

## Chapter 308

### CONTENT AND APPLICATION OF FERTILIZER TO TURF

**[HISTORY: Adopted by the Board of Health of the Town of Eastham 3-5-2020. Amendments noted where applicable.]**

#### **§ 308-1. Purposes.**

- A. Mounting evidence supports the claim that excessive nutrient enrichment of the region's groundwaters and surface waters may have significant public health impact. Direct effects on drinking water sources are well known and include the increased concentrations of nitrogen to levels that can violate the Safe Drinking Water Standards. The indirect public health effects through surface water enrichment from nitrogen and phosphorus can be equally unhealthy, and may lead to environmental and ecological alterations, resulting in toxic algae blooms and the proliferation of human and animal disease organisms including bacterial, fungal, myxozoa and insect vector pathogens.
- B. The Board of Health has determined that excessive, inappropriate or improper use of fertilizers is part of the overall problem of nutrient enrichment, and therefore promulgates the following regulation, regarding the use of fertilizer on turf. This chapter incorporates current best management practices which are deemed essential in this effort to protect the public health and aid in achieving compliance with the total daily maximum loads (TMDL) for the Town's water resources prescribed by the Commonwealth of Massachusetts while allowing reasonable use of fertilizers for the enhancement of turf quality.

#### **§ 308-2. Applicability.**

- A. It is, therefore, desirable to control by regulation and education, in the Town of Eastham, the use of fertilizer that contains phosphorus and nitrogen for the purposes set out herein.
- B. This chapter is not intended to eliminate the use of fertilizer but only to eliminate excess amounts of phosphorus and nitrogen from reaching our water bodies and groundwater. This chapter adopts the best management practices as the required operating procedures for turf management throughout the Town.
- C. This chapter shall apply to turf management practices only.

#### **§ 308-3. Authorization.**

This chapter is adopted by the Town of Eastham's Board of Health as authorized by MGL c. 111, § 31, and is further authorized as implementing regulations pursuant to the Fertilizer Management District of Critical Planning Concern designation, Barnstable County Ordinance 13-07, and by Section 9 of Chapter 262 of the Acts of 2012.

#### **§ 308-4. Definitions.**

For the purposes of this chapter, the following words shall have the following meanings unless the context clearly indicates a different meaning:

**AGRICULTURE/AGRICULTURAL USE** — Farming in all of its branches including the cultivation and tillage of the soil, the production, cultivation, growing, and harvesting of any agricultural, floricultural or horticultural commodities, including but not limited to cranberries.

**BEST MANAGEMENT PRACTICE (BMP)** — A sequence of activities designed to limit a nonpoint pollution source as conforming to the most current edition of "Best Management Practices for Soil and Nutrient Management in Turf Systems," prepared by University of Massachusetts Extension, Center for Agriculture, Turf Program.

**COMPOST** — The biologically stable humus-like material derived from composting, or the aerobic, thermophilic decomposition of, organic matter, which is applied as a fertility source (also referred to as enhancement or conditioning) for turf.

**EASTHAM** — The Town and all of its waters.

**FERTILIZE, FERTILIZING, or FERTILIZATION** — The act of applying fertilizer to turf.

**FERTILIZER** — A substance that enriches turf with elements essential for plant growth, such as nitrogen, phosphorus, or other substances; "fertilizer" hereunder does not include dolomite, limestone, or lime, grass clippings, compost or compost tea.

**FERTILIZER APPLICATOR** — Any person who applies fertilizer to turf and soils.

**GROUNDWATER** — Water found in cracks, fissures and pore spaces in the saturated zone below the ground surface, including but not limited to perched groundwater.

**IMPERVIOUS SURFACE** — A surface that has been compacted or covered with a layer of material so that it is highly resistant to infiltration by water, except for compacted areas on athletic fields such as clay or baseball infields, intensely trafficked turf and the like.

**LANDSCAPING** — For purposes of this chapter, establishment (including by sod, seeding, or transplanting), renovation, maintenance, management or fertilization of turf.

**NUTRIENT** — Any of the following 17 elements needed for growth of a plant; the three nonmineral elements: carbon, hydrogen, and oxygen; the six macronutrients: nitrogen, phosphorus, potassium, calcium, magnesium, and sulfur; and the eight micronutrients: boron, copper, iron, chloride, manganese, molybdenum, nickel and zinc.

**SLOW-RELEASE, CONTROLLED-RELEASE, TIMED-RELEASE, OR SLOWLY SOLUBLE/AVAILABLE NITROGEN** — Nitrogen in a form that delays its availability for uptake and use after application, and is not rapidly available to turf.

**SOIL** — The uppermost layer of the earth's surface, comprised of mineral and organic matter, which can host biological communities.

**SOIL TEST** — A technical analysis of soil conducted by a soil testing laboratory that uses standards recommended by and compliant with the University of Massachusetts Amherst Extension Program BMPs, including a Modified Morgan soil testing procedure and extractable nutrient values.

**TURF** — Grass-covered soil held together by the roots of the grass, also known as "sod" or "lawn."

**WATERS or WATER** — Bodies include, but are not limited to, streams, including

intermittent streams, creeks, rivers, freshwater and tidal wetlands, ponds, lakes, marine waters, canals, lagoons, and estuaries within the Town, including without limitation all waters defined in MGL c. 131, § 40 and Town Wetland bylaw or regulation with the exception of the following: coastal and inland banks, beaches, coastal dunes, dune fields, and lands subject to coastal storm flowage, inland or coastal flooding or inundation, or within 100 feet of the 100-year storm line.

