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Fast Track Proposed Regulation Agency Background Document

Agency name	State Water Control Board
Virginia Administrative Code (VAC) citation	9 VAC 25-260-185
Regulation title	Water Quality Standards
Action title	Amending the Chesapeake Bay nutrient criteria to include 2007, 2008 and 2010 Chesapeake Bay criteria assessment protocols addenda.
Date this document prepared	June 30, 2010

This information is required for executive branch review and the Virginia Registrar of Regulations, pursuant to the Virginia Administrative Process Act (APA), Executive Orders 36 (2006) and 58 (1999), and the *Virginia Register Form, Style, and Procedure Manual.*

Brief summary

Please provide a brief summary (no more than 2 short paragraphs) of the proposed new regulation, proposed amendments to the existing regulation, or the regulation proposed to be repealed. Alert the reader to all substantive matters or changes.

The proposed amendment to the Chesapeake Bay nutrient criteria section (9 VAC 25-260-185) of the State's Water Quality Standards regulation incorporates the October 2007, September 2008, and May 2010 Chesapeake Bay Criteria Assessment Protocols Addenda. The amendment also corrects grammatical errors to footnote 1 of section 9VAC25-260-185 B and in section 9VAC25-260-185 D.1.

Statement of final agency action

Please provide a statement of the final action taken by the agency including (1) the date the action was taken, (2) the name of the agency taking the action, and (3) the title of the regulation.

At their June 21, 2010, meeting, the State Water Control Board adopted the following recommendations by staff of the Department of Environmental Quality:

1. That the Board authorize the Director to promulgate amendments to correct grammatical and

spelling errors and incorporate 2007/2008/2010 assessment protocols for the Chesapeake Bay in section 9VAC25-260-185 D.3 for public comment using the fast-track process established in § 2.2-4012.1 of the Administrative Process Act for regulations expected to be non-controversial. The Board's authorization should also be understood to constitute its adoption of the regulation at the end of the public comment period provided that (i) no objection to use of the fast-track process is received by the Director from 10 or more persons, or any member of the applicable standing committee of either house of the General Assembly or of the Joint Commission on Administrative Rules, and (ii) the Director does not find it necessary, based on public comments or for any other reason, to make any changes to the proposal.

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2. That the Board set an effective date 15 days after close of the 30-day public comment period provided (i) the proposal completes the fast-track rulemaking process as provided in § 2.2-4012.1 of the Administrative Process Act and (ii) the Director does not find it necessary to make any changes to the proposal.

Legal basis

Please identify the state and/or federal legal authority to promulgate this proposed regulation, including (1) the most relevant law and/or regulation, including General Assembly chapter number(s), if applicable, and (2) promulgating entity, i.e., the agency, board, or person. Describe the scope of the legal authority and the extent to which the authority is mandatory or discretionary.

Section 62.1-44.15(3a) of the Code of Virginia, as amended, mandates and authorizes the State Water Control Board to establish water quality standards and policies for any State waters consistent with the purpose and general policy of the State Water Control Law, and to modify, amend or cancel any such standards or policies established. The federal Clean Water Act at 303(c) mandates the State Water Control Board to review and, as appropriate, modify and adopt water quality standards. The promulgating entity is the State Water Control Board.

The corresponding federal water quality standards regulation at 40 CFR 131.6 describes the minimum requirements for water quality standards. The minimum requirements are use designations, water quality criteria to protect the designated uses and an antidegradation policy. All of the citations mentioned describe mandates for water quality standards.

The Environmental Protection Agency (EPA) Water Quality Standards regulation (40 CFR 131.11) is the regulatory basis for the EPA requiring the states to establish water quality criteria to protect designated uses and the criteria are used to assess whether or not a waterbody is meeting those uses.

Purpose

Please explain the need for the new or amended regulation. Describe the rationale or justification of the proposed regulatory action. Detail 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.

