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# Notice of Intended Regulatory Action (NOIRA) Agency Background Document

Agency name	State Water Control Board
Virginia Administrative Code (VAC) citation(s)	Primary Action: 9VAC25-720 Secondary Action: 9VAC25-820
Regulation title(s)	Primary Action: Water Quality Management Planning Regulation Secondary Action: General Virginia Pollutant Discharge Elimination System (VPDES) Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed in Virginia
Action title	Amend Existing WQMP Regulation
Date this document prepared	September 17, 2019

This information is required for executive branch review and the Virginia Registrar of Regulations, pursuant to the Virginia Administrative Process Act (APA), Executive Order 14 (as amended, July 16, 2018), the Regulations for Filing and Publishing Agency Regulations (1 VAC 7-10), and the *Virginia Register Form, Style, and Procedure Manual for Publication of Virginia Regulations*.

#### **Brief Summary**

Please provide a brief summary (preferably no more than 2 or 3 paragraphs) of the subject matter, intent, and goals of this regulatory change (i.e., new regulation, amendments to an existing regulation, or repeal of an existing regulation).

The Water Quality Management Planning Regulation includes waste load allocations for dischargers of pollutants to various river basins throughout the Commonwealth of Virginia including total nitrogen (TN) and total phosphorus (TP) waste load allocations necessary for the restoration of water quality in the Chesapeake Bay and its tidal tributaries. The Board proposes to amend Sections 50.C (Potomac-Shenandoah River Basin), 60.C (James River Basin), 70.C (Rappahannock River Basin), 110.C (Chesapeake Bay – Small Coastal – Eastern Shore River Basin) and 120.C (York River Basin) to accomplish three goals. The goals are:

- 1. To establish TN and TP waste load allocations, if necessary, to meet revised water quality criteria for Chlorophyll-a in the tidal James River Basin;
- To either reallocate any unneeded significant industrial discharger allocations to other facilities
  registered under the General Virginia Pollutant Discharge Elimination System Watershed Permit
  Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the
  Chesapeake Bay Watershed in Virginia (9VAC25-820) or reserve any unneeded allocations for
  future use: and.
- 3. To establish floating waste load allocations for significant municipal dischargers based on the average daily flow treated by the facility in a given year and nutrient concentrations of 4.0 mg/l TN and 0.30 mg/l TP. Existing "primary" waste load allocations will remain and in any given year the

facility will be required to meet the lesser of the primary or floating allocations. Facilities with special circumstances could be assigned alternative floating waste load allocations or possibly no floating waste load allocation. The Board may consider exempting from this regulatory action a subset of the smallest significant dischargers that in aggregate represent a minor percentage of the expected load reductions. Special consideration may also be appropriate for treatment plants that reclaim and reuse a significant portion of their wastewater flow.

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The Board may, if necessary to implement amendments to the Water Quality Management Planning Regulation, also propose amendments to the General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed in Virginia.

In addition, a periodic/small business impact review of this regulation will be conducted as part of this regulatory action.

# **Acronyms and Definitions**

Please define all acronyms or technical definitions used in the Agency Background Document.

Board: State Water Control Board

EPA (U.S. EPA): United States Environmental Protection Agency

DEQ: Department of Environmental Quality NOIRA: Notice of Intended Regulatory Action

MG/L: Milligrams per liter

NPDES: National Pollutant Discharge Elimination System

USC: United States Code

TMDL: Total Maximum Daily Load

TN: Total Nitrogen
TP: Total Phosphorus

VAC: Virginia Administrative Code

VPDES: Virginia Pollutant Discharge Elimination System

WIP: Watershed Implementation Plan

WLA: Waste Load Allocation

WQMPR: Water Quality Management Planning Regulation

# **Mandate and Impetus**

Please identify the mandate for this regulatory change, and any other impetus that specifically prompted its initiation (e.g., new or modified mandate, petition for rulemaking, periodic review, board decision, etc.). For purposes of executive branch review, "mandate" has the same meaning as defined in Executive Order 14 (as amended, July 16, 2018), "a directive from the General Assembly, the federal government, or a court that requires that a regulation be promulgated, amended, or repealed in whole or part."

