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Revised Proposed Regulation Agency Background Document

Agency name	State Water Control Board
Virginia Administrative Code (VAC) citation(s)	9 VAC 25-900
Regulation title(s)	Certification of Nonpoint Source Nutrient Credits
Action title	New regulation for certification of nonpoint source nitrogen and phosphorus nutrient credits.
Date this document prepared	June 19, 2017 (revised March 19, 2019)

This information is required for executive branch review and the Virginia Registrar of Regulations, pursuant to the Virginia Administrative Process Act (APA), Executive Orders 17 (2014) and 58 (1999), and the *Virginia Register Form, Style, and Procedure Manual*.

Brief summary

Please provide a brief summary of the proposed regulatory action. Alert the reader to all substantive matters or changes.

This regulation establishes the process for the certification of nonpoint source nitrogen and phosphorus nutrient credits and assures the generation of the credits. The regulation includes application procedures, baseline requirements, credit calculation procedures, release and registration of credits, compliance and reporting requirements for nutrient credit-generating projects, enforcement requirements, application fees, and financial assurance requirements. Nonpoint source nutrient credits must be certified by the Department prior to release, placement on the registry and exchange. The agency developed this regulation as required pursuant to § 62.1-44.19:20 of the State Water Control Law.

The revised proposed regulation includes substantive changes to the proposed regulation including revisions for and the incorporation of provisions regarding restoration practices that may be used to generate nutrient credits. Additional changes will also be considered. Please see the public participation section for details on these additional changes.

Legal basis

Please identify the (1) the agency (includes any type of promulgating entity) and (2) the state and/or federal legal authority for the revised proposed regulatory action, including the most relevant citations to the Code of Virginia or General Assembly chapter number(s), if applicable. Your citation should include a specific provision, if any, authorizing the promulgating entity to regulate this specific subject or program, as well as a reference to the agency's overall regulatory authority.

The state authority to promulgate the proposed regulation is pursuant to Chesapeake Bay Watershed Nutrient Credit Program, Article 4.02 of the State Water Control Law. Specifically, the regulatory authority for the Board is contained at § 62.1-44.19:20 of the State Water Control Law which states under Subsection A: "The Board shall adopt regulations for the purpose of establishing procedures for the certification of nonpoint source nutrient credits."

Under Subsection B of § 62.1-44.19:20 of the State Water Control Law, the regulatory language may include but not be limited to: (i) establishing procedures for the certification and registration of credits; (ii) establishing credit calculation procedures; (iii) providing certification of credits on a temporal basis; (iv) establishing requirements to reasonably assure the generation of credits; (v) establishing reporting requirements; (vi) providing the Department the ability to audit/inspect for compliance; (vii) providing that the option to acquire nutrient credits for compliance purposes shall not eliminate any requirement to comply with local water quality requirements; (viii) establishing a credit retirement requirement; and, (ix) establishing other requirements as the Board deems necessary and appropriate.

Additionally, § 62.1-44.15 (10) of the State Water Control Law authorizes the State Water Control Board to adopt such regulations as it deems necessary to enforce the general water quality management program of the Board in all or part of the Commonwealth.

Purpose

Please explain the need for the new or amended regulation. Describe the rationale or justification of the proposed regulatory action. Describe the specific reasons the regulation is essential to protect the health, safety or welfare of citizens. Discuss the goals of the proposal and the problems the proposal is intended to solve.

Pursuant to § 62.1-44.19:20 of the State Water Control Law, the Board is required to adopt regulations for the certification of nonpoint source nutrient credits. Nonpoint credits established by the Board in accordance with the legislation and this regulatory action may include credits generated from agricultural and urban stormwater best management practices, management of animal feeding operations, land use conversion, and other established or innovative methods of nutrient control or removal. As part of the revised proposed regulation, additional provisions for the generation of nonpoint source nutrient credits from stream or wetlands restoration have also been incorporated.

In order to be placed on a registry of credits for exchange, the nonpoint source nutrient credits must be certified. These certified credits that are placed on the registry will be part of an enforceable market-based trading program that will involve the exchange of pollution allocations between sources. Currently, most programs involve exchanges between different point sources; however, this regulation is anticipated to make available nonpoint source nutrient credits to further trading avenues such as point source to nonpoint source trades or nonpoint to nonpoint trades. These trades will be part of the overall goal of meeting the reductions assigned by the Chesapeake Bay Watershed Implementation Plan and the Chesapeake Bay TMDL.

This regulation is another step towards a successful trading program for nutrient credits. The regulation provides clarity and assurances regarding the process for certification of nonpoint source nutrient credits for both the nutrient credit generating project and prospective credit purchasers.

Revised proposed substance

Please briefly identify and explain the new substantive provisions, substantive changes to existing sections, or both where appropriate, being introduced in the revised proposed regulation. Note, more detail about revised proposed changes is provided in the Detail of Changes section.

In accordance with § 62.1-44.19:20 of the State Water Control Law, the Board was directed to adopt regulations for the purpose of establishing the certification of nonpoint source nutrient credits. The Board approved a proposed regulation for public comment. Based on the public comment received, the RAP was reconvened to provide input on topics that required additional consideration. The proposed regulation has been revised based on: (i) the reconvened RAP discussions; (ii) public comment received on the proposed regulations; (iii) statutory changes; and, (iv) the Department's programmatic experience. These changes contained in the revised proposed regulation, some of which are substantive, are consistent with the requirements outlined in § 62.1-44.19:20 of the State Water Control Law and include the following:

1. Stream/Wetland Restoration Practices. Provisions for the certification of nutrient credits generated from the restoration of wetlands or streams by mitigation banks or new restoration projects have been added to the regulations in various sections as appropriate. These changes were made as part of the reconvened RAP process.
2. Innovative Practices. Additional requirements for innovative practices that may be used to generate nutrient credits have been incorporated such as: (i) defining innovative practices as a practice that is not approved by the Chesapeake Bay Program Partnership or the Virginia Stormwater BMP Clearinghouse; (ii) limiting innovative practices to generating only term credits; and, (iii) including a second public notification for projects using innovative practices. These changes were made as part of the reconvened RAP process.
3. Credits. The revised proposed regulation defines term credits to include a maximum term of five years with an option to renew every five years. The requirements for renewal applications have been included and a financial assurance exception is provided for term credits generated by structural BMPs when such credits are annual verified prior to release. The definition of and the requirements for application for certification of perpetual credit have been clarified including requirements for deed restrictions and site ownership. These changes were made as part of the reconvened RAP process.
4. Land Conversion Applications. The 2016 General Assembly adopted a statutory change mandating the process for reviewing applications and releasing credits generated by nutrient credit-generating projects using land conversion. The revised proposed regulation includes this process and comports with the legislative changes provided in Chapter 653 of the 2016 Acts of Assembly.
5. Public Comment. Revisions have been made to the regulation based on comments received during the proposed regulation's public comment. This includes clarification of: various terms, the applicability and limitation provisions, public notification, and the credit retirement

and exchange provisions. Additionally, requirements for MS4s generating nutrient credits for certification have been included and the baseline provision for MS4s has been added.

- 6. Department Changes. Revisions to the proposed regulation have been made based on the department’s additional experience processing requests for nutrient credit certifications pursuant to Subsection C of § 62.1-44.19:20 of the State Water Control Law which requires that, prior to the effective date of the regulation, nutrient credits be certified on a case-by-case basis using the best available scientific and technical information.

Further specifics on the substantive changes made in the revised proposed regulation and explanation of the topics of non-consensus for the RAP are provided in the *Detail of Changes* section.

Issues

Please identify the issues associated with the revised proposed regulatory action, including: 1) the primary advantages and disadvantages to the public, such as individual private citizens or businesses, of implementing the new or amended provisions; 2) the primary advantages and disadvantages to the agency or the Commonwealth; and 3) other pertinent matters of interest to the regulated community, government officials, and the public. If there are no disadvantages to the public or the Commonwealth, please indicate.

The primary advantage of this regulatory action is that the revised proposed regulation provides clarity and certainty for the nutrient trading market by establishing appropriate procedures for the certification of nonpoint source credits. This is an advantage to the nutrient credit-generating community, the public, and the Commonwealth as certainty in this market will help meet commitments outlined in the Chesapeake Bay Watershed Implementation Plan and other TMDLs. The framework and content of this regulatory action largely tracks the specifics outlined in § 62.1-44.19:20 of State Water Control Law regarding the promulgation of these regulations.

