



*VIRGINIA DEPARTMENT
OF AGRICULTURE AND
CONSUMER SERVICES*

**Report on the use of slowly available nitrogen
in lawn fertilizer and lawn maintenance fertilizer**

December 2011

**Matthew J. Lohr
Commissioner**

PREFACE

The 2011 session of the Virginia General Assembly tasked the Virginia Department of Agriculture and Consumer Services (VDACS), in consultation with the Department of Conservation and Recreation (DCR) and the Chesapeake Bay Commission (CBC), with the preparation of a report concerning the use of slowly available nitrogen in lawn fertilizer and lawn maintenance fertilizer. This report, which is predicated upon extensive discussions with a technical advisory committee (TAC) of stakeholders, includes discussion and recommendations regarding:

- The most effective means to encourage the use of slowly available nitrogen in lawn fertilizer and lawn maintenance fertilizer
- The most appropriate percentages of slowly available nitrogen to be included in lawn fertilizer and lawn maintenance fertilizer
- The most appropriate effective date for any change
- Costs to the manufacturer and consumer
- Recommendations on related issues

We wish to acknowledge the considerable time that participants in the TAC gave in providing input to this report. A list of the TAC's participants is provided in the appendices.

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EXECUTIVE SUMMARY

The 2011 session of the Virginia General Assembly tasked the Virginia Department of Agriculture and Consumer Services (VDACS), in consultation with the Department of Conservation and Recreation (DCR) and the Chesapeake Bay Commission (CBC), with the preparation of a report concerning the use of slowly available nitrogen in lawn fertilizer and lawn maintenance fertilizer. This report, which is predicated upon extensive discussions with a technical advisory committee (TAC) of stakeholders, includes discussion and recommendations regarding:

- The most effective means to encourage the use of slowly available nitrogen in lawn fertilizer and lawn maintenance fertilizer
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- Costs to the manufacturer and consumer
- Recommendations on related issues

The TAC met three times at VDACS' office in Richmond during the summer of 2011. Attendees included representatives from Agrium, Inc., Chesapeake Bay Commission, Chesapeake Bay Foundation, DCR, Responsible Industry for a Sound Environment (RISE), Scotts Miracle-Gro, Southern States, University of Florida, Virginia Agribusiness Council, Virginia Association of Soil and Water Conservation Districts, Virginia Cooperative Extension, Virginia Crop Production Association, Virginia Farm Bureau, Virginia Green Lawn Care, Virginia Homebuilders Association, Virginia Municipal League, Virginia Nursery and Landscape Association, Virginia Tech, and Virginia Turfgrass Council.

The TAC's discussions began with a presentation by Dr. Mark Alley, with Virginia Tech, regarding the nitrogen cycle and a presentation by Dr. Jerry Sartain, with the University of Florida, regarding Florida's experience addressing slow release nitrogen products. The TAC went on to discuss application rates for slowly available nitrogen in lawn fertilizer and lawn maintenance fertilizer and found that the most appropriate and practical method to address application rates is through amendments to DCR's Virginia Nutrient Management Standards and Criteria, rather than through amendments to the statute. The recommended application rates for slowly available nitrogen in lawn fertilizer and lawn maintenance fertilizer, "slow or controlled release fertilizer", and "enhanced efficiency" lawn maintenance fertilizer are detailed in the *Recommendations* section of this report.

BACKGROUND AND AUTHORITY

House Bill 1831 (Scott) and Senate Bill 1055 (Stuart), as enacted by the 2011 session of the General Assembly, direct the Virginia Department of Agriculture and Consumer Services (VDACS), in consultation with the Department of Conservation and Recreation (DCR) and the Chesapeake Bay Commission (CBC), to prepare a report concerning the use of slowly available nitrogen in lawn fertilizer and lawn maintenance fertilizer.

Virginia's Fertilizer Law and Related Regulations

VDACS administers the provisions of Virginia's fertilizer law, § 3.2-3600 et seq., Code of Virginia. The fertilizer law has historically pertained to truth in labeling, registration, sale, and distribution of fertilizers. Issues such as application rates and nutrient management plans are the purview of DCR.

The 2008 session of the General Assembly required the Board of Agriculture and Consumer Services to adopt regulations prescribing training and application requirements for fertilizer contractor-applicators who apply fertilizer on nonagricultural lands. The resulting nutrient management training and certification program must comport to guidelines promulgated by DCR. Compliance enforcement will be the responsibility of VDACS. The regulations, 2 VAC 5-405, *Regulations for the Application of Fertilizer to Nonagricultural Lands*, became effective on October 12, 2011. Persons subject to the regulations must be in compliance within 12 months of the effective date. However, because of further amendments to the fertilizer law during the 2011 legislative session, the regulations will be amended via an exempt action.

