

Article 68 Work Group Report to Board of Selectmen

December 7, 2010

Lucinda Young, Chair

Peter Boyce, Vice-Chair

Lee Saperstein, Secretary

What We Have Accomplished

1. Finished Work Group version of Article 68
(Accompanies this report)
2. Finished suggested Board of Health regulations
(Accompanies this report)
3. Completed first draft of Nantucket BMP
Nantucket Best Management Practices
(Needs significant additional work)
4. Started preparation of educational materials
(One draft sample accompanies this report)
5. Collected preliminary budget information

Article 68

- Final official version from Work Group
 - Incorporates one stage of legal review
 - Needs final legal review
- Reviewed at three meetings of full Work Group
- Final version passed with unanimous vote of all Work Group members.
- Sets simple guidelines for fertilizer use
 - Exceptions allowed if following BMP
- Establishes licensing/Certification for landscapers
- Note: Not to be forwarded to State until BMP ready

Board of Health Regulations

- Mirrors Home Rule Petition
- Calls for establishment of Licensing/Certification
- Sets simple, coarse limits for fertilizer use
- Refers to BMP document for exceptions
- Serves educational purpose
 - Especially before L/C phase is implemented

Best Management Practices (BMP) Document

- Authoritative document
 - Produced by local experts
 - Includes latest soil science
 - To be reviewed by UMASS & other outside experts
- Central to all other efforts
 - Feeds into public education efforts
 - Basis for Regulations and licensing/certification
- Could be example for Cape & Islands
 - Must be high quality document – a hard job

Progress on BMP

- First draft completed
 - Reviewed by subset of WG
- More work is needed
 - Needs to be more concise
 - Some additional material is needed
 - Some chapters need rewriting
- Schedule for BMP development being formulated

Public/Homeowner Education

- Sample mockup of one informational sheet done
 - An example of material for distribution
 - Funding sources identified
- Targeted mailing of informational sheet
 - Included with irrigation community invoices
 - Must be ready by Feb 1 for inclusion in mailing



NANTUCKET CARES



ABOUT ITS HARBORS, GARDENS, AND PONDS,
ITS GROUNDWATER AND LANDSCAPES

- C** Complete a soil test every three years to determine fertilizer needs. Consult Website below for more information.
- A** Add lime to correct soil acidity – as indicated by the soil test
- R** Reduce nitrogen and phosphorous reaching our harbors, ponds & groundwater by not fertilizing before or during heavy rain or when soil temperature is below 55°F
- E** Effectively reduce nitrogen needed for your lawn by mowing at least 2 ½ inches high and leaving clippings
- S** Soil enhanced with compost helps promote healthy lawns and gardens without harming our waters and wetlands.



For further information on best fertilizer practices for Nantucket's unique soils and climate, please visit:
<http://nantucket-ma.gov/fertilizer> (Note: This is a sample address)

A Proposal to the Board of Selectmen of the Town and County of Nantucket from the Article 68 Work Group for Regulations Enforced by the Board of Health of the Town of Nantucket (November 2, 2010)

BOARD OF HEALTH REGULATIONS ON THE CONTENT AND APPLICATION OF FERTILIZER USED IN THE TOWN OF NANTUCKET

SECTION 1. FINDINGS

1.1. There is sound scientific evidence to conclude that nitrogen and phosphorus in fertilizers are contaminants that negatively affect fresh and salt waters when present in excessive amounts. These excessive amounts of nitrogen and phosphorus contribute to undesirable algae and aquatic plant growth within all Nantucket water bodies.

SECTION 2. PURPOSE

2.1. It is necessary to control by Regulation in the Town of Nantucket the use of fertilizer that contains phosphorus and high percentages of fast-acting nitrogen so as to improve the water quality of the Town.

2.2. These Regulations provide for a reduction of nitrogen and phosphorus going into Nantucket's waters and wetlands by means of an organized system of education, licensure, and regulation of practice and should help Nantucket to achieve compliance with the Total Maximum Daily Loads (TMDL) prescribed by the Commonwealth of Massachusetts for nitrogen and phosphorus in its waters.

SECTION 3. AUTHORITY

3.1. These Regulations are adopted by the Town of Nantucket's Board of Health as authorized by Massachusetts General Laws, Chapter 111, Subsection 31.