State Water Control Law at Va. Code § 62.1-44.15(10) mandates the 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. In addition, Va. Code § 62.1-44.15(14) requires the Board to establish requirements for the treatment of sewage, industrial wastes and other wastes that are consistent with the purposes of this chapter. Va. Code § 62.1-44.19:14.D requires that the Board review, during 2020 and every 10 years thereafter, the basis for allocations granted in the Water Quality Management Planning Regulation (9VAC25-720) and as a result of the review propose for inclusion in the regulation either the reallocation of unneeded allocations to other facilities registered under the general watershed permit regulation or the reservation of such allocations for future use. Further impetus prompting this action includes the Board's adoption of water quality criteria for Chlorophyll-a in the tidal portion of the James River, the need to adopt waste load allocations, if necessary, that are protective of the new criteria and the Commonwealth's commitment to implement Initiative No. 52 in the Commonwealth of Virginia's Chesapeake Bay TMDL Phase III Watershed Implementation Plan dated August 23, 2019

The periodic review of this regulation is mandated by Executive Order 14 (as amended July 16, 2018). http://TownHall.Virginia.Gov/EO-14.pdf.

## **Legal basis**

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Please identify: (1) the agency (includes any type of promulgating entity); and, (2) the state and/or federal legal authority for the 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 Commonwealth's mandate in Va. Code § 62.1-44.15(10) is the source of legal authority identified to promulgate these amendments. The promulgating entity is the State Water Control Board.

The scope and purpose of the State Water Control Law is to protect and to restore the quality of state waters, to safeguard the clean waters from pollution, to prevent and to reduce pollution and to promote water conservation. Setting the specific effluent limits needed to meet the water quality goals is within the purview of the Board. Va. Code § 62.1-44.19:14.D requires that the Board review during 2020 and every 10 years thereafter the basis for allocations granted in the Water Quality Management Planning Regulation (9VAC25-720) and as a result of the review propose for inclusion in the regulation either the reallocation of unneeded allocations to other facilities registered under the general watershed permit regulation or the reservation of such allocations for future use. This provision establishes the legal basis for any proposed reallocation of significant industrial discharger allocations. Va. Code § 62.1-44.19:14.D.3 establishes that review of significant municipal discharger allocations will begin in 2030.

The correlation between the proposed regulatory action and the legal authority identified above is that the amendments being considered are modifications of the current requirements for the treatment of wastewater that will contribute to the protection of Virginia's water quality.

#### **Purpose**

Please describe the specific reasons why the agency has determined that this regulation is essential to protect the health, safety, or welfare of citizens. In addition, please explain any potential issues that may need to be addressed as the regulation is developed.

This rulemaking is essential to protect the health, safety or welfare of citizens in order to protect the quality of state waters. The rulemaking will establish new or revised limitations on the amount of nutrients (TN and TP) that are discharged to the Chesapeake Bay watershed. Discharges from wastewater treatment plants contribute to the overall loading of nutrients to the Chesapeake Bay and its tributaries. These nutrients have been identified as pollutants causing adverse impacts on large portions of the Bay and its tidal rivers, which are included in the list of impaired waters required under §303(d) of the Clean Water Act and § 62.1-44.19:5 of the Code of Virginia. Waters not meeting standards require development of a Total Maximum Daily Load (TMDL), also mandated under the same sections of federal and state law. EPA adopted the Chesapeake Bay TMDL in December 2010, and Virginia is now following a Watershed Implementation Plan to meet the requirements of that TMDL, in part by setting regulatory nutrient Waste Load Allocations (WLAs). The proposed amendments to the regulation are meant to accomplish three goals. The goals are:

 To incorporate, as necessary, final Chlorophyll-a based TN and TP WLAs for significant dischargers in the tidal James River Basin. The regulation currently includes WLAs adopted in 2005 that are not consistent with the Chesapeake Bay MTDL or the proposed water quality criteria for Chlorophyll-a developed in accordance with Appendix X to the Chesapeake Bay TMDL and approved by the Board on June 27, 2019. DEQ will use the results of updated water quality modeling to establish WLAs, if necessary, to meet the recently adopted Chlorophyll-a criteria; 2. To either reallocate any unneeded significant industrial discharger allocations to other facilities registered under the General Virginia Pollutant Discharge Elimination System Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed in Virginia (9VAC25-820) or reserve any unneeded allocations for future use. The Board is required to perform an analysis of existing WLAs and propose to reallocate them, as appropriate, every ten years as required by § 62.1-44.19:14.D of the Code of Virginia. This reallocation process may impact WLAs for industries that have ceased operations, industries that have changed the use of the facility in such a way as to make discharges unnecessary, ceased the discharge of nutrients and become unlikely to resume such discharges in the foreseeable future, or changed the production processes employed in the facility in such a way as to render impossible or significantly to diminish the likelihood of the resumption of previous nutrient discharges; and,