Fertilizer-related legislation during 2011

There were nine bills related to fertilizers that were introduced during the 2011 session of the Virginia General Assembly. Two of the bills, HB 2057 (Poindexter) and its companion in the Senate, SB 990 (Stuart), were bills sought by VDACS following discussions with a study group convened in 2010 for the purpose of updating the fertilizer law. The other seven fertilizer bills contained a wide variety of provisions that were ultimately reconciled following extensive discussions and negotiation among stakeholders. Those bills were rolled into HB 1831 and SB 1055, and contained an enactment clause mandating the preparation and submission of this report.

SLOWLY AVAILABLE NITROGEN TECHNICAL ADVISORY COMMITTEE

Commissioner of Agriculture and Consumer Services Matt Lohr convened a technical advisory committee (TAC) for the purpose of preparing the report required by the General Assembly. See Appendix B for a list of participants.

The General Assembly requested that the report address the following five topics:

- The most effective means to encourage the use of slowly available nitrogen in lawn fertilizer and lawn maintenance fertilizer
- The most appropriate percentages of slowly available nitrogen to be included in lawn fertilizer and lawn maintenance fertilizer
- The most appropriate effective date for any change
- Costs to the manufacturer and consumer
- Recommendations on related issues

The TAC met three times at VDACS' office in Richmond during the summer of 2011, discussed each of the five topics requested by the General Assembly, and agreed upon a set of recommendations to address slowly available nitrogen in lawn fertilizer and lawn maintenance fertilizer.

MEETINGS OF THE SLOWLY AVAILABLE NITROGEN TECHNICAL ADVISORY COMMITTEE

The first meeting of the TAC took place on July 7, 2011. Commissioner Lohr offered introductory remarks and outlined the charge for the group. Following the introduction of the various participants, Dr. Mark Alley, with Virginia Tech, gave a presentation on the cycle of nitrogen and discussed various methods used to reduce the nitrogen transformation rate in fertilizers. Dr. Jerry Sartain, with the University of Florida, spoke about Florida's experience and efforts to address slow release nitrogen products. Dr. Sartain also commented on the challenges posed by the different regulatory frameworks that multiple localities in his state have implemented. The TAC then discussed possible mechanisms to encourage the use of slowly available nitrogen products, as well as the most appropriate percentages of slowly available nitrogen to be included in lawn fertilizer and lawn maintenance fertilizer. Legislative initiatives in other Chesapeake Bay states, including changes to the Maryland and New Jersey statutes, as well as proposed changes in Pennsylvania, were discussed as a possible framework for Virginia's own approach. In those states, the standard for consumer and professional lawn applications that stakeholders agreed to was 0.7 lbs of readily available nitrogen per 1,000 sq.

ft., and 2.5 lbs per 1,000 sq. ft. total nitrogen application for products designated as enhanced efficiency fertilizer as long as no more than 0.7 lbs per 1,000 sq. ft. is released per month.

The TAC met again on August 3, 2011. Following a review of the July 7th meeting, participants agreed that July 1, 2014 would be an agreeable effective date for any changes related to the availability and use of slowly available nitrogen lawn and lawn maintenance fertilizers. The participants also indicated that the introduction to market of slowly available nitrogen product was well under way, and that eventual widespread use of such product would not result in additional cost to manufacturers or appreciable cost to consumers. Much of the subsequent discussion centered on the practicality of listing specific application rates in the Virginia Nutrient Management Standards and Criteria (Rev. 2005) rather than prescribing such application rates in the fertilizer statute. Since the Virginia Nutrient Management Standards and Criteria is a document incorporated by reference in 4 VAC 5-15, *Nutrient Management Training and Certification Regulations*, the TAC felt that it would be prudent to determine if amending the Standards and Criteria to include specific application rates for slowly-available nitrogen lawn and lawn maintenance fertilizer would constitute a substantive change to the regulations. The application rates adopted in other states were also discussed but no consensus was reached.

The TAC held its final meeting on September 7, 2011. The discussion continued to focus on application rates, with side discussions on the practicality of adopting definitions –some proposed, some already promulgated – by the Association of American Plant Food Control Officials (AAPFCO) regarding slow release, controlled release, and enhanced efficiency fertilizers. The Chesapeake Bay Program’s Watershed Model was briefly discussed, including the fact that Version 6 of the model is supposed to make allowances for slow release product, which is something that the current Version 5.3 of the Watershed Model does not support. The meeting concluded with no specific agreement regarding application rates, but stakeholders agreed to continue the dialogue on this particular topic.

Following the September 7, 2011 meeting of the TAC, the Chesapeake Bay Commission, in conjunction with industry representatives, stimulated additional discussion about the application rates. Those efforts yielded results which are indicated in the Recommendations section of this report.

FINDINGS

The following are the TAC's findings regarding the topics specified by the General Assembly.