As with the proposed regulation, the Department reconvened the Regulatory Advisory Panel (RAP) to assist with specific topics that required additional RAP input and consideration. The revised proposed regulation includes substantive changes which were a result of this reconvened RAP process (see the *Detail of Changes* section). The Department was careful to minimize disadvantages and to develop a program that provides clarity and certainty for those persons that choose to certify nonpoint source nutrient credits. This revised proposed regulatory action should pose no disadvantages to the public or to the Commonwealth.

Requirements more restrictive than federal

Please identify and describe any requirement of the revised proposal which is more restrictive than applicable federal requirements. Include a rationale for the need for the more restrictive requirements. If there are no applicable federal requirements or no requirements that exceed applicable federal requirements, include a statement to that effect.

There are no applicable federal regulations.

Localities particularly affected

Please identify any locality particularly affected by the revised proposed regulation. Locality particularly affected means any locality which bears any identified disproportionate material impact which would not be experienced by other localities.

This revised proposed regulation is a voluntary regulation. There are no requirements that a locality is mandated to meet unless the locality chooses to certify nutrient credits for exchange on the registry. Therefore, there are no localities particularly affected by the revised proposed regulation.

Public participation

Please include a statement that in addition to any other comments on the revised proposal, the agency is seeking comments on the costs and benefits of the revised proposal and the impacts on the regulated community.

In addition to any other comments on the revised proposed regulation, the Board is seeking comments on the costs and benefits of the revised proposal and the potential impacts of this regulatory proposal. Also, the Board is seeking information on impacts on small businesses as defined in § 2.2-4007.1 of the Code of Virginia. Information may include 1) projected reporting, recordkeeping and other administrative costs, 2) probable effect of the regulation on affected small businesses, and 3) description of less intrusive or costly alternative methods of achieving the purpose of the regulation.

Additionally, the Board is seeking comments on the following additional changes to the regulation:

- Adding a requirement to include the name and contact information of a Department staff person for all public notifications.
- Adding a requirement that the Department shall, if warranted, perform a site visit of the proposed nutrient credit-generating project for applications received.
- Including Chlorophyll-a to the list of impairment types in 9VAC25-900-90.C.2.c.
- Adding a provision establishing survival for mixed-use plantings of evergreens and hardwoods, which include a minimum of 200 evergreens, after the first complete growing season.

Anyone wishing to submit written comments for the public comment file may do so by mail, email or fax to Debra Harris, Department of Environmental Quality, P.O. Box 1105, Richmond, Virginia 23218; phone (804) 698-4209; FAX (804) 698-4234; email to Debra.Harris@deq.virginia.gov. Comments may also be submitted through the Public Forum feature of the Virginia Regulatory Town Hall web site at: <http://www.townhall.virginia.gov>. Written comments must include the name and address of the commenter. In order to be considered, comments must be received by 11:59 pm on the last day of the public comment period.

A public hearing will not be held following the publication of the revised proposed regulation.

Economic impact

Please identify the anticipated economic impact of the revised proposed new regulations or amendments to the existing regulation. When describing a particular economic impact, please specify which new requirement or change in requirement creates the anticipated economic impact.

<p>Projected cost to the state to implement and enforce the proposed regulation, including: a) fund source / fund detail; and b) a delineation of one-time versus on-going expenditures</p>	<p>This is a new program and the cost estimate is based on approximately two full time staff member plus administrative costs. It is estimated that this will be approximately \$200,000 per fiscal year based on staff time and administrative costs. Costs will likely increase as the program and the market for nutrient credits grows and develops. Additionally, the application fee will be used to help cover the department's costs and minimize impact to general funds.</p>
<p>Projected cost of the new regulations or changes to existing regulations on localities.</p>	<p>There are no projected costs to localities to implement and enforce this regulation as it is a voluntary program. If a locality generates nutrient credits and, subsequently, chooses to certify these nutrient credits in order to exchange the credits, then the costs to the locality that chooses to enter this market will be the same as any other participant including the costs for baseline and credit generating practices construction and maintenance, application preparation and submittal and associated application fee, and the operation and maintenance of the nutrient credit-generating project.</p>
<p>Description of the individuals, businesses, or other entities likely to be affected by the new regulations or changes to existing regulations.</p>	<p>Those persons, businesses, or other entities who wish to enter the nutrient trading market by applying for the certification of nutrient credits do so voluntarily. There is no mandate or law requiring anyone to generate nutrient credits. Those that voluntarily choose to generate nutrient credits for exchange are required to apply for the certification of their credits in accordance with this regulation. For instance, a farmer that wishes to convert a pasture area to a forested area does so by choice and if he also chooses to generate nutrient credits for exchange in the nutrient trading market, he will have to do so as required by this regulation.</p>
<p>Agency's best estimate of the number of such entities that will be affected. Please include an estimate of the number of small businesses affected. Small business means a business entity, including its affiliates, that: a) is independently owned and operated and; b) employs fewer than 500 full-time employees or has gross annual sales of less than \$6 million.</p>	<p>There is no way to estimate the number of entities that will be affected as this is a voluntary program. An entity must choose to enter this program and thus be required to adhere to this regulation. Additionally, no small business will be affected by this regulation unless it chooses to be a nutrient credit-generating project in order to exchange credits. The choice to become a nutrient credit-generating entity is entirely voluntarily. At this time, the department has been receiving approximately 50 applications annually with most of the applicants being either individual or small businesses/LLCs. The number of applications is expected to increase after the regulations are effective and as the market grows and develops.</p>
<p>All projected costs of the new regulations or changes to existing regulations for affected individuals, businesses, or other entities. Please be specific and include all costs including:</p>	<p>Since participation in the nutrient credit certification program is voluntary, there are no fiscal impacts on parties unless they choose to participate in the program. If an individual/business/other decides to generate nutrient credits, then the costs will be the</p>

<p>a) the projected reporting, recordkeeping, and other administrative costs required for compliance by small businesses; and b) specify any costs related to the development of real estate for commercial or residential purposes that are a consequence of the proposed regulatory changes or new regulations.</p>	<p>cost for certification of the credits under this regulation and will include baseline and credit generating practices construction and maintenance, application preparation and submittal, fee, and if needed, associated financial assurance.</p> <p>Costs vary depending on the type of practice implemented. For instance, the estimated cost for a land conversion project under this regulation will be about \$5,000 for application preparation plus an additional \$400/acre approximate cost for planting and the associated fees depending on the number of potential credits. For those nutrient credit generating projects required to submit financial assurance, there is the cost of financial assurance to be demonstrated and the cost associated with the type of financial mechanism that is chosen. For example, insurance may be \$1,000-\$2,000 per year for premiums, letters of credit cost 1-2% of the face value annually, surety bonds range from \$200-\$500 dollars cost per year, trust agreements have an annual cost of \$1,500-\$3,000 which is usually paid out of the fund's own proceeds, and certificates of deposit have no annual fees.</p> <p>Those that develop real estate for commercial or residential purposes may have the option to purchase nutrient credits that are certified under this regulation and that may be a cost savings as the credits may be able to be used in lieu of constructing and maintaining a bmp or the bmp may not need to be as large.</p>
<p>Beneficial impact the regulation is designed to produce.</p>	<p>The primary advantage of this regulatory action is that the revised proposed regulation provides for clarity and certainty for the nutrient trading market by establishing appropriate procedures for the certification and generation of nonpoint source credits.</p>

Alternatives

Please describe any viable alternatives to the proposal considered and the rationale used by the agency to select the least burdensome or intrusive alternative that meets the essential purpose of the action. Also, include discussion of less intrusive or less costly alternatives for small businesses, as defined in § 2.2-4007.1 of the Code of Virginia, of achieving the purpose of the regulation.

Pursuant to § 62.1-44.19:20 of the State Water Control Law, the Board is to adopt regulations for the certification of nonpoint source nutrient credits and sets out certain requirements for the regulation. This section was added to the State Water Control Law as part of the consolidation of water quality programs under Chapter 793 of the 2013 Acts of Assembly. The language of § 62.1-44.19:20 was based on the language of § 10.1-603.15:2 which was added to the Code of Virginia by Chapter 748 of the 2012 Acts of Assembly. Industry and developers strongly support a nutrient trading program including the exchange of nonpoint source nutrient credits as an alternative method of compliance with water quality permits in a cost effective manner.