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3. To require additional nutrient reductions from significant municipal wastewater treatment plants in accordance with Initiative No. 52 in the Commonwealth of Virginia's Chesapeake Bay TMDL Phase III Watershed Implementation Plan dated August 23, 2019. The Board proposes to achieve these reductions through adoption of floating WLAs for significant municipal dischargers based on the average daily flow treated by the facility in a given year and nutrient concentrations of 4.0 mg/l TN and 0.30 mg/l TP. Existing "primary" WLAs will remain and in any given year the facility will be required to meet the lesser of the primary or floating allocations. There are a number of municipal wastewater treatment plants that have special circumstances that merit special consideration under this rulemaking. The Board is soliciting comments on any facilities that merit special consideration. The Board may also consider (i) whether to apply the floating WLAs to all significant municipal dischargers or a smaller subset that is responsible for the majority of the nutrient load from the sector; (ii) exempting from floating WLAs a subset of the smallest significant dischargers that in aggregate represent a minor percentage of the expected load reductions; and (iii) the applicability of floating WLAs to treatment plants that reclaim and reuse a significant portion of their wastewater flow.

The Board may also propose amendments to the General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed in Virginia, if necessary to implement proposed amendments to the Water Quality Management Planning Regulation.

#### **Substance**

Please briefly identify and explain the new substantive provisions that are being considered, the substantive changes to existing sections that are being considered, or both.

Substantive changes being considered include:

- 1. New Chlorophyll-a based WLAs for TN and TP for significant municipal wastewater dischargers addressed in 9VAC25-720-60.C (James River Basin).
- 2. Revised WLAs for TN and TP for some significant industrial facilities in Sections 50.C (Potomac-Shenandoah River Basin), 60.C (James River Basin), 70.C (Rappahannock River Basin), 110.C (Chesapeake Bay Small Coastal Eastern Shore River Basin) and 120.C (York River Basin). Any proposed revisions will be in response to a review of current WLAs performed by the Board in accordance with § 62.1-44.19:14.D of the Code of Virginia.
- 3. The implementation of floating WLAs for TN and TP for significant municipal dischargers included in Sections 50.C (Potomac-Shenandoah River Basin), 60.C (James River Basin), 70.C (Rappahannock River Basin), 110.C (Chesapeake Bay Small Coastal Eastern Shore River Basin) and 120.C (York River Basin).

Proposed amendments to the General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed in Virginia are not currently under consideration, but may be proposed if necessary to implement proposed amendments to the Water Quality Management Planning Regulation.

#### **Alternatives**

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Please describe any viable alternatives to the regulatory change that were considered, and the rationale used by the agency to select the least burdensome or intrusive alternative that meets the essential purpose of the regulatory change. 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 regulatory change.

The Board considered two alternatives to the floating WLAs proposed in this rulemaking. The first alternative consisted of the implementation of technology-based effluent limitations that would require municipal dischargers (not currently equipped to do so) to upgrade their facilities to meet effluent concentrations of 4.0 mg/l TN and 0.30 mg/l TP. This approach would require legislative and regulatory changes as well as the modification of numerous individual VPDES permits. Although the approach would provide the most regulatory certainty and the largest reduction in nutrient loads, it was also deemed to be the most expensive alternative.

The second alternative consisted of the Board considering nutrient reductions generated by voluntary wastewater treatment upgrades as well as reductions generated by incentive payments made by the Commonwealth to the wastewater sector. The incentive payment proposal would require both legislative and regulatory changes as well as funding. The Board determined that the reductions from this approach may not be completed in time to meet the nutrient reduction goals of the Phase III WIP nor provide the regulatory certainty desired under the Chesapeake Bay TMDL.

In response to comments received from stakeholders during the development of the Phase III WIP, the current proposal to implement floating WLAs was developed. Implementing the nutrient reduction goals through the General Virginia Pollutant Discharge Elimination System (Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed in Virginia provides regulatory certainty, maximizes flexibility for the discharger and minimizes fiscal impact. Under the floating WLA concept, each discharger has the ability to meet the regulatory requirement through any combination of trading of nutrient credits, optimization of wastewater treatment plant performance or upgrading their facility.