The proposed amendments to the regulation are essential to protect the health, safety and welfare of the citizens of the Commonwealth by protecting the water quality and living resources of the Chesapeake Bay and its tidal rivers. EPA has continued to refine the assessment procedures as scientific research and management applications reveal new insights and knowledge about the Chesapeake Bay. The EPA's procedure documents being incorporated into VA regulation by this action replace or otherwise supersede

similar criteria assessment procedures published in earlier documents, but not all of them. Therefore, it is necessary for the Virginia water quality standards to refer to each of the addenda published by EPA.

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Rationale for using fast track process

Please explain the rationale for using the fast track process in promulgating this regulation. Why do you expect this rulemaking to be noncontroversial?

Please note: If an objection to the use of the fast-track process is received within the 60-day public comment period from 10 or more persons, any member of the applicable standing committee of either house of the General Assembly or of the Joint Commission on Administrative Rules, the agency shall (i) file notice of the objection with the Registrar of Regulations for publication in the Virginia Register, and (ii) proceed with the normal promulgation process with the initial publication of the fast-track regulation serving as the Notice of Intended Regulatory Action.

The proposed amendment to section 9VAC25-260-185 B references assessment protocol documents published by U.S. Environmental Protection Agency (EPA). These protocols have been developed by EPA through a collaborative process within the Chesapeake Bay Program. Other amendments are to correct reference to water quality standard sections, misspellings, and for grammatical correctness and clarity. The proposed amendments are expected to be non-controversial and therefore justify using the fast track process.

Substance

Please briefly identify and explain the new substantive provisions, the substantive changes to existing sections, or both where appropriate. (Provide more detail about these changes in the "Detail of changes" section.)

The proposed substantive amendment to section 9VAC25-260-185 B of the State's Water Quality Standards is reference to the October 2007, September 2008 and May 2010 Chesapeake Bay Criteria Assessment Protocols Addenda. These recently published protocols are being used by EPA to develop the Total Maximum Daily Loads (TMDLs) for the Chesapeake Bay and its tidal rivers. TMDLs must be developed in accordance with approved water quality standards. Therefore it is necessary for the Virginia water quality standards to refer to each of the addenda published by EPA.

Issues

Please identify the issues associated with the 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.

There are no primary advantages or disadvantages to the public. The primary advantage to the agency and the Commonwealth is having improved methods for assessing attainment of designated uses in the

Chesapeake Bay. There is no disadvantage to the agency or the Commonwealth that will result from the adoption of this amendment.

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Requirements more restrictive than federal

Please identify and describe any requirement of the 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.

The proposed amendment does not exceed applicable federal minimum requirements.

Localities particularly affected

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

The amendment should have a minimal effect on a particular locality as it is an update to assessment protocols.

Public Participation

Please include a statement that in addition to any other comments on the regulation, the agency is seeking comments on the costs and benefits of the proposal, the potential impacts on the regulated community and the impacts of the regulation on farm or forest land preservation.

In addition to any other comments, the Board is seeking comments on the costs and benefits of the proposal, the potential impacts on the regulated community and on any impacts of the regulation on farm and forest land preservation.

Anyone wishing to submit written comments for the public comment file may do so by mail, email or fax to Alan Pollock, Office of Water Quality Programs, Department of Environmental Quality, P.O. Box 1105, Richmond, VA 23218, email: Alan.Pollock@deq.virginia.gov, phone: 804-698-4002, fax: 804-698-4116. Comments may also be submitted through the Public Forum feature of the Virginia Regulatory Town Hall web site at: 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 5:00 p.m. on the date established as the close of the comment period.

A formal hearing will be held on a date and time and at a place to be determined if a request for a formal hearing is received by the contact person listed above within 30 days of publication of the notice of public comment period in the Virginia Register of Regulations.

Regulatory flexibility analysis

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 proposed regulation.

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Analysis not performed as no small businesses are affected and assessment protocols do not have a direct effect on compliance or reporting schedules and/or requirements.

Economic impact

Please identify the anticipated economic impact of the proposed regulation.