- **The most effective means to encourage the use of slowly available nitrogen in lawn fertilizer and lawn maintenance fertilizer**

The mechanisms that are currently in place to provide outreach and training education to consumers and professional lawn care operators regarding the application of fertilizers, as well as other nutrient management issues, are the appropriate means to disseminate information about the use and benefits of slowly available nitrogen in lawn and lawn maintenance fertilizers. The website content, as well as the training and education programs offered by Virginia Extension Service, the Virginia Master Gardener Association, the Chesapeake Bay Commission, the Chesapeake Bay Foundation, DCR, VDACS, and the lawn care industry, can be modified to accommodate the topic of slowly available nitrogen. The nitrogen reduction in the formulation of fertilizers sold directly to the "do it yourself" market will, by itself, impact the total amount of nitrogen applied, even if individual fertilizer use behaviors are not altered. Additional water quality and turf quality advantages could be achieved through increased public education, awareness and additional behavioral change brought about by targeted educational programs.

- **The most appropriate percentages of slowly available nitrogen to be included in lawn fertilizer and lawn maintenance fertilizer**

The science of turf management continues to advance along with the fertilizer industry's technologies that seek to improve nutrient availability and plant use efficiency. It is important for Virginia to be able to consider and adopt desirable advancements in a timely manner. Consequently, the TAC found that the promulgation of application rates for product containing slowly available nitrogen, rather than mandating the percentage content of slowly available nitrogen content in lawn fertilizer and lawn maintenance fertilizer in the statute, is the preferred approach. The appropriate document to list the application rates is DCR's Virginia Nutrient Management Standards and Criteria. The application rates should be guided by science-based recommendations for healthy turf management in Virginia and based upon research and advice from recognized experts. Possible resources could include Virginia Tech and Virginia Cooperative Extension in cooperation with other stakeholders that may include but are not limited to the University of Maryland, Georgia Cooperative Extension, North Carolina Cooperative Extension, the Crop Science Society of America, Penn

State University, Ohio State University Extension, the US Golf Association, and the US Composting Council.

- **The most appropriate effective date for any change**

The fertilizer industry's reformulation of slowly available nitrogen products that meet with the application rates recommended by the TAC can be completed by July 1, 2014.

- **Costs to the manufacturer and consumer**

The introduction to market of products containing slowly available nitrogen is well under way. The eventual widespread use of such product will not result in additional cost to manufacturers or appreciable cost to consumers.

- **Related issues**

The TAC discussed the practicality of seeking to exempt certain changes to the Virginia Nutrient Management Standards and Criteria from the provisions of the Virginia Administrative Process Act (APA) as a possible option to expedite the implementation of the recommended application rates, but some TAC members also noted that a public process should remain in place to consider such changes. During the TAC meetings, participants indicated that they would prefer a uniform statewide approach to slowly available nitrogen issues, rather than having to contend with multiple requirements and ordinances at the local level.

RECOMMENDATIONS

The TAC recommends that DCR and the Virginia Soil and Water Conservation Board consider and advance amendments to the application rates in DCR's Virginia Nutrient Management Standards and Criteria through a fast-track regulatory process that reflects the rates set out in this report below. DCR indicated that they are open to expediting this matter through existing regulatory processes that include public processes within the APA. Given that the Virginia Nutrient Management Standards and Criteria is a document incorporated by reference in 4 VAC 5-15, *Nutrient Management Training and Certification Regulations*, the revised application rates would have the enforceability of the regulations.

The recommended application rates for nitrogen in lawn fertilizer and lawn maintenance fertilizer are as follows:

- No more than 0.7 pounds per 1,000 square feet of readily available nitrogen, as defined by AAPFCO, during any given 30 day period
- No more than 0.9 pounds per 1,000 square feet of total nitrogen on cool season grasses during any given 30 day period
- No more than 1.0 pound per 1,000 square feet of total nitrogen on warm season grasses during any given 30 day period

The recommended application rates for “Slow or Controlled Release Fertilizer,” and for “Enhanced Efficiency” lawn maintenance fertilizer, as defined and adopted or proposed for adoption by AAPFCO, are as follows:

- No more than 2.5 pounds of nitrogen per 1,000 square feet per application, with a release rate of no more than 0.7 pounds of nitrogen per 1,000 square feet per 30 days
- The total annual application rate shall not exceed 80% of the nitrogen rates recommended for cool or warm season grasses in the Virginia Nutrient Management Standards and Criteria

The TAC also recommends amending the fertilizer statute to address VDACS’ ability to oversee the registration and labeling requirements for slowly available nitrogen in lawn fertilizer and lawn maintenance fertilizer. The recommended amendment is stated below.

3.2-3607. Product registration and label requirements; exemptions

G. Beginning July 1, 2014, no lawn maintenance fertilizer that fails to list on its directions for use nitrogen application rates that are consistent with the nitrogen application rates recommended for turfgrass in the most current version of the Virginia Nutrient Management Standards and Criteria shall be registered with the Commissioner or offered for sale, distribution, or use in the Commonwealth. The provisions of this section shall not restrict the continued sale by retailers of any prohibited fertilizer from any existing inventories in stock on July 1, 2014.