SECTION 4. DEFINITIONS; For the purposes of these Regulations, the following words shall have the following meanings unless the context clearly indicates a different meaning:

“Agriculture” means farming in all of its branches and the cultivation and tillage of the soil, the production, cultivation, growing, and harvesting of any agricultural, floricultural or horticultural commodities. For the purposes of these Regulations, agriculture means the raising of crops for commercial sale, where the threshold of commercial is two thousand five hundred dollars (\$2500.00) or more per year measured as an average over a five-year period. See also “horticulture.”

“Amendment” refers to the application of substances to soils and plantings; amendments include but are not limited to fertilizers and may include other soil conditioners such as lime, compost, and other organic materials.

“Applicator” means any person who applies fertilizer to plants and soils.

“Best Management Practice,” BMP, means a sequence of activities designed to limit a nonpoint pollution source. For the purposes of these Regulations and pursuant to Section 5.1 of these Regulations, BMP means the current edition of “Best Management Practices for Fertilizer Use on Lawn and Landscape Plantings on Nantucket, MA.”

“Combination Products,” sometimes known as “Weed and feed,” means any product that, in combination with fertilizer, contains weed killer, defoliant, crabgrass preventer, or any other chemical for restricting the growth of plants other than turf.

“Compost” is partially decomposed organic matter that is used as a soil amendment. Compost is considered a fertilizer for the purposes of this Act.

“Compost tea” is a liquid infusion of compost that is used as a soil amendment or foliar fertilizer. Compost tea is considered a fertilizer for the purposes of this Act.

“Continuing education hours” means elapsed or actual time spent in an educational, professional-development activity.

“Fast-acting nitrogen” means any water-soluble nitrogen that is immediately available to plants upon application.

“Fertilize, fertilizing, or fertilization” means the act of applying fertilizer to plants or soils.

“Fertilizer” means a substance that enriches the soil with elements essential for plant growth, such as nitrogen, phosphorus, or other substances; fertilizer does not include those nutrients that are normally excluded from fertilizer such as chemically part of dolomite, limestone, or lime. Fertilizer includes foliar fertilizers as defined below.

“Foliar Fertilizer” means any fertilizer product designed for uptake into a plant through its leaves and which typically are sprayed directly onto a plant.

“Horticulture” is a general term meaning plant science and plant products. For the purposes of these Regulations, horticulture means the raising of flowers, fruits, vegetables, berries, herbs, nuts, and other similar products for commercial sale, where the threshold of commercial is two thousand five hundred dollars (\$2500.00) or more per year measured as an average over a five-year period. See also “agriculture.”

“Impervious surface” means a surface that has been compacted or covered with a layer of material so that it is highly resistant to infiltration by water.

“Landscape professional” means a person who, in exchange for money, goods, services, or other consideration, applies fertilizer to plants or soils.

“Landscaping” means establishment by sod, seeding, or transplanting, renovation, maintenance, or fertilization of turf and other plantings.

“Licensed applicator” means a person authorized by the Nantucket Board of Health or Health Agent to apply fertilizer for commercial purposes.

“Nantucket” is the Town and County of Nantucket and all of its waters.

“Nantucket BMP” is the current edition of the “Best Management Practices for Fertilizer Use on Lawn and Landscape Plantings on Nantucket, MA.” Pursuant to Section 5.1 of these Regulations, the Nantucket BMP is adopted by the Board of Health and is generally available to the public.

“Nonpoint Pollution” means contamination which includes but is not limited to sediments, nutrients, pathogens, and pollutants that collect in water-bodies from stormwater runoff.” (301 CMR 26.03, “Definitions” in the “Coastal Pollutant Remediation Program”)

“Nonpoint Pollution Source (NPS)” means any activity releasing pollution that is not deemed point-source pollution.

“Nutrient” means any of the following 16 elements needed for growth of a plant; the three (3) non-mineral elements: carbon, hydrogen, and oxygen; the six (6) macronutrients: nitrogen, phosphorus, potassium, calcium, magnesium, and sulphur; and the seven (7) micronutrients: boron, copper, iron, chloride, manganese, molybdenum, and zinc.

“Nutrient management” means systematic control of the application of nutrients.

“Plantings” means organized cultivation of plants for beneficial purposes.

“Plants” are biological organisms in the *Kingdom Plantae* that, for the purposes of this Act, are used domestically.

“Point-Source water pollution” comes from stationary locations such as sewage treatment plants, factories, and ships and is subject to regulatory control under the Clean Water Act.

