECHARGE AREAS -- Areas which are underlain by surficial geologic deposits, including till or bedrock, and in which the prevailing direction of surface water flow is toward public water supply wells or potential sites for such wells.

STORM WATER BEST MANAGEMENT PRACTICES-- Structural, non-structural and managerial techniques that are recognized to be the most effective and practical means to prevent and/or reduce increases in stormwater volumes and flows, reduce point source and nonpoint source pollution, and promote storm water quality and protection of the environment. "Structural" BMPs are devices that are engineered and constructed to provide temporary storage and treatment of storm water runoff. "Nonstructural" BMPs use natural measures to reduce pollution levels, do not require extensive construction efforts, and/or promote pollutant reduction by eliminating the pollutant source. See Massachusetts Stormwater Handbook, revised and updated, relating to stormwater, February 2008. [3-8-2011]

STORM WATER MANAGEMENT- - The use of structural or non-structural practices that are designed to reduce storm water runoff pollutant loads, discharge volumes, and/or peak flow discharge rates. . [3-8-2011]

STORM WATER MANAGEMENT PLAN-- A plan to be submitted with the application for a Disposal Works Construction Permit when Innovative/Alternative technology is proposed for new construction. The Storm water Management Plan shall include current and proposed site conditions, proposed improvements, proposed storm water control measures, development schedules, and such other matters as may be required by the Pelham Board of Health. The Management Plan shall be developed in accordance with the guidance document titled "Stormwater Management for Residential Lots Utilizing Innovative/Alternative Technologies". [3-8-2011]

## § 130-19. Percolation tests. (Season March 15 to May 15).

A. Prior to any percolation testing to be scheduled for observation by the Pelham Board of Health or its agents, the applicant or owner of the parcel in question shall present a final determination of applicability as to the existence and location of areas subject to the protection of Chapter 119, Wetlands Protection, of the Code of the Town of Pelham and/or the Wetlands Protection Act (MGL c. 131, § 40). [3-10-1988]

- B. All sites where percolation tests are attempted shall be accurately marked on the map which records the results of a percolation test and the results of those attempts reported. [3-1-1987]
- C. If a percolation test fails, a second attempt can be located no closer than 40 feet to the failed site. [3-1-1987]
- D. All percolation tests shall be accurately located on a scale map of the lot. All measurements shall be in customary units and shall be referenced to a survey pin. The map will be filed, together with the results of the

percolation tests, with the Board of Health. In the case of subdivisions, only percolation tests done on surveyed lots are to be considered as official by the Board of Health. [3-1-1987]

- E. The Board of Health is the only body which can decide if a percolation test passes or fails. It must receive the results of percolation tests at the next public meeting within 30 days of completion and review those results and vote to accept or reject the said results at the said meeting. The results of all tests will be kept on file by the Board of Health. [3-1-1987]
- F. A percolation test will be deemed to have failed if:
- (1) Ledge or other impervious material is found at a depth closer to the surface than will permit at least six feet of undisturbed soil which is suitable for disposal of the liquid effluent of a sanitary disposal works (septic system).
- (2) The maximum groundwater elevation (or evidence of the presence of water, including but not limited to seepage, mottling, soil color or soil morphology) is found at a level or depth closer to the surface than will permit at least six feet of undisturbed soil which is suitable for disposal of the liquid effluent of a sanitary disposal works (septic system). See exceptions, § 130-21. [3-1-1986] *and* § 130-21 A. [3-8-2011]
- G. Percolation test sites must be marked in an enduring manner, such as with a metal stake, a cairn, concrete marker, etc., so that they may be located accurately in the future. [3-1-1986]

# § 130-20. Sanitary disposal works.

- A. An individual sewage disposal system shall be located at least 100 feet from any area delineated as under jurisdiction and subject to the protection of Chapter 119, Wetlands Protection, of the Code of the Town of Pelham and/or the Wetlands Protection Act (MGL c. 131, § 40). [3-11-1992]
- B. The use of curtain drains or swales to redirect surface water or lower the water table shall not be permitted in new construction of sanitary disposal works. See exceptions, § 130-21. [3-1-1986]
- C. [3-1-1986] The use of raised leach fields shall not be permitted in new construction. See exceptions, § 130-21 *and* § 130-21 A. [3-8-2011]. A raised leach facility is defined as a sewage system constructed wholly or partially in fill, where such fill is necessary in order to achieve the required six feet of soil. This section shall not prohibit the use of fill in the following circumstances:
- (1) In instances where the top- and subsoil are required to be removed and replaced with fill for a distance of 10 feet surrounding the leach system, provided that six feet of naturally occurring permeable soil is beneath the system and system construction is below natural grade elevation.
- (2) The use of fill as cover material, for backfilling, grading, including slope reduction, landscaping or other similar uses consequential to building construction. [10-14-1992]
- D. In septic system designs and installations, the clearance between the water table and/or ledge and the bottom of the leach facility shall be six feet. [2-10-1988] . See exceptions, § 130-21 *and* § 130-21 A. [3-8-2011]
- E. [3-11-1992] Within the Water Supply Protection District as established by Chapter 125, Zoning, of the Code of the Town of Pelham, the following additional regulations shall apply:

- (1) The siting of individual sewage disposal systems that are designed to receive more than 110 gallons of sewage per 1/4 acre per day or 440 gallons of sewage on any one acre per day, whichever is greater, shall be prohibited, except for the repair or replacement of an existing system.
- (2) In areas where soil percolation rates are faster than 2 minutes per inch, the Board of Health may impose additional measures reasonably necessary to protect public and private drinking water sources, such as but not limited to the following:
- (a) Prohibiting the use of leaching pits with an effective depth greater than two feet, including the underlying washed stone, as a disposal method.
- (b) Requiring the following separation and setback distances from private and public water sources:
- [1] Wells: 150 feet.
- [2] Public surface water supplies (reservoirs), including tributaries and drains thereto: 150 feet.
- [3] Wetland systems located within primary and secondary recharge areas: 150 feet.
- (c) Requiring the use of monitoring wells and periodic groundwater testing.
- (3) In evaluating the need to impose additional protective measures, the Board of Health shall consider such site factors as development density, water supply location in relation to septic system placement, surface and ground water flow, topography and soil type.

# § 130-21. Exception to regulations dated March 1, 1986.

The design criteria effective March 1, 1986, will come into force January 1, 1988, for properties which the Pelham Board of Health has recorded valid percolation tests. Until that date, design criteria current as of the February 28, 1986, shall be in force for those properties. It is not the intention of these regulations to invalidate results of prior percolation tests.

#### § 130-21 A. Additional exception to regulations dated March 1, 1986. [3-8-2011]

Systems that utilize innovative/alternative technologies approved by the Massachusetts Department of Environmental Protection with Provisional Use or General Use and Nitrogen Reduction Credit shall be allowed for new construction. Under this exception provision, the use of specified fill is allowable to meet the Title 5 minimum clearance between the water table and/or ledge and the bottom of the soil absorption system provided the following conditions are met:

1.) The design must utilize innovative/alternative technologies approved by the Massachusetts Department of Environmental Protection with Provisional Use or General Use and Nitrogen Reduction Credit. Full compliance with all conditions contained within the DEP approval for the specific technology utilized. Failure to comply with operation, maintenance and reporting requirements, or any other condition listed within the approval, shall constitute a violation of these regulations which may be penalized by the non-criminal method of disposition as provided in General Laws, Chapter 40, Section 21 D; or by filing a criminal complaint at the appropriate venue. Each 30 day period on which any violation exists uncorrected shall be deemed to be a separate offense. Penalty: \$50.00 for the first offense, \$150.00 for the second offense, \$300.00 for the third offense.

- 2.) Management of storm water run-off originating from the lot development and any change in topography from the use of fill. Management Plan shall be developed in accordance with the guidance document titled "Stormwater Management for Residential Lots Utilizing Innovative/Alternative Technologies".
- 3.) The house, leach field and all outbuilding must be located no more than 300 feet from a town road in existence as of January 1, 2011
- 4.) At least 50% of the lot must be preserved in its natural predevelopment condition. When calculating the area which must be preserved in its natural predevelopment state, the following types of land shall not be taken into consideration: a Velocity Zone or Regulatory Floodway identified by FEMA, land subject to flooding (including, but not limited to, wetlands and vernal pools), and land under surface water (land covered with water, including, but not limited to, rivers, ponds, oceans, streams and lakes). [3-8-2011]

## § 130-22. Wells. [3-1-1987]

Dug or shallow wells are not permitted for new construction in the Town of Pelham.

#### § 130-23. Permit and license fees.

## § 130-24. Variances. [3-11-1992]

The Pelham Board of Health may vary the provisions of these regulations when, in the Board's opinion, strict enforcement will manifest injustice. Any request for a variance shall be made in writing and shall state the specific regulation and reasons therefore. The Board of Health will not consider any request unless the applicant has, at his or her own expense, notified all abutters by certified mail at least 10 days prior to the Board of Health meeting at which the variance request will be heard. These notification requirements are waived for variances to repair existing septic systems. No provision of these regulations shall be construed as limitation on the emergency powers of the Pelham Board of Health.

# § 130-25. Enforcement; violations and penalties. [3-11-1992]

A. The Pelham Board of Health may take any enforcement action deemed lawful and appropriate.

B. Whosoever violates any of these regulations shall, upon conviction, be fined not less than \$10 nor more than \$500, except when otherwise provided by law.

#### § 130-26. Severability. [3-11-1992]

If any section, sentence, phrase or word of these regulations shall be declared invalid for any reason whatsoever, that decision shall not affect any other portion of these regulations, which shall remain in full force and effect, and to this end, the provisions of these regulations are hereby declared severable.