The only alternative to this regulatory action is to not develop the mandated regulations which will not provide the clarity and assurances that are necessary for the growth and success of the nutrient credit trading program and which will also fail to undertake actions specifically required by state law.

Regulatory flexibility analysis

Pursuant to § 2.2-4007.1B of the Code of Virginia, please describe the agency's analysis of alternative regulatory methods, consistent with health, safety, environmental, and economic welfare, that will accomplish the objectives of applicable law while minimizing the adverse impact on small business. Alternative regulatory methods include, at a minimum: 1) the establishment of less stringent compliance or reporting requirements; 2) the establishment of less stringent schedules or deadlines for compliance or reporting requirements; 3) the consolidation or simplification of compliance or reporting requirements; 4) the establishment of performance standards for small businesses to replace design or operational standards required in the proposed regulation; and 5) the exemption of small businesses from all or any part of the requirements contained in the revised proposed regulation.

Section 62.1-44.19:20 of the State Water Control Law directs the Board to adopt regulations governing the certification of nonpoint source nutrient credits and provides general requirements for the regulations. The framework and content of this revised proposed regulation tracks the requirements specified in § 62.1-44.19:20. In working with the Regulatory Advisory Panel (RAP) to develop the revised proposed regulations, the Department sought to establish compliance and reporting requirements that provided only the information necessary to determine compliance and were on a workable schedule. Small business exemptions are not provided as no statutory authority exists for such an exemption and as this program is entirely voluntary. Any entity that chooses to generate nonpoint source nutrient credits for exchange as part of the trading program is required to certify those credits in accordance with this regulation.

Public comment from previous proposed stage

Please summarize all comments received during the public comment period following the publication of the first proposed stage and provide the agency response.

The proposed regulation was published for public comment on December 29, 2014. Two public hearings were held on February 11, 2015 in Glen Allen and February 12, 2015 in Roanoke. The comment period closed on March 16, 2015.

During the comment period, 295 persons commented on the proposed regulation. The majority submitted comments as part of a Chesapeake Bay Foundation (CBF) Action Alert. There were 277 people that submitted comments under the CBF action alert requesting: (i) strengthening local water quality protections; (ii) providing for a public comment process; and, (iii) adding a 35 foot vegetated buffer on all farm pasturelands. In addition to the action alert comments, the Department received an additional 149 comments from 18 individuals and entities.

The following are summarized comments along with the Department's response to the comments. Please note, a table is attached to this document which provides the individual comments and the agency response.

1. Local Water Quality (9VAC25-900-90.C)

Comment Summary: During the proposed regulation's comment period, many commenters requested further strengthening of the local water quality compliance provisions under Subsection 90.C. These commenters noted that the proposed requirements did not provide enough assurances for the protection of local water quality and needed to be revised to comply with EPA's Technical Memorandum, "Local Water Quality Protection When Using Credits for NPDES Permit Issuance and Compliance," dated March 17, 2014. Contrary to that, other commenters noted that the provisions for local water quality compliance were too restrictive on trading.

Response: The Department considered the comments. Regarding local water quality, as stated in Subdivisions 90.C.2.a and 90.C.2.b, the exchange of credits within an area subject to an approved local TMDL for total phosphorus or total nitrogen is limited to nutrient credits which have been generated upstream of where the discharge reaches impaired waters. These provisions allow for credit exchange but also provide protection of local water quality by limiting the location that those credits can be generated in. Subdivision C.2.c includes provisions that are applicable when there is no local TMDL but there is impairment.

The prioritization to acquire credits upstream or as close the impaired segment as possible balances the allowances for trading and the needs to protect impaired waters for which no TMDL or comprehensive watershed management study has been performed. Where a VSMP authority or MS4 locality has performed such a study and determined that further limitations on trading are necessary, the Department expects such restrictions to be established as authorized pursuant to §62.1-44.15:33.A. It should be noted that, in accordance with Subsection 40.B, the regulation does not limit or otherwise affect the authority of the State Water Control Board to establish and enforce more stringent water quality-based effluent limitations for total nitrogen or total phosphorus in permits where those limitations are necessary to protect local water quality.

In accordance with § 62.1-44.19:20 of the State Water Control Law, the regulations shall provide that "the option to acquire nutrient credits for compliance purposes shall not eliminate any requirement to comply with local water quality requirements". In order to meet the statutory requirement, the exchange of credits where local water quality requirements apply is addressed under Subdivision 90.C.2 of the regulation. In the revised proposed regulations, the local water quality provision has been changed regarding when the hierarchy will apply for impaired waters. In addition to not applying the hierarchy when the water quality impairment is not likely caused by nutrients, two additional criteria were added: (i) when the use of credits would not reasonably be considered to cause or contribute to the impairment; or, (ii) when the department determines through issuance of a VPDES permit that local water quality cannot be protected unless exchange of credits are restricted to upstream of where the discharge reaches impaired waters. By incorporating these changes, the revised proposed regulation provides a workable methodology for exchanging credits when local water quality requirements are a consideration and provides necessary protections to ensure exchanges comply with and do not contravene local water quality requirements in order to meet the statutory requirement.

2. Agriculture Baseline (9VAC25-900-100.B)

Summary Comment: Commenters did not agree with the proposed regulation's use of a certified Resource Management Plan as a means of achieving the necessary pollution reductions to meet baseline. The commenters claimed that the Resource Management Plans do not meet the pollution reductions requirements established in the Chesapeake Bay TMDL as the Resource Management Plans do not require the establishment of a 35-foot buffer on pasture lands. Therefore, the commenters requested that all agriculture baselines include a 35-foot buffer.

Response: The Department considered the comments regarding agriculture baseline use of a Resource Management Plan (RMP) and the buffer issue. The Virginia Soil and Water Conservation Board was authorized to adopt the Resource Management Plan Regulation (4VAC50-70) under their statutory authorities. The Department of Environmental Quality is not the administering agency for the RMP program or its regulations. Administration and oversight of the RMP program is the responsibility of the Department of Conservation and Recreation. The provisions for the Resource Management Plans (RMP) and authority for the RMP regulations are provided for in state law. Subdivision B.4 of §10.1-104.8 of the Code of Virginia, requires that the RMP “include agricultural best management practices sufficient to implement the Virginia Chesapeake Bay TMDL Watershed Implementation Plan and other local total maximum daily load water quality requirements of the Commonwealth”. The RMP regulations have been adopted in accordance with the Virginia Soil and Water Conservation Board’s statutory authority and it is not the intent of this rulemaking for the certification of nutrient credits to revisit decisions made in adoption of the RMP Regulation (4VAC50-70). As this is a program that is administered and overseen by DCR, an RMP that has been certified in accordance with 4VAC50-70 is considered to be sufficient to meet the agricultural baseline requirements of Section 100. Therefore, the Department has not changed the agricultural baseline requirements. However, the commenters should note that, pursuant to Subdivision 100.B.2, riparian buffers are a baseline practice for applicants that are not subject to regulation under DCR’s RMP. Furthermore, in accordance with Subsection 110.D, nutrient credit-generating projects using land conversion to generate nutrient credits cannot include the area of land within 35 feet of a water body with perennial flow in the nutrient credit calculation submitted with the application.

3. Provide a Public Comment Process (9VAC25-900-80)

Summary Comment: During the proposed regulation’s comment period, many commenters requested that Section 80’s public notification requirements be changed to a public comment process in order to provide additional transparency and provide the right to challenge a certification of nutrient credits under the APA.

Response:

The Department considered the comments. The decision regarding the right of appeal is a policy decision. Challenges of permits are allowed if the challenger meets the requirements of the State Water Control Law. To require the Department to hold a public comment period and possible hearing on every application decision would be burdensome. The authorizing statute requires the Department to provide public notification for a proposed nutrient credit-generating project and, therefore, the Department has included a public notification process in the proposed regulation. However, in cases where the Department decides that additional public involvement would be useful for the review and processing of the certification application, the Department may still utilize an informal public comment period without requiring a formal public comment process for all nutrient credit certification applications which may unnecessarily complicate and extend the process for every application.

As provided by statute, the revised proposed regulation has kept this requirement a public notification. However, the public notification provision has been revised to clarify the information that will be posted for the public such as name of the applicant, location of the project and a description of the practices. In addition, based on the discussions and comments of the reconvened RAP regarding innovative practices, a provision has been added to the revised proposed regulation requiring a second public notification prior to issuance of a nutrient credit certification generated by an innovative practice. This second public notification will include the name of the applicant, the location of the nutrient credit-generating project, a description of the innovative practice and the proposed quantity of term nutrient credits to be certified.