“Slow-release, controlled-release, timed-release, slowly available, or water-insoluble nitrogen” 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.

“Soil” means the upper-most layer of the earth’s surface, comprised of mineral and organic matter, which can host biological communities.

“Soil test” means a technical analysis of soil conducted by an accredited soil-testing laboratory.

“Turf” means 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 of Nantucket, including without limitation all waters defined in Massachusetts General Laws Chapter 131, Section 40 and Town of Nantucket Code Section 136 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 hundred-year storm line, or within any area located within the geographic boundaries of the resource areas that are habitat for rare/significant wildlife and/or fauna.

SECTION 5. STANDARDS OF PERFORMANCE

5.1. Nantucket Best Management Practices

There shall be available at all times a Nantucket Best Management Practices (Nantucket BMP) document that is approved by the Board of Health that is based on principles of soil science appropriate to Nantucket soils and climate. The initial version of the Nantucket BMP was developed by a broad group of stakeholders representing diverse interests and has been reviewed by soil and turf scientists and educators. Amendment of the Nantucket BMP shall be based on scientific information and shall be initiated by a similarly broad group. Such changes may go into effect only after scientific review by knowledgeable soil scientists and shall require a vote of a supermajority of the Board of Health.

5.2. Prohibited Conduct. Applicators shall not:

- 5.2.1. apply fertilizer immediately before or during heavy rainfall, such as but not limited to thunderstorms, hurricanes, or north eastern storms, or when the soil is saturated due to intense or extended rainfall;

5.2.2. apply fertilizer between November 1st and the following March 31st of any calendar year;

5.2.3. apply, spill, or deposit fertilizer on any impervious surface and fail to remove the applied, spilled, or deposited fertilizer immediately, or to apply fertilizer in a manner that allows fertilizer to enter into storm drains;

5.2.4. apply fertilizer closer than 100 feet to any water-body as defined above unless a permit is obtained from the Nantucket Conservation Commission allowing such activity [This reflects current Nantucket Wetland Regulations];

5.2.5. deposit grass clippings, leaves, or any other vegetative debris into or within 25 feet of water-bodies, retention and detention areas, drainage ditches or storm water drains, or onto impervious surfaces such as, but not limited to, roadways and sidewalks, except during scheduled clean-up programs.

5.3. Fertilizer Content and Application Requirements for Applicators

5.3.1. The following restrictions shall apply to the content of fertilizer to be applied to turf, other plants, or soil.

5.3.1.1. An applicator shall not apply any fertilizer unless the fertilizer contains a minimum of 70 percent slow-release nitrogen as the nitrogen additive; exemptions to this standard may be allowed, as in Section 5.3.3., to licensed applicators who follow the Nantucket BMP.

5.3.1.2. An applicator shall not apply fertilizer that contains phosphorus, unless a soil test indicates a phosphorus deficiency and it is applied in conformance with the Nantucket BMP.

5.3.2. Fertilizer application shall comply with the Nantucket BMP. A single application for turf shall not exceed 1.25 pounds of actual nitrogen per thousand square feet, and the annual rate shall not exceed 4.0 pounds of actual nitrogen per thousand square feet; and a single application for trees, shrubs, herbs and other ornamental plantings shall not exceed 0.75 pounds of actual nitrogen per thousand square feet, and the annual rate shall not exceed 2.0 pounds of actual nitrogen per thousand square feet.

5.3.3. The fertilizer application requirements of Section 5.3.2. of these Regulations shall apply without limitation to the application of combination products.

5.3.4. Foliar fertilizers shall be applied in compliance with the Nantucket BMP. The nitrogen application rate of foliar products shall be included when calculating the annual total nitrogen application rate.

5.3.5. Compost and compost tea shall be applied in compliance of the Nantucket BMP. The nitrogen application rate of compost and compost tea shall be included when calculating the annual total nitrogen application rate.

5.4. Exemptions. The following activities shall be exempt from Sections 5.2. and 5.3. of these Regulations:

5.4.1. Application of phosphorus when establishing vegetation, after land disturbance, and when re-establishing or repairing turf after substantial damage, provided the application is in compliance with the Nantucket BMP.. When applied within 100 ft of any water-body such application requires a permit from the Nantucket Conservation Commission [This reflects current Nantucket Wetland Regulations].

5.4.2. Application of fertilizer by a licensed applicator when following the recommendations of the Nantucket BMP; a written record must accompany this exemption.