Finally, the TAC recommends that the target effective date for the implementation of the recommended application rates and amendments to the Code of Virginia be July 1, 2014.

(APPENDIX A)

CHAPTER 341 [HB 1831] / CHAPTER 353 [SB 1055]

An Act to amend and reenact §§ [3.2-3600](#), [3.2-3602](#), [3.2-3602.1](#), [3.2-3607](#), [3.2-3611](#), [10.1-104.2](#), and [10.1-603.7](#) of the Code of Virginia; to amend the Code of Virginia by adding sections numbered [3.2-3607.1](#) and [3.2-3607.2](#) and by adding in Article 1 of Chapter 1 of Title 10.1 a section numbered [10.1-104.5](#); and to repeal § [15.2-924.1](#) of the Code of Virginia, relating to fertilizer; regulation of application and labeling; civil penalty.

[H 1831 / S 1055]

Approved March 22, 2011

Be it enacted by the General Assembly of Virginia:

1. That §§ [3.2-3600](#), [3.2-3602](#), [3.2-3602.1](#), [3.2-3607](#), [3.2-3611](#), [10.1-104.2](#), and [10.1-603.7](#) of the Code of Virginia are amended and reenacted and that the Code of Virginia is amended by adding sections numbered [3.2-3607.1](#) and [3.2-3607.2](#) and by adding in Article 1 of Chapter 1 of Title 10.1 a section numbered [10.1-104.5](#) as follows:

§ [3.2-3600](#). Definitions.

As used in this chapter, unless the context requires a different meaning:

"Brand" means a term, design, trademark or product name under which a regulated product is distributed.

"Bulk" means in nonpackaged form.

"Bulk fertilizer" means a fertilizer distributed in a nonpackaged form.

"Commercial fertilizer" means a fertilizer distributed for farm use, or for any other use, other than any specialty fertilizer use.

"Compost" means a biologically stable material derived from the composting process.

"Composting" means the biological decomposition of organic matter. It may be accomplished by mixing and piling so as to promote aerobic decay, anaerobic decay, or both aerobic and anaerobic decay.

"Contractor-applicator" means any person required to hold a permit to distribute or apply any regulated product pursuant to § [3.2-3608](#).

"Custom medium" means a horticultural growing medium that is prepared to the exact specifications of the person who will be planting in the medium and delivered to that person without intermediate or further distribution.

"Deficiency" means the amount of nutrient found by analysis to be less than that guaranteed, which may result from a lack of nutrient ingredients, or from lack of uniformity.

"Distribute" means to import, consign, manufacture, produce, compound, mix, blend, or in any way alter, the chemical or physical characteristics of a regulated product, or to offer for sale, sell, barter, warehouse or otherwise supply regulated product in the Commonwealth.

"Distributor" means any person who distributes.

"Fertilizer" means any substance containing one or more recognized plant nutrients, which is used for its plant nutrient content, and which is designed for use, or claimed to have value, in promoting plant growth. Fertilizer does not include unmanipulated animal and vegetable manures, marl, lime, limestone, and other products exempted by regulation.

"Fertilizer material" means a fertilizer that: (i) contains important quantities of no more than one of the primary plant nutrients: nitrogen (N), phosphate (P205) and potash (K20); (ii) has 85 percent or more of its plant nutrient content present in the form of a single chemical compound; or (iii) is derived from a plant or animal residue, a by-product, or a natural material deposit that has been processed or conditioned in such a way that its content of plant nutrients has not been materially changed, except by purification and concentration.

"Grade" means the percentage of total nitrogen (N), available phosphate (P205) and soluble potash (K20), stated in whole numbers in the same terms, order, and percentages as in the guaranteed analysis, except that fertilizer materials, specialty fertilizers, bone meal, manures and similar raw materials may be guaranteed in fractional units.

"Guaranteed analysis" means that information required by this chapter to be displayed on the label of a regulated product.

"Guarantor" means the person whose name appears on the label of a regulated product.

"Horticultural growing medium" means any substance or mixture of substances that is promoted as or is intended to function as an artificial soil for the managed growth of horticultural crops.

"Industrial co-product" means a product derived from an industrial process that meets the definition of fertilizer, soil amendment, soil conditioner or horticultural growing medium.

"Investigational allowance" means an allowance for variations, inherent in the taking, preparation, and analysis of an official sample.

"Label" means the display of all written, printed, or graphic matter, upon the immediate container, or a statement accompanying a regulated product, including an invoice.

"Labeling" means all written, printed, or graphic matter, upon or accompanying any regulated product, including invoices, advertisements, brochures, posters, and television and radio announcements, used in promoting the sale of the regulated product.

"Lawn fertilizer" means any fertilizer intended for nonagricultural use on newly established turf areas from sod or seed during the first growing season, turf areas being repaired or renovated, and turf areas where soil tests performed within the past three years indicate a nutrient deficiency.