4. Urban Baseline/MS4 Changes (9VAC25-900-100)

Summary Comment: During the proposed regulation's comment period, commenters requested revisions to the provisions for urban baseline regarding management areas draining to MS4s. The concern noted was to ensure that an MS4 would need to achieve the level of reduction required by their permit prior to generating credits.

Response: The Department has considered the comments. In order to clarify the MS4's baseline requirements, the revised proposed regulation include the MS4 service area as part of the management area definition under Section 10. This change makes it clear that, prior to MS4s generating nutrient credits, the entire MS4 service area must meet the baseline provisions of Section 100.

5. Release of Credits (9VAC25-900-90.B)

Summary Comment: During the proposed regulation's comment period, some commenters requested that the regulation be revised to decrease or eliminate the release of the 25% advance credits for land conversion, while other commenters requested that land conversion projects be provided an option to post financial assurance in order to have 100% of the credits released upon certification.

Response: The Department has considered these comments. Regarding the request to decrease or eliminate the 25% release, it should be noted that the 25% advance credit for land-use conversions or restoration projects are released after the land is taken out of use for agriculture. This would entail the elimination of fertilizer application, the meeting of baseline requirements within the entire management area, and the credit generating area under the protection of a deed restriction. The 25% release of credits is considered to be a conservative estimate of the nutrient reductions provided by those initial actions alone. Additionally, the 2016 statutory changes for release of credits included additional criteria for release of credits (see subdivision B.1.h of § 62.1-44.19:20 of the Code of Virginia). The regulation has been changed to comport to the statutory revisions as well.

Regarding the request to allow a way for 100% credit release for land conversion projects when financial assurance is posted, the Department also considered this issue. The regulations are moving away from this concept. The oversight and necessary administration to allow for the use of financial assurances to guarantee the success of a land conversion after planting could be very burdensome on the Department if it has to cash in the financial assurance mechanism in order to hire third party contractors to reestablish a failed land conversion project. As a workable method allowing for some credits to be released upon certification and the remaining credits can be released after the land conversion has met the performance criteria of Section 110.

6. Management Area (9VAC25-900-10)

Summary Comment: During the proposed regulation's comment period, those in the banking community suggested limiting the definition of the management area depending on the nutrient credit generating practice used. For land conversion practices, it was recommended that the management area be defined as just the area that is undergoing the conversion. However, other commenters indicated that the management area definition was not restrictive enough to address other issues of concern such as leakage and also MS4s reduction requirements.

Response: The Department has considered the comments. As noted in #4 above, the definition for management area was revised to include the MS4 service area; however, no other revision was made to this definition except for grammatical corrections. The main purpose of the

definition for management area is to define the area over which baseline practices are to be implemented prior to the generation of credits. The Department maintains that baseline practices should be applied to all contiguous properties under common ownership. The requirement that a property be brought up to a minimum set of standards prior to generating credits for exchange ensures a level playing field for participants in the trading program.

The management area as defined in the revised proposed regulation is consistent with the findings of the enabling legislation (§ 62.1-44.19:12) as it provides a foundation for establishing market-based incentives to help achieve the Chesapeake Bay Program's nonpoint source reduction goals.

7. Site Visit/Inspections (9VAC25-900-80 and Part IV)

Summary Comment: During the proposed regulation's comment period, commenters requested that requirements be added to the regulation requiring the Department to conduct site visits of proposed nutrient credit-generating projects and to provide an inspection schedule for projects generating certified nutrient credits.

Response: The Department has considered the comments. Unless the statute mandates an action, as in the case of the 2016 timeline provisions for land conversion projects, in general, the Department does not regulate its own programs under the regulations it administers. The nutrient credit certification regulations are for those persons who voluntarily choose to certify generated nutrient credits for placement on the exchange registry. Site visits and inspections by staff will be part of the Department's inspection program for applicants and projects generating certified nutrient credits. Additionally, the requirements for site visit/inspection frequency and the inspection criteria will be part of the inspection program for nutrient credit-generating projects as is done for the Department's other programs. Therefore, the flexibility of when the Department may perform a site visit or inspection has been retained in the revised proposed regulation.

8. Financial Assurance (Part VI)

Summary Comment: During the proposed regulation's comment period, commenters noted that the financial assurance costs would be too restrictive for structural BMPs and providing for financial assurance would not make it cost effective for credit generation. Other commenters noted concerns with structural BMPs generating perpetual credits, even when financial assurance is provided. Additionally, during the perpetual credit discussions of the reconvened RAP, the issue of financial assurance was still not resolved.

Response: The Department considered the comments and the issues regarding financial assurance. These requirements were provided in the proposed regulation for structural BMPs as these practices will eventually require maintenance and possibly replacement at some point in their life. This concern is especially significant for those structural BMPs that are permanent and used to generate perpetual credits. Therefore, structural BMPs will be required to provide financial assurance to ensure their viability for the term of the nutrient credit generated. The amount to be provided will depend on the type of the BMP and the cost estimates provided for the continued operation and maintenance (O&M) and the repair/replacement of the BMP. The revised proposed regulation includes relief from financial assurance for structural BMPs that generate term credits which are verified by the Department on an annual basis prior to release. These types of structural BMPs, in addition to those with terms of one year or less, will not be required to maintain financial assurance. The revised proposed regulation will require that the financial assurance for structural BMPs generating perpetual credits provide coverage for the cost of 50 years of O&M. This increase in the O&M coverage is based on the need to assure long-term viability of these structural BMPs.

Reconvened RAP

During the comment period, people submitted comments on topics that the Department decided would best be discussed with the RAP for further consideration and input. Therefore, in February 2016, the RAP was reconvened to assist the Department with changes to the regulation concerning the following topics:

- Stream/Wetlands Restoration & Mitigation Banking Provisions
- Innovative Practices
- Term Nutrient Credits Limits
- Perpetual Nutrient Credits/Permanence

The discussion of the reconvened RAP process is provided in Detail of Changes section. As part of the reconvened RAP process, substantive changes were made to the proposed regulation. Therefore, another public comment period will be held in order for the public to provide additional comments on the revised proposed regulations.

Periodic review and small business impact review report of findings

Please (1) summarize all comments received during the public comment period following the publication of the Notice of Intended Regulatory Action and (2) indicate whether the regulation meets the criteria set out in Executive Order 17 (2014), e.g., is necessary for the protection of public health, safety, and welfare, and is clearly written and easily understandable. In addition, as required by 2.2-4007.1 E and F, please include a discussion of the agency's consideration of: (1) the continued need for the regulation; (2) the nature of complaints or comments received concerning the regulation from the public; (3) the complexity of the regulation; (4) the extent to which the regulation overlaps, duplicates, or conflicts with federal or state law or regulation; and (5) the length of time since the regulation has been evaluated or the degree to which technology, economic conditions, or other factors have changed in the area affected by the regulation.

The NOIRA was published in the Virginia Register on September 10, 2012. The comment period ended on October 10, 2012. There were 23 submittals in total and most were requests to serve on the Regulatory Advisory Panel. Of the 23 submittals, five (5) submittals provided comment on the NOIRA in addition to the request to serve on the Regulatory Advisory Panel.