5.4.3. Fertilizer may be applied by landscape professionals without a license, in accordance with the Nantucket BMP, during the interim between adoption of these Regulations and the development of a licensing program by the Nantucket Board of Health.

5.4.4. Application of fertilizer for agricultural and horticultural uses, including sod farms.

SECTION 6. EDUCATION, LICENSURE, ENFORCEMENT, AND PENALTIES.

6.1. Education

6.1.1. The Town of Nantucket Board of Health shall maintain a program of fertilizer education that is based on the Nantucket BMP.

6.1.2. The Town's Board of Health shall administer a test passage of which shall demonstrate an individual's participation in fertilizer education.

6.1.3. Summaries of fertilizer application requirements will be made readily available to the public by the Town.

6.2. Licensure

6.2.1. A license issued by the Town of Nantucket Board of Health is required of Landscape Professionals when they fertilize lawns and plantings; such a license may be held but is not required by home-owners who apply fertilizer on their own property.

6.2.2. Persons who pass the test described in 6.1.2. may apply to the Board of Health for a fertilizer license.

6.2.3. Fertilizer licenses shall be valid for a period of three years from the date of issuance; renewal requires obtaining the required amount of continuing education hours or passage of the current test.

6.3. Enforcement

The Health Director and Assistant Health Officer are hereby empowered to enforce this Section of the Board of Health Regulations.

6.4. Penalties

Without limiting any other remedies or penalties, the Board of health may punish any person or entity that violates these Regulations by assessing a penalty of \$300.00. Each day or part thereof which violation occurs or continues shall constitute a separate offense. As an alternative to criminal prosecution or civil action, the non-criminal disposition procedure set forth in Massachusetts General laws Chapter 40, Subsection 21D, Sections 1-2, 1-3,1-4,1-5, and 1-6 of the Code of the Town of Nantucket may be used with a penalty of \$300.00 for each violation, each day ort part thereof during which such violation occurs or continuers constitutes a separate offense.

SECTION 7. SEVERABILITY CLAUSE

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

SECTION 8. AMENDMENTS

These Regulations are based on the Nantucket BMP and were developed by a broad group of stakeholders representing diverse interests and has been reviewed by soil and turf scientists and educators. Amendment of these Regulations shall be based on scientific information and may be initiated only by a similarly broad group. Such changes

may go into effect only after scientific review by knowledgeable soil scientists and passage by a super-majority of the Board of Health.

SECTION 9. EFFECTIVE DATE

These Regulations shall take effect on January 1, 2012.

[Printed: 2010-11-30]

A Proposal to the Board of Selectmen of the Town and County of Nantucket from the Article 68 Work Group for a Home Rule Petition to Control the Application of Fertilizer on Nantucket:

AN ACT REGULATING THE CONTENT AND APPLICATION OF FERTILIZER USED IN THE TOWN OF NANTUCKET TO MINIMIZE NUTRIENT CONTAMINATION IN NANTUCKET'S WATERS

SECTION 1. FINDINGS

1.1. There is a sound scientific basis to conclude that nitrogen and phosphorus in fertilizers are contaminants that negatively affect water-bodies when present in excessive amounts, contributing to undesirable algae and aquatic plant growth, known as "eutrophication."

1.2. Excessive amounts of both nitrogen and phosphorus discharged into the waters of Nantucket significantly decrease the habitat value of the freshwater and estuarine ecosystems including, without limitation, to hard clams, bay scallops and other species and increase the risk of deleterious impacts on public health and general welfare.

1.3. Nantucket has significant amounts of coarse, sandy soils that are subject to rapid water infiltration, percolation, and leaching of nutrients.

1.4. The Nantucket and Madaket Harbors, the surrounding coastal waters, and Nantucket's ponds and wetlands are essential components of the recreation, tourism, and commercial-fishing industries in the Town of Nantucket.

1.5. Applying appropriate amounts and types of slow-release nitrogen to plants and plantings maintains healthy plant growth while decreasing contamination to groundwater.

1.6. Applying phosphorus to plants only in situations in which a soil test indicates the need to do so is a sound management practice and can decrease the nutrient load to Nantucket and Madaket Harbors, freshwater ponds, and wetlands in the Town of Nantucket.

1.7. Plants do not effectively utilize nitrogen and phosphorus during periods when the soil is frozen or the plants are dormant, thus allowing nutrients either to run off or to leach into Nantucket's Harbors and ponds in increased amounts.