"Lawn maintenance fertilizer" means any fertilizer intended for the nonagricultural routine maintenance of turf.

"Licensee" means the person who receives a license to distribute any regulated product under the provisions of this chapter.

"Manipulated manure" means animal or vegetable manure that is ground, pelletized, mechanically dried, packaged, supplemented with plant nutrients or other substances other than

phosphorus, or otherwise treated in a manner to assist with the sale or distribution of the manure as a fertilizer or soil or plant additive.

"Manufacturer" means any person who manufactures, produces, compounds, mixes, blends, or in any way alters the chemical or physical characteristics of any regulated product.

"Mixed fertilizer" means a fertilizer containing any combination or mixture of fertilizer materials.

"Official analysis" means the analysis of an official sample, made by the Commissioner.

"Official sample" means the sample of regulated product taken by the Commissioner, and designated as "official" by the Board.

"Percent" or "percentage" means the percentage by weight.

"Primary nutrient" includes total nitrogen (N), available phosphate (P2O5), and soluble potash (K2O).

"Quantity statement" means the net weight (mass), net volume (liquid or dry), count or other form of measurement of a commodity.

"Registrant" means the person who registers regulated products, under the provisions of this chapter.

"Regulated product" means any product governed by this chapter, including any fertilizer, specialty fertilizer, soil amendment, soil conditioner, and horticultural growing medium.

"Soil amendment" means any substance or mixture of substances, imported, manufactured, prepared or sold for manurial, soil enriching, or soil corrective purposes, or intended to be used for promoting or stimulating the growth of plants, increasing the productivity of plants, improving the quality of crops, or producing any chemical or physical change in the soil. The following are exempt from the definition of "soil amendment": fertilizer, unmanipulated or composted animal and vegetable manures, soil conditioners, horticultural growing media, agricultural liming materials, unmixed mulch and unmixed peat.

"Soil conditioner" means any substance or mixture of substances imported, manufactured, prepared or sold for soil corrective purposes including polyelectrolytes such as complex vinyl and acrylic compounds and certain cellulose and lignin derivatives.

"Specialty fertilizer" means a fertilizer distributed for nonfarm use, including use on home gardens, lawns, shrubbery, flowers, golf courses, municipal parks, cemeteries, greenhouses and nurseries.

"Stop sale, use, removal, or seizure order" means an order that prohibits the distributor from selling, relocating, using, or disposing of a lot of regulated product, or portion thereof, in any manner, until the Commissioner or the court gives written permission to sell, relocate, use or dispose of the lot of regulated product or portion thereof.

"Ton" means a unit of 2000 pounds avoirdupois weight.

"Turf" means nonagricultural land that is planted as closely mowed, managed grass and includes golf courses, parks, cemeteries, publicly owned lands, and residential, commercial, or industrial property.

"Unmanipulated manure" means substances composed of the excreta of domestic animals, or domestic fowls, that has not been processed or conditioned in any manner including processing or conditioning by drying, grinding, pelleting, shredding, addition of plant food, mixing artificially with any material or materials (other than those that have been used for bedding, sanitary or feeding purposes for such animals or fowls), or by any other means.

§ [3.2-3602](#). Local government regulation of fertilizer.

No locality shall regulate the registration, packaging, labeling, sale, *use, application, storage* or distribution of fertilizers *except by ordinance as provided for in the requirements of the Chesapeake Bay Preservation Act (§ [10.1-2100](#) et seq.), the Erosion and Sediment Control Law (§ [10.1-560](#) et seq.), the Stormwater Management Act (§ [10.1-603.1](#) et seq.) or other nonpoint source regulations adopted by the Department of Conservation and Recreation or the Soil and Water Conservation Board.* The provisions of this section shall not preempt the adoption, amendment, or enforcement of the Statewide Fire Prevention Code pursuant to § [27-97](#) and the Uniform Statewide Building Code pursuant to § [36-98](#).

§ [3.2-3602.1](#). Board authorized to adopt regulations for the application of regulated products to nonagricultural property; civil penalty.

A. The Board shall adopt regulations to certify the competence of (i) contractor-applicators ~~and~~, (ii) licensees, and (iii) employees, representatives, or agents of state agencies, localities, or other governmental entities who apply any regulated product to nonagricultural lands.