	T
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	The projected cost to implement and enforce the proposed regulatory amendment should not cause any additional financial impact to the state. This amendment is an update of existing rules and while the staff may have to change the way water quality assessments are conducted, it will not take additional staff or resources to do this. The assessment program is funded by EPA 106 grants as well as State general fund budget.
Projected cost of the regulation on localities	It is not expected that this adjustment to assessment protocol will impose a cost on localities.
Description of the individuals, businesses or other entities likely to be affected by the regulation	Individuals, businesses, or other entities likely to be impacted include point source permitted discharges greater than 0.5 million gallons per day (MGD) with nutrients and oxygen demanding substances in their discharge. This includes sewage treatment plants, food processing (poultry and seafood), chemical and pulp and paper industries. The agency does not expect changes in assessment protocol to have an affect on these entities.
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 (i) is independently owned and operated and (ii) employs fewer than 500 full-time employees or has gross annual sales of less than \$6 million.	None. The agency does not expect changes in assessment protocol to have an affect on small businesses.
All projected costs of the regulation for affected individuals, businesses, or other entities. Please be specific. Be sure to include the projected reporting, recordkeeping, and other administrative costs required for compliance by	N/A

small businesses.

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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.

The primary alternative considered to date was to leave the regulation unchanged. This was not the alternative chosen because the updated assessment protocols were developed by EPA through a collaborative process within the Federal- Interstate Chesapeake Bay Program. These recently published protocols are being used by EPA to develop the Total Maximum Daily Loads (TMDLs) for the Bay and its tidal rivers. TMDLs must be developed in accordance with approved water quality standards. Therefore it is necessary for the Virginia standards to refer to each of the addenda published by EPA.

Family impact

Please assess the impact of the proposed 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.

The development of water quality standards is for the protection of public health and safety, which has only an indirect impact on families.

Detail of changes

Please detail all changes that are being proposed and the consequences of the proposed changes. Detail all new provisions and/or all changes to existing sections.

If the proposed regulation is intended to replace an emergency regulation, please list separately (1) all changes between the pre-emergency regulation and the proposed regulation, and (2) only changes made since the publication of the emergency regulation.

For new provisions or changes to existing regulations, use this chart:

Current section number	Proposed Current requirement new section number, if applicable				Proposed change and rationale
9 VAC 25-260-	_	A. Dissolved ox	ygen.		Amending section 9VAC25-260-185
185		Designated Use	Criteria Concentration/ Duration	Temporal Application	D.3. to include
		Migratory fish	7-day mean ≥ 6 mg/l (tidal habitats with 0-0.5 ppt salinity)	February 1 - May 31	references to Chesapeake Bay Criteria

spawning and

	nursery	Instantaneous minimum ≥ 5 mg/l		
		30 day mean ≥ 5.5 mg/l (tidal habitats with 0-0.5 ppt salinity)		
		30 day mean ≥ 5 mg/l (tidal habitats with > 0.5 ppt salinity)		
	Open water ¹	7 day mean ≥ 4 mg/l year-round²		
		Instantaneous minimum ≥ 3.2 mg/l at temperatures < 29℃		
		Instantaneous minimum ≥ 4.3 mg/l at temperatures ≥ 29℃		
		30 day mean ≥ 3 mg/l		
	Deep water	1 day mean ≥ 2.3 mg/l	June 1 - September 30	
		Instantaneous minimum ≥ 1.7 mg/l		
	Deep channel	Instantaneous minimum ≥ 1 mg/l	June 1 - September 30	

¹In applying this open water instantaneous criterion to the Chesapeake Bay and its tidal tributaries where the existing water quality for dissolved oxygen exceeds an instantaneous minimum of 3.2 mg/l, that higher water quality for dissolved oxygen shall be provided antidegradation protection in accordance with 9VAC 25-610-30 A.2.

²Open-water dissolved oxygen criteria attainment is assessed separately over two time periods: summer (June 1- September 30) and nonsummer (October 1-May 31) months.