1.8. Heavy precipitation, snowmelt, and excessive irrigation greatly increase the amount of nitrogen and phosphorus that runs off or leach into adjacent water-bodies.

1.9. The Nantucket & Madaket Harbors Action Plan, approved by the Secretary of the Massachusetts Executive Office of Energy and Environmental Affairs (EEA) on December 21, 2009, specifies the need to reduce nutrients (specifically nitrogen and phosphorus) flowing into the Harbors.

1.10. EEA, in Report #97-TMDL-2 Control #249.0, January 28, 2009, "Nantucket Harbor Embayment System, Total Maximum Daily Loads for Total Nitrogen," has mandated Total Maximum Daily Loads (TMDL) for Nantucket Harbor.

1.11. 301 CMR 21.98, "Policy Appendix," specifies that the Massachusetts Coastal Zone Management (MCZM) Program Plan will "ensure that nonpoint pollution controls promote the attainment of state surface water quality standards in the coastal zone" (301 CMR 21.98(3): Water Quality Policy # 2).

1.12. The Massachusetts "Nonpoint Pollution Source (NPS) Management Plan," created by the Department of Environmental Protection (DEP), Bureau of Resource Protection, states that a DEP objective is to assist "communities in drafting river protection bylaws and ordinances."

1.13. The Massachusetts Estuaries Project (MEP), whose reports are available from the DEP, states, as part of the suggestions for a solution to the problem of nutrient management, that "limiting the use of lawn fertilizers" may be necessary.

SECTION 2. PURPOSE

2.1. It is necessary to impose mandatory controls in the Town of Nantucket on the use of fertilizer that contains phosphorus and nitrogen so as to improve the water quality of the Town.

2.2. Restrictions on the amount of nitrogen and phosphorus discharged into Nantucket's waters will protect the integrity of Nantucket's waters for present and future generations.

2.3. This Act provides for a reduction of nitrogen and phosphorus going into Nantucket's waters by means of an organized system of education, licensure, and regulation of practice.

2.4. The purpose of this Act is to help Nantucket achieve compliance with the Total Maximum Daily Loads (TMDL) prescribed by the Commonwealth of Massachusetts for nitrogen and phosphorus in its waters.

SECTION 3. AUTHORITY

3.1. Article 68, as amended and approved by the Town of Nantucket Annual Town Meeting on April 6, 2010, adjourned session, approved the introduction of this legislation in the General Court.

SECTION 4. DEFINITIONS: For the purposes of this Act, the following words shall have the following meanings unless the context clearly indicates a different meaning.

"Agriculture" means farming in all of its branches and the cultivation and tillage of the soil, the production, cultivation, growing, and harvesting of any agricultural, floricultural

or horticultural commodities. For the purposes of this Act agriculture means the raising of crops for commercial sale, where the threshold of commercial is two thousand five hundred dollars (\$2500.00) or more per year measured as an average over a five-year period. See also “horticulture.”

“Amendment” refers to the application of substances to soils and plantings; amendments include but are not limited to fertilizers and may include other soil conditioners such as lime, compost, and other organic materials.

“Applicator” means any person who applies fertilizer to plants and soils.

“Best Management Practice,” BMP, means a sequence of activities designed to limit a nonpoint pollution source. For the purposes of this Act and pursuant to Section 5.1, BMP means the current edition of “Best Management Practices for Fertilizer Use on Lawn and Landscape Plantings on Nantucket, MA.”

“Combination Products,” sometimes known as “Weed and feed,” means any product that, in combination with fertilizer, contains weed killer, defoliant, crabgrass preventer, or any other chemical for restricting the growth of plants other than turf.

“Compost” is partially decomposed organic matter that is used as a soil amendment. Compost is considered a fertilizer for the purposes of this Act.

“Compost tea” is a liquid infusion of compost that is used as a soil amendment or foliar fertilizer. Compost tea is considered a fertilizer for the purposes of this Act.

“Continuing education hours” means elapsed or actual time spent in an educational, professional-development activity.

“Fast-acting nitrogen” means any water-soluble nitrogen that is immediately available to plants upon application.

“Fertilize, fertilizing, or fertilization” means the act of applying fertilizer to plants or soils.