B. The regulations shall establish (i) training requirements ~~and~~; (ii) proper nutrient management practices in accordance with § [10.1-104.2](#), ~~and~~ including soil analysis techniques, equipment calibration, and the timing of the application; and (iii) reporting requirements, including the submission of an annual report as specified by the Commissioner regarding the location of lawn fertilizer and lawn maintenance fertilizer applications. Contractor-applicators and licensees who apply lawn fertilizer and lawn maintenance fertilizer to more than a total of 100 acres of nonagricultural lands annually and employees, representatives, or agents of state agencies, localities, or other governmental entities who apply lawn fertilizer and lawn maintenance fertilizer to nonagricultural lands shall submit an annual report on or before February 1 and on a form prescribed by the Commissioner. The annual report shall include the total acreage or square footage by zip code of the land receiving lawn fertilizer and lawn maintenance fertilizer in the preceding calendar year. The Department shall provide for optional reporting by electronic methods. The Department shall make publicly available every year the total acreage or square footage by zip code. Any personal information collected pursuant to this section shall be exempt from the Virginia Freedom of Information Act (§ [2.2-3700](#) et seq.), except that the Commissioner may release information that has been transformed into a statistical or aggregate form that does not allow identification of the persons who supplied, or are the subject of, particular information.

~~B~~ C. The Board may impose a civil penalty of up to \$250 on any contractor-applicator or licensee who fails to comply with the regulations. The amount of the civil penalty shall be paid into the special fund established in § [3.2-3617](#).

€ D. The Board shall form a technical advisory committee of stakeholders. The Board shall consult with the technical advisory committee of stakeholders and the Department of Conservation and Recreation in the development of the regulations.

~~D. Contractor-applicators and licensees~~ E. Any person who ~~apply~~ *is subject to regulation and who applies* any regulated product to nonagricultural lands shall comply with the regulations within 12 months of the effective date of the regulations.

F. *Contractor-applicators and licensees in compliance with regulations adopted by the Board pursuant to this section shall not be subject to local ordinances governing the use or application of lawn fertilizer and lawn maintenance fertilizer.*

§ [3.2-3607](#). Product registration and label requirements; exemptions.

A. In addition to licensing requirements:

1. Any person whose name is on the label of and who distributes in the Commonwealth any specialty fertilizer packaged in containers of 50 pounds or less dry net weight, or five gallons or less liquid net volume, shall: (i) apply for registration for such specialty fertilizer with the Commissioner on forms furnished or approved by the Commissioner; (ii) pay to the Commissioner by July 1 of each registration year a registration fee of \$50 for each grade under a given brand prior to distributing the fertilizer in the Commonwealth; and (iii) provide labels for each grade under a given brand with the application.

2. Any person who distributes in the Commonwealth a soil amendment, soil conditioner, or horticultural growing medium shall: (i) apply for registration for such soil amendment, soil conditioner, or horticultural growing medium with the Commissioner on forms furnished or approved by the Commissioner; (ii) pay to the Commissioner by July 1 of each registration year a registration fee of \$100 for each product name or brand of soil amendment, soil conditioner or horticultural growing medium prior to distributing the product in the Commonwealth; and (iii) provide labels for each product name or brand with the application.

B. The Commissioner shall furnish a copy of the registration to the applicant after approval of the registration.

C. Any person applying for registration of a specialty fertilizer, soil amendment, soil conditioner, or horticultural growing medium shall include with the application a label that includes the following information:

1. For specialty fertilizer, the grade under a given brand; for soil amendments, soil conditioners, or horticultural growing media, the product name or brand;
2. The guaranteed analysis;
3. The name and address of the registrant; and
4. The quantity statement.

D. The Commissioner may require verification of any labeling claims for any regulated product.

E. Custom-media and horticultural growing media planted with live plant material are exempt from labeling and registration requirements and inspection fees.

F. *Beginning December 31, 2013, no lawn maintenance fertilizer containing more than zero percent phosphorus or other compounds containing phosphorus, such as phosphate, shall be registered with the Commissioner or offered for sale, distribution, or use in the Commonwealth. This prohibition does not include lawn fertilizer, manipulated manure, yard waste compost, products derived from sewage sludge, soils containing fertilizer, fertilizer products intended primarily for gardening, tree, shrub, and indoor plant application, including nurseries, or reclaimed water. The provisions of this section shall not restrict the continued sale by retailers of any prohibited fertilizer from any existing inventories in stock on December 31, 2013.*

G. The Commissioner shall give the guarantor or manufacturer of any unregistered regulated product in commerce in the Commonwealth, a grace period of 15 working days from issuance of notification within which to register the regulated product. Any person required to register any regulated product who fails to register the regulated product within the grace period shall pay to the Commissioner a \$50 late fee in addition to the registration fee. The Commissioner may issue a stop sale, use, removal or seizure order upon any regulated product until the registration is issued.

§ [3.2-3607.1](#). *Consumer education.*

A. *The Department, in consultation with representatives of the fertilizer industry, fertilizer retailers, and statewide turf and lawn care organizations, and other interested parties, may develop consumer information and recommended best practices for the application of lawn fertilizer.*

B. *The Department shall provide a public listing of contractor-applicators who apply fertilizer on nonagricultural lands and have met the training requirements of § [3.2-3602.1](#). The Department shall encourage consumers to consult the listing when hiring a lawn care professional.*

§ [3.2-3607.2](#). *Sale of deicing agents.*

Beginning December 31, 2013, it is unlawful for any person to offer for sale any deicing agent containing urea or other forms of nitrogen or phosphorus intended for application to parking lots, roadways, and sidewalks or other paved surfaces in the Commonwealth. The provisions of this section shall not restrict the continued sale by retailers of any deicing agent from any existing inventories in stock on December 31, 2013.