Commenter	Comment	Agency response
Douglas Beisch, Williamsburg Environmental Group, Inc.	<p>We feel that nutrient trading and certification is an important, perhaps critical, tool in meeting the aggressive water quality improvement objectives of the Commonwealth. The efforts to develop a clear and efficient regulatory structure that allows for a variety of additional tools to be brought to bear is crucial for not only regulated entities, but for private parties seeking to establish innovative nutrient reduction mechanisms.</p> <p>We suggest the regulations be flexible and science-based, with an efficient process for certification based on established nutrient reduction guidance (Chesapeake Bay Program, VIMS, DCR, etc.) for the Chesapeake Bay, and that uncertainties be hedged by appropriate trading ratios including delivery ratios and margins of safety. This will allow for quick deployment of these well-studied technologies while also providing the regulatory assurances needed. Expediting the implementation of innovative technologies should be accomplished, where practicable, if these tools are to be</p>	<p>Recommendations accepted and taken under consideration during the drafting of the proposed regulation.</p>

	of any practical use in satisfying the Bay TMDL milestones and objectives.	
Steven Herzog, P.E. Director, DPU Hanover County	Hanover County has great interest in these regulations. We see nutrient trading as being critical to the success of both our non-point source and point source compliance strategies in the short and long term. These regulations should allow the maximum flexibility in trading possible while meeting environmental goals and needs. Consideration should be given to allowing inter-basin trading.	Recommendations accepted and taken under consideration during the drafting of the proposed regulation.
Ann Jennings Virginia Executive Director Chesapeake Bay Foundation	<p>CBF concurs that nutrient trading must be incorporated into efforts to achieve the Chesapeake Bay Total Maximum Daily Loads for nutrients and sediment; however, it is equally critical that the details of the credit or offset certification, permit compliance, public notification, and enforcement requirements ensure actual water quality improvements and protect local waterways. We, therefore, find the pending regulatory development an important step toward Virginia achieving a restored Chesapeake Bay.</p> <p>CBF suggests that the strength of Virginia's Nutrient Trading Program will be dictated by certain key decisions during development of the regulations. In particular, regulatory development affords the opportunity to clarify issues unresolved during the 201 study, including mechanisms for ensuring that local water quality is not jeopardized, the definition of baseline for various land uses, and mechanisms for ensuring that non-traditional practices are appropriately considered and evaluated for credit generation.</p>	Recommendations accepted and taken under consideration during the drafting of the proposed regulation.
Robert C. Steidel President Virginia Association of Municipal Wastewater Agencies, Inc. (VAMWA)	VAMWA was a lead proponent in the 2012 General Assembly of the legislation under which the Regulations are required. This activity reflected the continuation of VAMWA's long-term support for nutrient trading, including Virginia's landmark 2005 legislation and its successful implementation. VAMWA is interested in a well-designed credit certification process that provides the opportunity for robust credit generation and a sufficient credit supply that cost-effectively supports continued economic growth in the Commonwealth.	Recommendations accepted and taken under consideration during the drafting of the proposed regulation.
Randy Bartlett President Virginia Municipal Stormwater Association, Inc. (VAMSA)	Most VAMSA members own and operate municipal separate storm sewer systems ("MS4s"), which are permitted under state-issued VSMP/VPDES permits. The 2012 legislation under which DCR is developing the Regulations expressly authorizes MS4s to trade nutrient credits. VAMSA supports a credit certification approach that provides localities (MS4s) with the flexibility to select the best option(s) based on local needs, embraces innovation and judges each credit generating proposal on its merits. The concept of trading annual credits is especially well-suited to MS4s given the ongoing nature of MS4s' regulatory relationship with the Commonwealth through the VSMP/VPDES permit program.	Recommendations accepted and taken under consideration during the drafting of the proposed regulation.

As part of the NOIRA's and the proposed regulation's comment period, comments on the impacts on small businesses were requested to include information on: 1) projected reporting, recordkeeping and other administrative costs; 2) the probable effect of the regulation on

affected small businesses; and, 3) the description of less intrusive or costly alternatives for achieving the purpose of the regulation. No comments were submitted regarding impacts to small businesses during either the NOIRA's or proposed regulation's public comment period.

The agency developed this regulation as required pursuant to § 62.1-44.19:20 of the State Water Control Law. The regulation has been drafted pursuant to the requirements of § 62.1-44.19:20 in a manner that is protective of public health, safety, and welfare, and is clearly written and easily understandable.

Subsection A of § 62.1-44.19:20 of the State Water Control Law requires that the Board shall adopt regulations for the purpose of establishing procedures for the certification of nonpoint source nutrient credits. Therefore, this is a new regulation developed to meet the statutory requirements and to provide for the advancement of the nutrient trading program. There are no duplicate requirements for the regulation of the certification of nutrient credits under either state or federal laws.

Family impact

Please assess the impact of this regulatory action on the institution of the family and family stability including to what extent the regulatory action will: 1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; 2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one's spouse, and one's children and/or elderly parents; 3) strengthen or erode the marital commitment; and 4) increase or decrease disposable family income.

There is no anticipated adverse impact on the institution of the family and family stability; however, improvement in water quality does have a positive impact on health which may indirectly impact families.

Detail of changes

Please list all changes that are being proposed and the consequences of the proposed changes; explain the new requirements and what they mean rather than merely quoting the proposed text of the regulation. If the proposed regulation is a new chapter, describe the intent of the language and the expected impact. Please describe the difference between existing regulation(s) and/or agency practice(s) and what is being proposed in this regulatory action.

*Please list separately all differences between the **proposed** regulation and this **revised proposed** regulation.*

As part of the development of the proposed regulation, a Regulatory Advisory Panel (RAP) was convened and ten public meetings of the RAP were held. The proposed regulation was published for public comment on December 29, 2014. Two public hearings were held on February 11, 2015 in Glen Allen and February 12, 2015 in Roanoke. The comment period closed on March 16, 2015. During the comment period, 295 persons commented on the proposed regulation. Based on the comments and Department considerations, the decision was made to reconvene the RAP. The RAP was reconvened and three additional meetings were held plus one sub-group meeting. The primary purpose of the reconvened RAP was to revise the regulation for the following issues: (i) wetland and stream restoration practices used to generate nutrient credits; (ii) the use of innovative practices for credit generation; (iii) term credits including limits on the term and renewal of the term credits; and, (iv) further defining perpetual credits.

During these reconvened RAP meetings, the RAP discussed various requirements pertaining to the issues outlined above. For the most part, the revised proposed regulation reflect revisions necessary for the issues discussed and were agreed to by the RAP; however, topics of concern/non-consensus were noted and those topics are highlighted following the table.

Differences between the proposed and the revised proposed regulation are provided in the following table.

Current section number	Proposed requirement	Revised Proposed requirement	Proposed change, intent, rationale, and likely impact of proposed requirements
Part I Definitions			
10	Definitions	Definitions	<p>Definitions for terms used in the regulation are provided in this section. The definitions explain meanings of relevant terms as these terms are used in the proposed regulation.</p> <p>Differences between the proposed and revised proposed regulation are the clarification of various terms, the deletion of terms not used in the regulation, the addition of the following new terms: bankfull event, innovative practice, landowner, mitigation, mitigation bank, MS4 service area, nutrient credit-generating project (replaces nutrient credit-generating entity), restoration, state waters, steward, VSMP authority, VWP permit, and wetlands.</p> <p>These terms were added due to the addition of requirements for restoration practice and to reflect the changes made for term credits, perpetual credits and innovative practices during the reconvened RAP process. Additional clarification of various terms is the result of public comment on the proposed regulation.</p>
Part II General Information			
20	Authority and delegation of authority.	Authority and delegation of authority.	<p>Section 20 provides the statutory authority for this regulation and the delegation of authority for implementation of the regulation and its requirements.</p> <p>There are no changes between the proposed and revised proposed regulation.</p>
30	Purpose and applicability	Purpose and applicability	<p>Section 30 explains the purpose of the regulations and when the regulatory requirements apply.</p> <p>Differences between the proposed and revised proposed regulation are: (i) clarification that the regulation is for certification of credit places on the registry for exchange; (ii) clarification that this chapter does not apply to point source credits; and, (iii) a provision added for stream and wetland restoration projects.</p> <p>Rationale for changes is to provide additional clarity as was requested during the public comment period. During the reconvened RAP process, an additional provision was added for restoration projects.</p>
40	Relationship to other laws and regulations	Relationship to other laws and regulations	<p>Section 40 explains the relationship of this regulation to other regulations; mainly, it provides a list of those that may use the credits as allowed under § 62.1-44.19:21. The intent is to provide a more comprehensive view of the nutrient trading program of which the certification process is a component, and to provide the limitations of the regulation.</p> <p>There are no changes between the proposed and revised proposed regulation.</p>
50	Appeal process	Appeal process	<p>Section 50 details the appeal process pursuant to § 62.1-44.19:23.</p> <p>There are no changes between the proposed and revised proposed regulation.</p>