**§ 308-5. Standards of performance.**

- A. Best management practices. The best management practices ("BMP"), as defined in § 308-4 and attached as Appendix 1,<sup>1</sup> is hereby incorporated into and made part of this chapter.
- B. Performance standards for fertilizer application.
- (1) Fertilizer shall not be applied during or immediately prior to predicted heavy rainfall, such as but not limited to thunderstorms, hurricanes, or northeastern storms, or when the soil is saturated due to intense or extended rainfall;
  - (2) Neither fertilizer nor compost shall be applied between November 12 and the following April 14;
  - (3) Fertilizer applicators shall not apply, spill, or deposit fertilizer on any impervious surface and fail to remove the applied, spilled, or deposited fertilizer immediately (and in which case the applicator shall then either contain, dispose of legally or apply the fertilizer as allowed), and shall not apply, spill or deposit fertilizer in a manner that allows fertilizer to enter into storm drains or waterbodies or nearby properties;
  - (4) Unless the Town's Bylaws, including its Wetland Bylaw or regulations, contain a stricter standard, or other enforcement or approval mechanism such as through the Town's Conservation Commission, which shall control, fertilizer shall not be applied closer than 100 feet to any waterbody, or within the zone of contribution to a public drinking well unless permission is obtained through the enforcement authority set out herein allowing such activity.
  - (5) Fertilizer that contains phosphorus shall not be applied unless a soil test taken not more than 36 months before the proposed fertilizer application indicates that additional phosphorus is needed for growth of that turf, or unless establishing new turf or re-establishing or repairing turf after substantial damage or land disturbance, in which case the application shall be in compliance with the BMP.
  - (6) A single application of fertilizer that contains nitrogen shall not exceed 1.0 pound of actual nitrogen per thousand square feet, shall consist of at least 20% slow-release nitrogen fertilizer and the annual rate per twelve-month period shall not exceed 3.2 pounds of actual nitrogen per 1,000 square feet. Single applications may be done at intervals of no less than four weeks until the annual maximum is reached.

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1. Editor's Note: Said appendix is on file in the City offices.

- (7) The fertilizer application requirements of this section shall apply with the same limitations to combination products, i.e., amount of nitrogen and phosphorus.

C. Exemptions. The following activities shall be exempt from this chapter:

- (1) Application of fertilizer for agriculture/agricultural use.
- (2) Application of fertilizer to home gardens, landscape ornamentals, shrubs, trees bushes, vegetables, fruit and container plants.
- (3) Application of mulch exempted.

**§ 308-6. Education.**

- A. The Town may rely on the Cape Cod Cooperative Extension to assist in maintaining a program of fertilizer education that is based on the BMP.
- B. Fertilizer education may consist of, but is not limited to, collaboration with retailers to post in-store information on Town fertilizer regulations; mailings and flyers for the general public concerning Town fertilizer regulations, and other public educational efforts the BOH, from time to time, deems appropriate.

**§ 308-7. Enforcement, penalties, variance/appeal.**

- A. Enforcement and penalties: The Board of Health, through the Health Agent, Assistant Health Agent, or other enforcing officer or official designated by Board of Health, may enforce this chapter and address violations thereof through any lawful process:
  - (1) First offense: a warning shall be issued.
  - (2) Second offense: a fine of no more than \$100.
  - (3) Third offense and subsequent violations: a fine of \$300 per day may be imposed.
- B. Variance/appeals.
  - (1) Variance. A request for variance to any part of this chapter may be made directly to the Board of Health. A variance may be granted when in the opinion of the Board of Health the public and environmental health will not be compromised. The applicant must provide a written request to appear at a Board of Health Meeting and provide an opportunity to provide information on why a variance should be granted that would provide equal protection to public health and the environment.
  - (2) Appeal. Under MGL c. 111, § 31, any person or persons aggrieved by a Board of Health order may request a hearing before the Board of Health by filing a written request within seven days of receiving the order. At the hearing the petitioner will have an opportunity to be heard and to show why an order should be modified or reconsidered. Any person aggrieved by final order of the Board of Health may seek relief therefrom within 30 days in Barnstable Superior Court, as provided by the laws of the commonwealth.

**§ 308-8. Amendments.**

- A. Under MGL c. 111, § 31, no amendment to this chapter shall be adopted until such time as the Board of Health shall hold a public hearing thereon, notice of the time, place and subject matter of which, sufficient for identification, shall be given by publishing in a newspaper of general circulation in the Town once in each of two successive weeks, the first publication to be not less than 14 days prior to the date set for such hearing.
- B. No such amendment shall be effective unless the proposed amendment has been reviewed and approved by the Board of Health.
- C. Amendments shall also be subject to the procedures set out in Sections 10 and 11 of the Cape Cod Commission Act, Chapter 716 of the Acts of 1989, as amended. Specifically, amendments must also be consistent with the Fertilizer Management District of Critical Planning Concern designation, Barnstable County Ordinance 13-07 and the Guidelines for Implementing Regulations set out therein, including the requirement for consistency with the BMP.

**§ 308-9. Provisions severable.**

If any provision of this regulation is declared invalid by a court of competent jurisdiction, such invalidity shall not affect any remaining provisions of this regulation. Any part of these regulations subsequently invalidated by a new state law or modification of an existing state law shall automatically be brought into conformity with the new or amended law and shall be deemed to be effective immediately.