“Fertilizer” means a substance that enriches the soil with elements essential for plant growth, such as nitrogen, phosphorus, or other substances; fertilizer does not include those nutrients that are normally excluded from fertilizer such as chemically part of dolomite, limestone, or lime. Fertilizer includes foliar fertilizers as defined below.

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“Nantucket BMP” is the current edition of the “Best Management Practices for Fertilizer Use on Lawn and Landscape Plantings on Nantucket, MA.” Pursuant to Section 5.1 of this Act, the Nantucket BMP is adopted by the Board of Health and is generally available to the public.

“‘Nonpoint Pollution’ means contamination which includes but is not limited to sediments, nutrients, pathogens, and pollutants that collect in water-bodies from stormwater runoff.” (301 CMR 26.03, “Definitions” in the “Coastal Pollutant Remediation Program”)

“Nonpoint Pollution Source (NPS)” means any activity releasing pollution that is not deemed point-source pollution.

“Nutrient” means any of the following 16 elements needed for growth of a plant; the three (3) non-mineral elements: carbon, hydrogen, and oxygen; the six (6) macronutrients: nitrogen, phosphorus, potassium, calcium, magnesium, and sulphur; and the seven (7) micronutrients: boron, copper, iron, chloride, manganese, molybdenum, and zinc.

“Nutrient management” means systematic control of the application of nutrients.

“Plantings” means organized cultivation of plants for beneficial purposes.

“Plants” are biological organisms in the *Kingdom Plantae* that, for the purposes of this Act, are used domestically.

“Point-Source water pollution” comes from stationary locations such as sewage treatment plants, factories, and ships and is subject to regulatory control under the Clean Water Act.

“Slow-release, controlled-release, timed-release, slowly available, or water-insoluble nitrogen” 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.

“Soil” means the upper-most layer of the earth’s surface, comprised of mineral and organic matter, which can host biological communities.

“Soil test” means a technical analysis of soil conducted by an accredited soil-testing laboratory.

“Turf” means 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 of Nantucket, including without limitation all waters defined in Massachusetts General Laws Chapter 131, Section 40 and Town of Nantucket Code Section 136 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 hundred-year storm line, or within any area located within the geographic boundaries of the resource areas that are habitat for rare/significant wildlife and/or fauna.

SECTION 5. STANDARDS OF PERFORMANCE

5.1. Nantucket Best Management Practices

There shall be available at all times a Nantucket Best Management Practices (Nantucket BMP) document that is approved by the Board of Health that is based on principles of soil science appropriate to Nantucket soils and climate. The initial version was developed by a broad group of stakeholders representing diverse interests and has been reviewed by soil and turf scientists and educators. Amendment of the Nantucket BMP shall be based on scientific information and shall be made by a similarly broad group. Such changes may go into effect only after scientific review by knowledgeable soil scientists and shall require a vote of a supermajority of the Board of Health.

5.2. Prohibited Conduct. Applicators shall not:

5.2.1. apply fertilizer immediately before or during heavy rainfall, such as but not limited to thunderstorms, hurricanes, or north eastern storms, or when the soil is saturated due to intense or extended rainfall;

5.2.2. apply fertilizer between November 1st and the following March 31st of any calendar year;

5.2.3. apply, spill, or deposit fertilizer on any impervious surface and fail to remove the applied, spilled, or deposited fertilizer immediately, or to apply fertilizer in a manner that allows fertilizer to enter into storm drains;

5.2.4. apply fertilizer closer than 100 feet to any water body as defined above unless a permit is obtained from the Nantucket Conservation Commission allowing such activity [This reflects current Nantucket Wetland Regulations];

5.2.5. deposit grass clippings, leaves, or any other vegetative debris into or within 25 feet of water-bodies, retention and detention areas, drainage ditches or storm water drains, or onto impervious surfaces such as, but not limited to, roadways and sidewalks, except during scheduled clean-up programs.

5.3. Fertilizer Content and Application Requirements for Applicators

5.3.1. The following restrictions shall apply to the content of fertilizer to be applied to turf, other plants, or soil.

5.3.1.1. An applicator shall not apply any fertilizer unless the fertilizer contains a minimum of 70 percent slow-release nitrogen as the nitrogen additive; exemptions to this standard may be allowed, as in Section 5.3.3., to licensed applicators who follow the Nantucket BMP.

5.3.1.2. An applicator shall not apply fertilizer that contains phosphorus, unless a soil test indicates a phosphorus deficiency and it is applied in conformance with the Nantucket BMP.