Current section number	Proposed requirement	Revised Proposed requirement	Proposed change, intent, rationale, and likely impact of proposed requirements
60	Limitations, liability, and prohibitions	Limitations, liability, and prohibitions	Section 60 section explains the limitations and the prohibitions for nutrient credit certification. Differences between the proposed and revised proposed regulation are for clarification such as the addition of Subsection J which requires nutrient credit generation and use to be contemporaneous with the applicable permit's compliance period. Rationale for changes is to provide additional clarity as was requested during the public comment period.
70	Documents and internet resources	Documents and internet resources	Section 70 provides the URL address for the internet available resources. Changes to this section include updates of links and the resources listed. The changes were necessary as some of the resources have been updated.
Part III Administrative and Technical Criteria			
80	Procedure for application for certification of nutrient credits	Procedure for application for certification of nutrient credits	Section 80 lists the application requirements and processing for certification of nutrient credits. Differences between the proposed and revised proposed regulation are numerous and were made based on public comment, statutory changes, and the reconvened RAP. Clarification of application provisions and public notification requirements were made as a result of public comment. Changes to the processing of applications for nutrient credits generated from land conversion practices were made as a result of statutory revisions. As part of the reconvened RAP, this section was also revised by adding: (i) a renewal application process for term credits; (ii) language necessary to include restoration practices; (iii) a provision to request additional information, if needed, for nutrient credit-generating projects using innovative practices; and, (iv) a second public notification for nutrient credit-generating projects using innovative practices.
90	Nutrient credit release and registration	Nutrient credit release and registration	Section 90 provides the criteria for the retirement of credits, the release schedule for credits, and registration. Additionally, the provisions for exchange of credits and to insure local water quality is not contravened are contained in this section. Differences between the proposed and revised proposed regulation include: (i) revisions necessary to include the statutory changes made by the 2016 General Assembly in Subsection B; (ii) clarification of the Chapter 870 citations in Subsection A; (iii) the addition of criteria necessary for the release of credits generated by restoration practices; and, (iv) adding additional criteria regarding the application of the hierarchy for the exchange of credits in an area with impaired waters. These changes were made as a result of public comment, statutory revisions, and discussions with the reconvened RAP.
100	Establishing baseline	Establishing baseline	Section 100 details the requirements necessary to establish baseline within the management area. Differences between the proposed and revised proposed regulation are the addition of Subsection F which provides the baseline for restoration practices and the addition of Subdivision D.4 providing the criteria an MS4 permittee must meet in order to achieve baseline. These changes were made as a result of public comment, statutory revisions, and discussions with the reconvened RAP.
110	Credit calculation procedures	Credit calculation procedures	Section 110 provides the parameters for calculating the number of nutrient credits a proposed nutrient credit-generating entity will produce. The parameters are specific to the type of practices implemented such as agricultural, urban, etc.

Current section number	Proposed requirement	Revised Proposed requirement	Proposed change, intent, rationale, and likely impact of proposed requirements
			<p>The differences between the proposed and revised proposed regulation are: (i) the addition of credit calculation criteria for restoration practices; (ii) added language to clarify the removal efficiencies used in the Bay watershed; and, (iii) add a provision that the removal efficiencies will be review and adjusted for a certification renewal.</p> <p>These changes were made as a result of public comment and discussions with the reconvened RAP. The changes are necessary to add language for restoration practices regarding credit calculations and to provide for necessary adjustment to urban practices credit calculation procedures dependent on the removal efficiencies approved by the Chesapeake Bay Program partnership.</p>
120	Implementation plan	Implementation plan	<p>Section 120 provides requirements for the Implementation Plan which details how the nutrient credit-generating entity will generate credits for the term of the credits.</p> <p>The difference between the proposed and revised proposed regulation is: (i) clarification of the woody stem types; (ii) the addition of an approval from the Interagency Review Team for mitigation projects; and, (iii) the addition of Subsection H which provides the implementation plan requirements for restoration practices which was necessary to include needed specific requirements for restoration practices.</p>
130	Signature requirements	Signature requirements	<p>Section 130 provides the criteria for who should sign the application for nutrient credit certification.</p> <p>The difference between the proposed and revised proposed regulation is the addition of the certification statement language for signatories. This was necessary to provide enforceability of the certification.</p>
Part IV Compliance and Enforcement			
140	Inspections and information to be furnished	Inspections and information to be furnished	<p>Section 140 provides the requirements under which the nutrient credit-generating entity shall be subject to inspections by the Department.</p> <p>There are no substantive changes between the proposed and revised proposed regulation. The only change made was the chapter wide change from the term “nutrient credit-generating entity” to the new term “nutrient credit-generating project.”</p>
150	Recordkeeping and reporting	Recordkeeping and reporting	<p>Section 150 explains the requirements for recordkeeping and what information shall be reported to the Department.</p> <p>Differences between the proposed and revised proposed regulation are the addition of Subdivision 150.C.6 for reporting requirements pertaining to restoration practices and the clarification of the annual reporting time period under Subdivision 150.C.5..</p>
160	Enforcement and penalties	Enforcement and penalties	<p>Section 160 states that all applicable procedures under State Water Control Law may be used to enforce the regulation.</p> <p>There are no changes between the proposed and revised proposed regulation.</p>
170	Suspension of credit exchange	Suspension of credit exchange	<p>Section 170 provides the causes for suspension of the ability to exchange credits on the registry and the process for such suspension.</p> <p>There are no substantive changes between the proposed and revised proposed regulation. The only change made was the chapter wide change from the term “nutrient credit-generating entity” to the new term “nutrient credit-generating project.”</p>
180	Nutrient credit certification transfer,	Nutrient credit certification transfer, modification,	<p>Section 180 allows for the nutrient credit certification to be modified, revoked and reissued, or terminated either at the request of the party holding the certification or upon the department’s initiative for cause the causes for modification, revocation and recertification, or termination by the Department.</p>

Current section number	Proposed requirement	Revised Proposed requirement	Proposed change, intent, rationale, and likely impact of proposed requirements
	modification, revocation and recertification , expiration and termination	revocation and recertification <u>reissuance</u> , expiration and termination	Some members of the RAP expressed concern that these provisions caused uncertainty and could deter investment in nonpoint nutrient trading banks. Differences between the proposed and revised proposed regulation is the deletion of an unnecessary provision under Subsection H.
Part V Fees			
190	Purpose and applicability of fees	Purpose and applicability of fees	Section 190 provides the basis for the fees. There are no changes between the proposed and revised proposed regulation.
200	Determination of application fee amount	Determination of application fee amount	Section 200 details how to determine the appropriate fee amount to be submitted. Differences between the proposed and revised proposed regulation are the clarification of how to assess a renewal application fee.
210	Payment of application fees	Payment of application fees	Section 210 provides instructions on how to pay the fee. Differences between the proposed and revised proposed regulation were to clarify what was meant by proper payment.
220	Application fee schedule	Application fee schedule	Section 220 is a table that lists the base fee and the supplementary fee amounts for the various types of credits. Differences between the proposed and revised proposed regulation are the addition of another example for calculating the fee. The example was added to provide further clarity on the calculation of the fee.
Part VI Financial Assurance			
Changes were made to all sections of Part VI, except Section 240. The majority of the revisions were to incorporate financial assurance requirements for nutrient credit-generating projects using new wetland or stream restoration practices not subject to 33 CFR 332.8 and § 62.1-44.15:23 of the Code of Virginia.			
230	Financial assurance applicability	Financial assurance applicability	Section 230 provides the information on what types of nutrient credit-generating projects are required to have financial assurance in accordance with Part VI. Differences between the proposed and revised proposed regulation are the addition of the applicability criteria for nutrient credit-generating projects using new wetland or stream restoration practices not subject to 33 CFR 332.8 and § 62.1-44.15:23 of the Code of Virginia and that will be generating perpetual credits. The owners of these projects shall be required to submit and maintain financial assurance. Additional changes were made to provide clarity for MS4s as was requested during the public comment period. The revisions were necessary to include needed restoration practice specific requirements and to clarify confusing provisions.
240	Suspension of nutrient credit exchange	Suspension of nutrient credit exchange	Section 240 details that in cases where the financial assurance is not maintained in accordance with this part, the Department may take appropriate enforcement action. There are no changes between the proposed and revised proposed regulation.
250	Cost estimates for perpetual and term nutrient credit-	Cost estimates for perpetual and term nutrient credit-generating entities <u>projects</u>	Section 250 provides the criteria to be used in development of the cost estimate for projects. Differences between the proposed and revised proposed regulation are the addition of restoration specific criteria. Additionally, to ensure appropriate funding for perpetual credits generated by structural BMPs, the operation and maintenance cost estimate was increased to cover fifty years. The revisions were necessary to include needed restoration practice specific requirements.