§ [3.2-3611](#). *Labeling.*

A. The manufacturer or guarantor of any regulated product distributed in the Commonwealth shall affix a label to the container or provide an invoice at the time of delivery for a bulk regulated product that states in clear, legible and conspicuous form, in the English language, the following information:

1. The quantity statement;
2. The grade under a given brand. The grade shall not be required when no primary nutrients are claimed;
3. The guaranteed analysis, which shall:
 - a. For fertilizers, conform to the following, with the percentage of each plant nutrient stated as follows:
 - (1) Total Nitrogen (N) %
 - Available Phosphate (P205) %
 - Soluble Potash (K20) %
 - (2) For unacidulated mineral phosphate materials and basic slag, bone, tankage, and other organic phosphate materials, the available phosphate (P205), or the degree of fineness, or both, may also be guaranteed;
 - (3) Guarantees for plant nutrients other than nitrogen (N), phosphate (P205), and potash (K20) shall be expressed in the form of the element. A statement of the sources of nutrients including oxides, salt, and chelates, may be required on the application for registration of specialty fertilizers, and may be included as a parenthetical statement on the label. Degree of acidity or alkalinity (pH), beneficial substances, or compounds determinable by laboratory methods also may be guaranteed by permission of the Commissioner and with the advice of the Director of the Virginia Experiment Station. When any degree of acidity or alkalinity (pH), beneficial substances, or compounds are guaranteed, they shall be subject to inspection and analysis in accord with the methods and regulations prescribed by the Board;
 - b. For soil amendments, consist of a list of ingredients, and may include a statement of naturally occurring nutrient levels;
 - c. For soil conditioners, including polyelectrolytes, contain the following information in the following form:
 - (1) Name of active ingredient %
(name and list all)
 - (2) Total other ingredients %
 - d. For horticultural growing media, include a list of ingredients and other guarantees as required by regulation;
 - e. When compost derived from sewage sludge, hazardous materials, unrendered animals or poultry or their parts, or other source material specified in regulations established by the Board is used as an ingredient, identify the source material of the compost; and
 - f. Include a list of such other ingredients as may be required by the Board through regulation.
4. The name and address of the registrant or licensee.
 - B. A commercial fertilizer that is formulated according to specifications provided by a consumer prior to mixing, or any fertilizer formulated for a consumer, shall be labeled to show: (i) the quantity statement; (ii) the guaranteed analysis; and (iii) the name and address of the distributor or the licensee.

C. For horticultural growing media, a statement of added fertilizers, if any, shall be listed on the registration document and customer sales invoice.

D. Beginning December 31, 2013, lawn fertilizer and lawn maintenance fertilizer shall be labeled as follows:

"DO NOT APPLY NEAR WATER, STORM DRAINS, OR DRAINAGE DITCHES. DO NOT APPLY IF HEAVY RAIN IS EXPECTED. APPLY THIS PRODUCT ONLY TO YOUR LAWN/GARDEN, AND SWEEP ANY PRODUCT THAT LANDS ON THE DRIVEWAY, SIDEWALK, OR STREET, BACK ONTO YOUR LAWN/GARDEN."

§ [10.1-104.2](#). Voluntary nutrient management training and certification program.

A. The Department shall operate a voluntary nutrient management training and certification program to certify the competence of persons preparing nutrient management plans for the purpose of assisting ~~land owners~~ *landowners* and operators in the management of land application of fertilizers, municipal sewage sludges, animal manures, and other nutrient sources for agronomic benefits and for the protection of the Commonwealth's ground and surface waters.

B. The Department shall develop a flexible, tiered, voluntary nutrient management plan program to assist owners and operators of agricultural land in preparing nutrient management plans for their own property that meet the nutrient management specifications developed by the Department. The Department shall convene a stakeholder group composed of individuals representing agricultural and environmental organizations to assist in the development of this program. The program shall: (i) allow owners and operators of agricultural lands who are not required to have a certified nutrient management plan to prepare their own nutrient management plans; (ii) include a tiered approach for lands of different sizes, agricultural production, and nutrient applications; (iii) consider similar online programs in other states or sponsored by universities; (iv) address how the nutrient management plans can be verified and receive credit in the Chesapeake Bay Watershed Model for properties in the Chesapeake Bay watershed; (v) establish an effective date for implementation; and (vi) include any other issues related to developing a flexible, tiered, voluntary nutrient management plan program for owners and operators of agricultural lands.