B. Submerged aquatic vegetation and water clarity. Attainment of the shallow-water submerged aquatic vegetation designated use shall be determined using any one of the following criteria:

Designated Use	Chesapeake Bay Program Segment	SAV Acres ¹	Percent Light- Through- Water ²	Water Clarity Acres ¹	Temporal Application
Shallow Water	CB5MH	7,633	22%	14,514	April 1 - October 31
Submerged Aquatic Vegetation	СВ6РН	1,267	22%	3,168	March 1 - November 30
Use	СВ7РН	15,107	22%	34,085	March 1 - November 30
	СВ8РН	11	22%	28	March 1 - November 30
	POTTF	2,093	13%	5,233	April 1 - October 31
	РОТОН	1,503	13%	3,758	April 1 - October 31
	РОТМН	4,250	22%	10,625	April 1 - October 31
	RPPTF	66	13%	165	April 1 - October 31
	RPPOH	4	13%	10	April 1 - October 31
	RPPMH	1700	22%	5000	April 1 - October 31

Assessment
Protocols Addenda
2007 (CBP/TRS
288/07, EPA 903R-07-005), 2008
(CBP/TRS 290-08,
EPA 903-R-08-001,
and 2010
(CBP/TRS 301-10,
EPA 903-R-10002).

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These recently published protocols are being used by EPA to develop the Total Maximum Daily Loads for the Bay and its tidal rivers. TMDLs must be developed in accordance with approved water quality standards and it is necessary for the VA standards to refer to each of the addenda published by EPA.

Minor changes to correct typographical and grammatical errors in subsection A to correct an incorrect section reference for the Antidegradation Policy; footnote 1 to subsection B to add the words "shall be used" to the end of the sentence; subsection D.1. to correct two misspellings of "Rappahannock"; subsection D.2. to delete an extra word (the) and add the words "shall be used" to the end of the sentence; and subsection D.3. to correct an existing assessment addendum reference. (CB $\underline{\mathbf{A}}$ /TRS 285-07, EPA 903-R-07-003 to CBP/TRS 285-07, EPA 903-R-07-003)

CRRMH	768	22%	1,920	April 1 - October 31
PIAMH	3,479	22%	8,014	April 1 - October 31
MPNTF	85	13%	213	April 1 - October 31
MPNOH	-	=	-	-
PMKTF	187	13%	468	April 1 - October 31
PMKOH	-	-	-	-
YRKMH	239	22%	598	April 1 - October 31
YRKPH	2,793	22%	6,982	March 1 - November 30
МОВРН	15,901	22%	33,990	March 1 - November 30
JMSTF2	200	13%	500	April 1 - October 31
JMSTF1	1000	13%	2500	April 1 - October 31
APPTF	379	13%	948	April 1 - October 31
JMSOH	15	13%	38	April 1 - October 31
СНКОН	535	13%	1,338	April 1 - October 31
JMSMH	200	22%	500	April 1 - October 31
JMSPH	300	22%	750	March 1 - November 30
WBEMH	-	-	-	-
SBEMH	-	-	-	-
EBEMH	-	-	-	-
ELIPH	-	-	-	-
LYNPH	107	22%	268	March 1 - November 30
POCOH	-	-	-	-
РОСМН	4,066	22%	9,368	April 1 - October 31
TANMH	13,579	22%	22,064	April 1 - October 31
	_		_	

Designated Use Chlorophyll a Narrative Criterion Temporal

¹The assessment period for SAV and water clarity acres shall be the single best year in the most recent three consecutive years. When three consecutive years of data are not available, a minimum of three years within the data assessment window.

 $^{^2}Percent$ Light through Water = $100e^{(\text{-}KdZ)}$ where K_d is water column light attenuation coefficient and can be measured directly or converted from a measured secchi depth where K_d = 1.45/secchi depth. Z = depth at location of measurement of K_d .