Current section number	Proposed requirement	Revised Proposed requirement	Proposed change, intent, rationale, and likely impact of proposed requirements
	generating entities		
260	Financial assurance requirements for term credits	Financial assurance requirements for term credits	Section 260 provides the requirement for using financial assurance mechanisms for those structural BMPs that generate term credits. Differences between the proposed and revised proposed regulation is the additional of Subsection F. This subsection provides criteria for the replacement, termination or revocation of a financial assurance mechanism.
270	Financial assurance requirements for perpetual credits	Financial assurance requirements for perpetual credits	Section 270 provides the criteria for using financial assurance mechanism for those that generate perpetual credits. Differences between the proposed and revised proposed regulation are the addition of criteria for restoration projects. The revisions were necessary to include needed restoration practice specific requirements.
280	Allowable financial mechanisms	Allowable financial mechanisms	Section 280 provides that more than one type of mechanism may be used to meet financial assurance obligations. Differences between the proposed and revised proposed regulation are the addition of criteria for restoration projects. The revisions were necessary to include needed restoration practice specific requirements.
290	Trust	Trust	Section 290 provides the requirements for using a "Trust" as a financial assurance mechanism. Differences between the proposed and revised proposed regulation are the addition of for restoration projects and to clarify the use of the funds if cashed by the Department. The revisions were necessary to insure that the adequate financial assurance is maintained and to include needed restoration practice specific requirements.
300	Surety bond	Surety bond	Section 300 provides the requirements for using a "Surety Bond" as a financial assurance mechanism. Differences between the proposed and revised proposed regulation are the addition of criteria for restoration projects and to clarify the use of the funds if cashed by the Department. The revisions were necessary to insure that the adequate financial assurance is maintained and to include needed restoration practice specific requirements.
310	Letter of credit	Letter of credit	Section 310 provides the requirements for using a "Letter of Credit" as a financial assurance mechanism. Differences between the proposed and revised proposed regulation are the addition of criteria for restoration projects and to clarify the use of the funds if cashed by the Department. The revisions were necessary to insure that the adequate financial assurance is maintained and to include needed restoration practice specific requirements.
320	Certificate of deposit	Certificate of deposit	Section 320 provides the requirements for using a "Certificate of Deposit" as a financial assurance mechanism. Differences between the proposed and revised proposed regulation are: (i) adding new criteria to include restoration projects; (ii) a new Subsection B to require that owner's review cost estimates and update the amount of the mechanism if needed; and, (iii) clarification of the use of the funds if cashed by the Department. The revisions were necessary to insure that the adequate financial assurance is maintained and to include needed restoration practice specific requirements.
330	Insurance	Insurance	Section 330 provides the requirements for using "Insurance" to provide financial assurance. Differences between the proposed and revised proposed regulation are: (i) adding new criteria to include restoration projects; (ii) adding a new Subsection C to require that owner's review cost estimates and update the

Current section number	Proposed requirement	Revised Proposed requirement	Proposed change, intent, rationale, and likely impact of proposed requirements
			liability limit of the insurance if needed; and, (iii) clarification of the requirements for the insurance policy term and renewal. The revisions were necessary to insure that the adequate financial assurance is maintained and to include needed restoration practice specific requirements.
340	Incapacity of financial providers or owners	Incapacity of financial providers or owners	Section 340 provides assurances that the Department will be notified of any event, such as bankruptcy, that may cause the financial mechanism to be invalid. Changes between the proposed and revised proposed was to remove an incorrect provision under Subsection B.
350	Wording of the financial assurance mechanism	Wording of the financial assurance mechanism	Provides the specific language necessary for the different types of financial mechanisms that may be used. Differences between the proposed and revised proposed regulation are primarily to include language for restoration projects in the mechanism wording. The revisions were necessary as owners of nutrient credit-generating projects utilizing proposed new wetland or stream restoration practices not subject to 33 CFR 332.8 and § 62.1-44.15:23 of the Code of Virginia for the generation of perpetual credits will be required to submit and maintain financial assurance. Therefore, this required revisions to the mechanism wording.
DIBR	Documented Incorporated by Reference	Documented Incorporated by Reference	Provides the citations to documents that are used by the regulation to provide standards. Differences between the proposed and revised proposed regulation are: (i) updates to the specifications listed; and, (ii) the addition of documents such as the Watershed Implementation Plan Phase I and II.

As noted above, after the proposed regulation’s public comment period, the RAP was reconvened with a primary purpose to revise the regulation in order to: (i) incorporate wetland and stream restoration practices used to generate nutrient credits; (ii) further consider the use of innovative practices for credit generation; (iii) discuss if term credits should include limits; and, (iv) further define perpetual credits.

The following is a list of topics which are areas of concern or non-consensus by the RAP. Some of the issues resulted from the reconvened RAPs discussions while other topics did not have consensus based on the original RAP process and have remained non-consensus items even after the Department’s revisions to the proposed regulation after the public comment period. The non-consensus topic and explanation of the issue is provided along with the Department response and reasoning for the language contained in the revised proposed regulation.

1. Perpetual Credits for Stream Restoration

During the reconvened RAP’s discussions regarding stream restoration, the RAP did not come to consensus regarding nutrient credit-generating projects using stream restoration practices to generate perpetual credits. Some on the RAP would prefer that stream restoration practices be limited to the generation of term credits only.

The Department has considered the comments and information provided during the reconvened RAP process. Under the Department’s Virginia Water Protection program, stream restoration is considered to be permanent. Additionally, the revised proposed regulation requires that an owner of a nutrient credit-generating project generating perpetual credits through the use of new wetland or stream restoration practices not subject to 33 CFR 332.8 and § 62.1-44.15:23 of the Code of Virginia to submit and maintain financial assurance for the monitoring and long-term

maintenance of the restoration practices. Based on these factors, the Department has included stream restoration projects as a practice that may be used to generate perpetual credits in the revised proposed regulation.

2. Innovative Practices

The reconvened RAP discussed innovative practices but did not come to consensus on the use of innovative practices to generate nutrient credits. Some believe that only nutrient credits generated by practices approved by the Chesapeake Bay Program Partnership or the Virginia Stormwater BMP Clearinghouse should be certified.

Based on discussions of the reconvened RAP, the regulation has been changed to provide additional criteria for innovative practices. Innovative practices are defined as a practice that is not approved by the Chesapeake Bay Program Partnership or the Virginia Stormwater BMP Clearinghouse. These innovative practices may only be used to generate term nutrient credits. Applications for nutrient credit certification generated by the use of innovative practices may also be subject to review by a certification advisory committee and will have a second public notification prior to the credit certification. The Department has included procedures for the review and certification of nutrient credits generated by innovative practices as provided by 62.1-44.19:20.B.1.b. The changes in the revised proposed regulation for innovative practices are appropriate and will provide the assurances necessary.

3. MS4 Changes/Urban Baseline (9VAC25-900-100.D)

During the proposed regulation's comment period, revisions were requested to the provisions for urban baseline regarding management areas draining to MS4s. Some RAP members also provided comments during the reconvened RAP process regarding baseline requirements for urban BMPs within MS4s jurisdictions and accountability issues for MS4 jurisdictions generating nutrient credits for exchange.

The Department has considered the comments on the proposed regulation and the information provided during the reconvened RAP process. Based on this information, the Department has included the MS4 service area as part of the management area definition under Section 10 in order to clarify that, prior to MS4s generating nutrient credits, the entire MS4 service area must meet the urban baseline provisions of Section 100. In regards to the accountability, clarifications have been provided under Section 60.

4. Release of Credits (9VAC25-900-90.B)

Some members of the RAP would prefer that 100% of the credits be released upon planting completion for land conversion projects with the backing of financial assurance.