C. The Department shall, ~~promulgate~~ *with the approval of the Virginia Soil and Water Conservation Board, adopt* regulations:

1. Specifying qualifications and standards for individuals to be deemed competent in nutrient management plan preparation, and providing for the issuance of documentation of certification to such individuals;
2. Specifying conditions under which a certificate issued to an individual may be suspended or revoked;
3. Providing for criteria relating to the development of nutrient management plans for various agricultural and urban agronomic practices;
4. Establishing fees to be paid by individuals enrolling in the training and certification programs;

5. Providing for the performance of other duties and the exercise of other powers by the Director as may be necessary to provide for the training and certification of individuals preparing nutrient management plans; and

6. Giving due consideration to relevant existing agricultural certification programs.

B D. There is hereby established a special, nonreverting fund in the state treasury to be known as the Nutrient Management Training and Certification Fund. The fund shall consist of all fees collected by the Department pursuant to subsection **A C**. No part of the fund, either principal or interest, shall revert to the general fund. The fund shall be administered by the Director, and shall be used solely for the payment of expenses of operating the nutrient management training and certification program.

§ [10.1-104.5](#). Nutrient management plans required for golf courses; penalty.

A. On or before July 1, 2017, all persons that own land operated as a golf course and upon which fertilizer, manure, sewage sludge, or other compounds containing nitrogen or phosphorous are applied to support turf, plant growth, or other uses shall develop and implement nutrient management plans for such land in accordance with the regulations adopted pursuant to § [10.1-104.2](#). However, such lands shall be exempt from the application rate and timing provisions contained in any regulations developed pursuant to § [10.1-104.2](#) if research involving nutrient application rate and timing is conducted on such lands.

B. Nutrient management plans developed pursuant to this section shall be submitted to the Department. The Department shall approve or contingently approve such nutrient management plans within 30 days of submission. Such nutrient management plans shall be revised and resubmitted for approval to the Department every five years thereafter or upon a major renovation or redesign of the golf course lands, whichever occurs sooner.

C. Golf courses shall maintain and properly implement approved nutrient management plans, planning standards, and specifications on all areas where nutrients are applied.

D. Nutrient management plans shall be made available to the Department upon request.

E. The Department shall (i) provide technical assistance and training on the development and implementation of nutrient management plans, planning standards, and specifications and (ii) establish, prior to July 1, 2015, a cost-share program specific to golf courses for implementation of this section.

F. Any information collected pursuant to this section shall be exempt from the Virginia Freedom of Information Act (§ [2.2-3700](#) et seq.).

G. A golf course owner found to be in violation of this section after July 1, 2017, shall be given 90 days to submit a nutrient management plan to the Department for approval before a \$250 civil penalty is imposed. All civil penalties imposed under this section shall be deposited in the Nutrient Management Training and Certification Fund (§ [10.1-104.2](#)).

H. Golf courses in compliance with this section shall not be subject to local ordinances governing the use or application of fertilizer.

§ [10.1-603.7](#). Authorization for more stringent ordinances.

A. Localities are authorized to adopt more stringent stormwater management ordinances than those necessary to ensure compliance with the Board's minimum regulations, provided that the more stringent ordinances are based upon factual findings of local or regional comprehensive watershed management studies or findings developed through the implementation of a MS4 permit or a locally adopted watershed management study and are determined by the locality to be necessary to prevent any further degradation to water resources or to address specific existing water pollution including nutrient and sediment loadings, stream channel erosion, depleted groundwater resources, or excessive localized flooding within the watershed and that prior to adopting more stringent ordinances a public hearing is held after giving due notice. *Localities shall report to the Board when more stringent stormwater management ordinances are determined to be necessary pursuant to this section.*

B. Any local stormwater management program in existence before January 1, 2005, that contains more stringent provisions than this article shall be exempt from the requirements of subsection A.

2. That § [15.2-924.1](#) of the Code of Virginia is repealed.

3. That the Department of Agriculture and Consumer Services shall provide, no later than December 15, 2011, a report to the House Committee on Agriculture, Chesapeake and Natural Resources and the Senate Committee on Agriculture, Conservation and Natural Resources concerning the use of slowly available nitrogen in lawn fertilizer and lawn maintenance fertilizer. The report shall (i) conduct an assessment of the most effective means to encourage the use of slowly available nitrogen in lawn fertilizer and lawn maintenance fertilizer, (ii) determine the most appropriate percentages of slowly available nitrogen to be included in lawn fertilizer and lawn maintenance fertilizer, (iii) recommend the most appropriate effective date for any change, (iv) calculate the costs to the manufacturer and consumer, and (v) provide a review of any other issues related to the use of slowly available nitrogen in lawn fertilizer and lawn maintenance fertilizer. The Department shall consult with the Department of Conservation and Recreation and the Chesapeake Bay Commission and, at the Department's discretion, may convene a technical advisory committee of stakeholders concerning the development and content of the report.

(APPENDIX B)

Technical Advisory Committee Participants

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Chesapeake Bay Commission

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