Other alternatives received in response to the Notice of Intended Regulatory Action or raised during the Regulatory Advisory Panel discussions will be considered.

# Periodic Review and Small Business Impact Review Announcement

If you wish to use this regulatory action to conduct, and this NOIRA to announce, a periodic review (pursuant to § 2.2-4017 of the Code of Virginia and Executive Order 14 (as amended, July 16, 2018)), and a small business impact review (§ 2.2-4007.1 of the Code of Virginia) of this regulation, keep the following text. Modify as necessary for your agency. Otherwise, delete the paragraph below and insert "This NOIRA is not being used to announce a periodic review or a small business impact review."

In addition, pursuant to Executive Order 14 (as amended, July 16, 2018) and § 2.2-4007.1 of the Code of Virginia, the agency is conducting a periodic review and small business impact review of the Water Qulity Management Planning Regulation to determine whether this regulation should be terminated, amended, or retained in its current form. Public comment is sought on the review of any issue relating to this regulation, including whether the regulation (i) is necessary for the protection of public health, safety, and welfare; (ii) minimizes the economic impact on small businesses consistent with the stated objectives of applicable law; and (iii) is clearly written and easily understandable.

# **Public Participation**

Please indicate whether the agency is seeking comments on this regulation, including ideas to assist the agency in the development of the regulation and the costs and benefits of the alternatives stated in this notice or other alternatives. Also, indicate whether a public hearing is to be held to receive comments. Please include one of the following choices: 1) a panel will be appointed and the agency's contact if you are interested in serving on the panel is Valerie Rourke; 2) a panel will not be used; or 3) public comment is invited as to whether to use a panel to assist in the development of this regulation.

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The Board is seeking comments on this proposed regulatory action, including but not limited to: 1) questions or concerns to be considered by the Board and regulatory advisory panel during the development of the proposal; 2) recommendations and associated information for specific wastewater treatment facilities that should be provided special circumstances during the development of the proposal; 3) recommendations for alternative actions that may achieve the same desired level of nutrient reductions; 4) the costs and benefits of the alternatives stated in this background document or other recommended alternatives; and 5) the overall impacts of the proposed regulatory action.

The Board is also seeking information on impacts to 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) 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.

Anyone wishing to submit written comments for the public comment file may do so through the Public Comment Forums feature of the Virginia Regulatory Town Hall web site at <a href="https://www.townhall.virginia.gov">https://www.townhall.virginia.gov</a>. Written comments must include the name and address of the commenter. Comments may also be submitted by mail, email or fax to Gary Graham, P.O. Box 1105, Richmond, Virginia 23218, phone: 804 698-4103, FAX: 804 698-4319, and <a href="mailto:gary.graham@deq.virginia.gov">gary.graham@deq.virginia.gov</a>. In order to be considered, comments must be received by 11:59 pm on the last day of the public comment period.

# **Public Hearing at Proposed Stage**

A minimum of one public hearing will be held following the publication of the proposed stage of this regulatory action, and notice of the hearing will be posted on the Virginia Regulatory Town Hall website (<a href="https://www.townhall.virginia.gov">https://www.townhall.virginia.gov</a>) and on the Commonwealth Calendar website (<a href="https://www.virginia.gov/connect/commonwealth-calendar">https://www.virginia.gov/connect/commonwealth-calendar</a>). Both oral and written comments may be submitted at the public hearing.

# **Regulatory Advisory Panel**

A regulatory advisory panel will be involved in the development of the proposed regulation.

The Board is using a regulatory advisory panel to develop a proposal. Persons interested in assisting in the development of a proposal should notify the department contact person by the end of the comment period and provide their name, address, phone number, email address and the organization you represent (if any). The primary function of the advisory panel is to develop recommended regulation amendments for Board consideration through the collaborative approach of regulatory negotiation and consensus. Multi-applications from a single company, organization, group or other entity count as one for purposes of making the decision specified in the preceding sentence. Notification of the composition of the advisory committee will be sent to all applicants.

# **Family Impact**

In accordance with § 2.2-606 of the Code of Virginia, assess the potential 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

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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.

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No impact on the institution of the family and family stability is expected as a result of this proposed rulemaking.