C. Chlorophyll a.

		Application
Open Water	Concentrations of chlorophyll a in free-floating microscopic aquatic plants (algae) shall not exceed levels that result in undesirable or nuisance aquatic plant life, or render tidal waters unsuitable for the propagation and growth of a balanced, indigenous population of aquatic life or otherwise result in ecologically undesirable water quality conditions such as reduced water clarity, low dissolved oxygen, food supply imbalances, proliferation of species deemed potentially harmful to aquatic life or humans or aesthetically objectionable conditions.	March 1 - September 30

D. Implementation.

1. Chesapeake Bay program segmentation scheme as described in Chesapeake Bay Program, 2004 Chesapeake Bay Program Analytical Segmentation Scheme-Revisions, Decisions and Rationales: 1983—2003, CBP/TRS 268/04, EPA 903-R-04-008, Chesapeake Bay Program, Annapolis, Maryland, and the Chesapeake Bay Program published 2005 addendum (CBP/TRS 278-06; EPA 903-R-05-004) is listed below and shall be used as the spatial assessment unit to determine attainment of the criteria in this section for each designated use.

Chesapeake Bay Segment Description	Segment Name ¹	Chesapeake Bay Segment Description	Segment Name ¹
Lower Central Chesapeake Bay	CB5MH	Mobjack Bay	МОВРН
Western Lower Chesapeake Bay	CB6PH	Upper Tidal Fresh James River	JMSTF2
Eastern Lower Chesapeake Bay	СВ7РН	Lower Tidal Fresh James River	JMSTF1
Mouth of the Chesapeake Bay	CB8PH	Appomattox River	APPTF
Upper Potomac River	POTTF	Middle James River	JMSOH
Middle Potomac River	РОТОН	Chickahominy River	СНКОН
Lower Potomac River	POTMH	Lower James River	JMSMH
Upper Rappahannock River	RPPTF	Mouth of the James River	JMSPH
Middle Rapphannock River	RPPOH	Western Branch Elizabeth River	WBEMH
Lower Rapphannock River	RPPMH	Southern Branch Elizabeth River	SBEMH
Corrotoman River	CRRMH	Eastern Branch Elizabeth River	EBEMH
Piankatank River	PIAMH	Lafayette River	LAFMH
Upper Mattaponi River	MPNTF	Mouth of the Elizabeth River	ELIPH

^{*}See 9VAC25-260-310 special standard bb for numerical chlorophyll criteria for the tidal James River.

Lower Mattaponi River	MPNOH	Lynnhaven River	LYNPH
Upper Pamunkey River	PMKTF	Middle Pocomoke River	POCOH
Lower Pamunkey River	PMKOH	Lower Pocomoke River	POCMH
Middle York River	YRKMH	Tangier Sound	TANMH
Lower York River	YRKPH		

¹First three letters of segment name represent Chesapeake Bay segment description, letters four and five represent the salinity regime of that segment (TF = Tidal Fresh, OH = Oligohaline, MH = Mesohaline and PH = Polyhaline) and a sixth space is reserved for subdivisions of that segment.

- 2. The assessment period shall be the most recent three consecutive years. When three consecutive years of data are not available, a minimum of three years within the the data assessment window.
- 3. Attainment of these criteria shall be assessed through comparison of the generated cumulative frequency distribution of the monitoring data to the applicable criteria reference curve for each designated use. If the monitoring data cumulative frequency curve is completely contained inside the reference curve, then the segment is in attainment of the designated use. The reference curves and procedures to be followed are published in the USEPA, Ambient Water Quality Criteria for Dissolved Oxygen, Water Clarity and Chlorophyll a for the Chesapeake Bay and Its Tidal Tributaries, EPA 903-R-03-002, April 2003 and the 2004 (EPA 903-R-03-002 October 2004), and 2007 (CBA/TRS 285-07, EPA 903-R-07-003) addenda. An exception to this requirement is in measuring attainment of the SAV and water clarity acres, which are compared directly to the criteria.