The Department has considered this issue and is proposing to include provisions for land conversion projects which help to ensure that tree plantings are successfully established prior to the release of credits. The Department's previous practice was to release 100% of credits upon planting with the sponsor providing financial assurance in the event of a crop failure. This procedure has placed the burden on the Department to re-inspect plantings a year or two after release and to require replanting or to potentially cash in the financial assurance mechanism and contract out replanting of the site if the sponsor does not cooperate. The Department has found some sites with significant planting failures which occurred after credits were released and sold. In order to minimize the problems caused in such situations, the revised proposed regulation has been drafted to put the onus on the applicant rather than the Department by not releasing 100% of the credits until the planting has proven to be successful. The revised proposed regulation allows for an initial release of 25% of the credits upon taking the property

out of agricultural production and recording of a deed restriction. The remaining 75% of credits are not released until the success of the planting has been established (i.e., after one complete growing season for evergreens and two complete growing seasons for hardwoods). This is consistent with the approach used in mitigation banking program in which 15% of the bank credits are released in advance to help finance the project. The remaining 85% of the credits are not released until the mitigation program performance criteria have been met. The proposed initial 25% release of nutrient credits is believed to be consistent with the reductions achieved by taking the property out of agricultural production. The proposed phased release also eliminates the need for financial assurance on land conversion projects.

5. Local Water Quality Compliance (9VAC25-900.C.2)

The RAP did not reach consensus on the provisions ensuring compliance with local water quality requirements. Some RAP members believe the provision was too restrictive on trading while others believed it was not adequately protective. During the proposed regulation's comment period, some commenters noted that the proposed requirements did not provide enough assurances for the protection of local water quality and needed to be revised to comply with EPA's Technical Memorandum, "Local Water Quality Protection When Using Credits for NPDES Permit Issuance and Compliance," dated March 17, 2014. Additionally, the RAP had additional questions regarding local water quality provisions during the reconvened RAP process.

The Department considered the comments. Per the statute, these regulations shall provide that "the option to acquire nutrient credits for compliance purposes shall not eliminate any requirement to comply with local water quality requirements". In order to meet the statutory requirement, the exchange of credits where local water quality requirements apply is addressed under Subdivision 90.C.2 of the regulation. The local water quality provision has been revised to provide further clarification on when the hierarchy will apply. In addition to not applying the hierarchy when the water quality impairment is not likely caused by nutrients, the hierarchy will also not be applied when: (i) the use of credits would not reasonably be considered to cause or contribute to the impairment; or, (ii) the department determines through issuance of a VPDES permit that local water quality cannot be protected unless exchange of credits are restricted to upstream of where the discharge reaches impaired waters. By incorporating these changes, the revised proposed regulation provides a workable methodology for exchanging credits when local water quality requirements are a consideration and provides necessary protections to ensure exchanges comply with and do not contravene local water quality requirements.

6. Management Area

The RAP did not reach consensus on a definition of this term. During the proposed regulation's comment period, those in the banking community suggested limiting the definition of the management area depending on the nutrient credit generating practice used. For land conversion practices, it was recommended that the management area be defined as just the area that is undergoing the conversion. However, other commenters indicated that the definition was not restrictive enough to address other issues of concern.

The Department has considered the comments made during the public comment period and during the RAP process. In response to public comment, the definition for management area was revised to include the MS4 service area (see discussion in #3 above); however, no other revision was made to this definition. The main purpose of the definition for management area is to define the area over which baseline practices are to be implemented prior to the generation of credits. The Department maintains that baseline practices should be applied to all contiguous properties under common ownership. The requirement that a property be brought up to a

minimum set of standards prior to generating credits for exchange ensures a level playing field for participants in the trading program. The Department maintains the requirement to achieve baseline reductions on all contiguous acres under common ownership is appropriate prior to the generation of term or perpetual credits and, therefore, the change proposed to the management area definition has not been made. Additionally, the management area definition is consistent with the findings of the enabling legislation (§ 62.1-44.19:12) as it provides a foundation for establishing market-based incentives to help achieve the Chesapeake Bay Program's nonpoint source reduction goals.

7. Public Notification

The RAP has not reached consensus on the public notification requirements. During the proposed regulation's comment period, many commenters requested that the notification be revised to be a public comment period. This topic was also discussed by the reconvened RAP as it pertains to innovative practices.

The Department considered the comments and the RAP discussions and maintains that a public notification in lieu of a public comment period is appropriate. The authorizing statute requires the Department to provide public notification for a proposed nutrient credit-generating project and, therefore, the Department has included a public notification process in the proposed regulation. However, in cases where the Department decides that additional public involvement would be useful for the review and processing of the certification application, the Department may still utilize an informal public comment period without requiring a formal public comment process for all nutrient credit certification applications which may unnecessarily complicate and extend the process for every application.

The revised proposed regulation has retained this requirement as a public notification. However, due to public comment and the reconvened RAP discussions, the public notification provision has been revised to clarify the information that will be posted for the public such as name of the applicant, location of the project and a description of the practices. In addition, a provision has been added to the revised proposed regulation for a second public notification prior to issuance of a nutrient credit certification generated by an innovative practice. This public notification will include the name of the applicant, the location of the nutrient credit-generating project, a description of the innovative practice and the proposed quantity of term nutrient credits to be certified.

8. Site Visit/Inspection

The RAP did not reach consensus on the proposed provisions which provide flexibility for the Department to decide when a site visit may need to occur. During the proposed regulation's comment period, commenters requested that a provision be added to the regulation requiring the Department to conduct a site visit of the nutrient credit-generating project for all applicants and provide an inspection schedule for projects generating certified nutrient credits.

The Department has considered the comments. Unless the statute mandates an action, the Department generally does not regulate its own actions under the regulations that it administers. For example, the permitting regulations that the Department administers do not require the inspection of the permitted facilities. However, the Department recognizes the need for such inspections and does so as a routine procedure. The Department will also be inspecting sites under this program but does not believe it is appropriate to require the Department inspection in the regulation.

9. Agricultural Baseline

The RAP did not come to consensus regarding animal feed operations (AFO) baseline provisions. Some on the RAP noted a concern with the use of a VPDES or VPA permit to meet baseline for an AFO and preferred the use of the practice-based criteria of Subsection C.2. During the proposed regulation's comment period, this concern was again noted.

The Department has considered the comments. Commenters referred to the case, *CBF v. Commonwealth, et al.*, in support of their comments. However, at this time, this case has been dismissed and the State Water Control Board's adoption of the Virginia Pollution Abatement Regulation and General Permit for Animal Feeding Operations (9VAC25-192) was affirmed by the judge. Additionally, as required in accordance with Subsection A of Section 100, the baseline provisions of Subsection B are applicable to all AFO areas. Under a VPA permit, there is implicit livestock water body exclusion for perennial surface waters as there is no discharge allowed. If a farm does have discharges, the VPA general permit will not supplant the requirement for a VPDES permit. Therefore, a valid VPDES or VPA permit is an appropriate mechanism of establishing baseline and, the revised proposed regulation has retained this provision providing that baseline may be met if the AFO is in compliance with a valid VPDES or VPA permit.

10. Financial Assurance (Part VI of 9VAC25-900)

The RAP did not reach consensus on the overall concept of requiring financial assurance. During the proposed regulation's comment period, commenters noted that the financial assurance costs would be too restrictive for structural BMPs and providing for financial assurance would not make it cost effective for credit generation. Additionally, during the perpetual credit discussions at the reconvened RAP meetings, the issue was not resolved. Some members still continue to feel that the financial assurance for perpetual structural BMPs will be too expensive and make it prohibitive for these practices to be used to generate perpetual credits.

The Department has considered the issue. As noted during the reconvened RAP process, structural BMPs will require maintenance and possibly replacement at some point in their life especially for those that are permanent and used to generate perpetual credits. Therefore, structural BMPs will be required to provide financial assurance to ensure their viability for the term of the nutrient credit generated. The amount to be provided will depend on the type of the BMP and the cost estimates provided for the continued operation and maintenance (O&M) and the repair/replacement of the BMP. The revised proposed regulation includes relief from financial assurance for structural BMPs that generate term credits which are verified by the Department on an annual basis prior to release. These types of structural BMPs, in addition to those with terms of one year or less, will not be required to maintain financial assurance. However, the revised proposed regulation will require that the financial assurance for structural BMPs generating perpetual credits provide coverage for the cost of 50 years of O&M and for repair/replacement. This cost assurance amount is based on the need to assure the long-term viability of these structural BMPs.

Acronyms and Definitions

Please define all acronyms used in this Agency Background Document. Also, please define any technical terms that are used in the document that are not also defined in the "Definition" section of the regulations.

"APA" means the Administrative Process Act.

"BMP" means best management practices.

"EPA" means the Environmental Protection Agency.

"RAP" means the Regulatory Advisory Panel.

"TMDL" means the total maximum daily load of a pollutant that a waterbody can receive without resulting in an impaired status of the waterbody.