5.3.2. Fertilizer application shall comply with the Nantucket BMP. A single application for turf shall not exceed 1.25 pounds of actual nitrogen per thousand square feet, and the annual rate shall not exceed 4.0 pounds of actual nitrogen per thousand square feet; and a single application for trees, shrubs, herbs and other ornamental plantings shall not exceed 0.75 pounds of actual nitrogen per thousand square feet, and the annual rate shall not exceed 2.0 pounds of actual nitrogen per thousand square feet.

5.3.3. The fertilizer application requirements of Section 5.3.2. of this Act shall apply without limitation to the application of combination products.

5.3.4. Foliar fertilizers shall be applied in compliance with the Nantucket BMP. The nitrogen application rate of foliar products shall be included when calculating the annual total nitrogen application rate.

5.3.5. Compost and compost tea shall be applied in compliance of the Nantucket BMP. The nitrogen application rate of compost and compost tea shall be included when calculating the annual total nitrogen application rate.

5.4. Exemptions. The following activities shall be exempt from Sections 5.2. and 5.3. of this Act:

5.4.1. Application of phosphorus when establishing vegetation, after land disturbance, and when re-establishing or repairing turf after substantial damage, provided the application is in compliance with the Nantucket BMP.. When applied within 100 ft of any waterbody such application requires a permit from the Nantucket Conservation Commission [This reflects current Nantucket Wetland Regulations].

5.4.2. Application of fertilizer by a licensed applicator when following the recommendations of the Nantucket BMP; a written record must accompany this exemption.

5.4.3. Fertilizer may be applied by landscape professionals without a license, in accordance with the Nantucket BMP, during the interim between passage of this Act and the development of a licensing program by the Nantucket Board of Health.

5.4.4. Application of fertilizer for agricultural and horticultural uses, including sod farms.

SECTION 6. EDUCATION, LICENSURE, ENFORCEMENT, AND PENALTIES.

6.1. Education

6.1.1. The Town of Nantucket Board of Health shall maintain a program of fertilizer education that is based on the Nantucket BMP.

6.1.2. The Town's Board of Health shall administer a test, passage of which shall demonstrate an individual's participation in fertilizer education.

6.1.3. Summaries of fertilizer application requirements will be made readily available to the public by the Town.

6.2. Licensure

6.2.1. A license issued by the Town of Nantucket Board of Health is required of Landscape Professionals when they fertilize lawns and plantings; such a license may be held but is not required by home-owners who apply fertilizer on their own property.

6.2.2. Persons who pass the test described in 6.1.2. may apply to the Board of Health for a fertilizer license.

6.2.3. Fertilizer licenses shall be valid for a period of three years from the date of issuance; renewal requires obtaining the required amount of continuing education hours or passage of the current test.

6.3. Enforcement

Enforcement of this Act shall be by the Nantucket Board of Health or its agent.

6.4. Penalties

6.4.1. Application of fertilizer in violation of this Act by an unlicensed person shall be punished by a fine of three hundred dollars (\$300.00).

6.4.2. Application of fertilizer by a licensed person in violation of this Act shall be punished by loss of license and/or a fine of three hundred dollars (\$300.00).

6.4.3. Subsequent offenses shall be punished by fines of five hundred dollars (\$500.00) per offense.

6.4.4. As an alternative to initiating criminal proceedings, this Act may be enforced pursuant to the noncriminal disposition procedure set forth in M.G.L. c.40 §21D and Chapter 1, Article II of the Town's Code, in which case the Board of Health or its agent shall be the enforcing person and the penalty shall be \$300.00 for each offense.

SECTION 7. SEVERABILITY CLAUSE

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

SECTION 8. AMENDMENTS

This Act is based on the Nantucket BMP and was developed by a broad group of stakeholders representing diverse interests and has been reviewed by soil and turf scientists and educators. Amendment of this Act shall be based on scientific information and may be made only by a similarly broad group. Such changes may go into effect only after scientific review by knowledgeable soil scientists and shall require a vote of a supermajority of the Nantucket Board of Health.

SECTION 9. Regulations

The Town of Nantucket Board of Health is hereby authorized to adopt regulations to effectuate the purposes of this Act, including without limitation the adoption of the Nantucket BMP as a regulation; However, the failure of the Board of Health to adopt regulations shall not act to suspend or invalidate the effect of this Act.[Printed: 2010-11-30]