Chapter 103

FERTILIZER NITROGEN AND PHOSPHORUS CONTROL

[HISTORY: Adopted by the 5-13-2013 Annual Town Meeting, Art. 35; amended in its entirety 10-27-2014 STM, Art. 7. Subsequent amendments noted where applicable.]

GENERAL REFERENCES

Herbicides — See Ch. 102.

Wetlands regulations — See Ch. 196A.

Wetlands — See Ch. 160.

§ 103-1. Purpose.

A Town bylaw to conserve resources and protect the environment by regulating the outdoor application of nitrogen and phosphorus in order to reduce the overall amount of excess nitrogen and phosphorus entering the town's Resource Areas as defined in the Orleans Wetlands Protection Bylaw (Ch. 160-2) and Orleans Wetland Protection Regulations Ch. 196A-2. Reducing excess nitrogen and phosphorus helps protect and improve water quality of Orleans valuable surface waters.

§ 103-2. Applicability.

This bylaw shall apply to and regulate any and all applications of nitrogen and phosphorus fertilizer within the Town of Orleans.

§ 103-3. Definitions.

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

AGRICULTURE — Includes farming in all its branches, generally as the cultivation and tillage of soil, dairying, the production, cultivation, growing and harvesting of agricultural, floricultural, viticultural, or horticultural commodities, and shellfishing, including preparations and delivery to storage or to market or to carriers for transportation to market.

BEST MANAGEMENT PRACTICE, BMP — A sequence of activities designed to limit a nonpoint pollution source. For the purposes of this Bylaw and pursuant to Section 103-6 of this Bylaw, BMP means 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.

FERTILIZER — A substance that enriches the soil with elements essential for plant growth, such as nitrogen, phosphorus, potassium or other substances; fertilizer does not include those nutrients that are normally excluded from fertilizer such as chemicals that are part of dolomite, limestone, or lime.

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.

NITROGEN — An element essential to plant growth. For the purposes of the Bylaw, nitrogen may be available as slow-release, controlled-release, timed-release, slowly available, or water insoluble nitrogen, which means nitrogen in a form that delays its availability for plant uptake and use after application and is not rapidly available to turf and other plants; and/or quick-release, water-soluble nitrogen which means nitrogen in a form that does not delay its availability for turf and other plant uptake and is rapidly available for turf and other plant uptake and use after application.

PHOSPHORUS — Mineral and organic substances that contain phosphorus and that are used for improving the nutrition of plants.

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

§ 103-4. Performance standards.

All applications shall comply with the following standards:

- A. The application of nitrogen or phosphorus is prohibited between October 16 and April 14.
- B. No person shall cause nitrogen or phosphorus to apply to, or otherwise be deposited to any impervious surface including parking lot, driveway, roadway, sidewalk, or ice. Any fertilizer applied, spilled, and/or deposited on any impervious surface, either intentionally or accidentally, must be immediately and completely removed and contained and either legally applied to turf or any other legal site or retuned to an appropriate container.
- C. No person shall apply nitrogen or phosphorus directly during or immediately prior to 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.
- D. The application of nitrogen or phosphorus is prohibited within 100 feet of Resource Areas as defined in the Orleans Wetland Protection Bylaw and regulations.
- E. Phosphorus containing fertilizer shall not be applied unless a soil test taken not more than three years 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 Best Management Practices (BMP) developed by University of Massachusetts Extension, Center for Agriculture, Turf Program.

§ 103-5. Exemptions.

The following activities shall be exempt from Section 103-4:

- A. Application of nitrogen or phosphorus for agriculture and horticulture uses
- B. Application of nitrogen or phosphorus to gardens, including vegetable and flower, trees, shrubs and indoor applications including greenhouses.
- C. Application of nitrogen or phosphorus for the establishment of new vegetation in

the first growing season, or repairing of turf in the first growing season, after substantial damage.

D. Yard waste compost or other similar materials that are primarily organic in nature and are applied to improve the physical condition of the soil.

§ 103-6. Recommendations. [Amended 5-8-2017 ATM, Art. 35]

A. The Town of Orleans strongly recommends that nitrogen should be applied to turf and other plants at the lowest rate necessary. Any single application of nitrogen should not exceed 0.5 pounds of nitrogen per 1000 square feet, and the annual aggregate total application of nitrogen should not exceed 1.0 pounds per 1000 square feet. The application of any nitrogen should be of an organic, slow-release, water-insoluble form.

§ 103-7. Compliance.

Fertilizer shall only be applied in conformance with this section within 2 years of its effective date.

§ 103-8. Enforcement.

The enforcement authority shall be the Zoning Enforcement Officer or his designee.

§ 103-9. Severability.

Should any section, part, or provision of this bylaw be deemed invalid or unconstitutional, such decision shall not affect the validity of the remaining terms of this bylaw as a whole or any part thereof, other than the section, part, or provision held invalid or unconstitutional.